



The European Conference on Language Learning Official Conference Proceedings

July 13-17, 2023 | SOAS & University College London, UK

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Organised by IAFOR in association with the IAFOR Research Centre at Osaka University and IAFOR's Global University Partners

ISSN: 2188-112X

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The International Academic Forum (IAFOR)
Sakae 1-16-26-201
Naka Ward, Nagoya, Aichi
Japan 460-0008
www.iafor.org

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Videos in the Language Classroom As Learning Mediators

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

The inclusion of videos in teaching has become widespread in the last decades. The paper faces the question of whether this practice should be considered beneficial to learning in any case, due to the attractiveness of audio-visual resources. Studies in cognitive psychology offer a complex answer: on the one hand, the double channel - sight and hearing - is a motivating device; on the other hand, the exposure to the two language codes, images and commentary, may cause cognitive overload in working memory, hindering long-term meaningful retrieval. Examples from the author's experiences of teaching English as a second language to undergraduates show how a teacher may endeavour to emphasise the attractiveness of the medium and, at the same time, reduce or even avoid memory shortcomings. To ensure beneficial effects, criteria to follow when choosing a video are underlined, as the overall consistency between the visual and the verbal codes. To weaken the critical effects, attention is drawn on the following aspects: the role of videos to activate or create learners' cognitive and language 'schema' before approaching a new topic; the selection of comprehension strategies according to the educational objective, rather than a thorough understanding of the video clip. The paper concludes focusing on the need for learners to be aware of the rationale behind both the choice of video clips and of comprehension strategies, in order to encourage autonomous learning in an academic context, as well as in everyday life.

Keywords: Video Clip, Dual-Coding Theory, Cognitive Load, 'Schema', Autonomous Learning

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Introduction

The inclusion of a video in a classroom activity can initially be a motivating resource that, thanks to its variety, attractiveness and flexibility, makes the class daily routine exciting for both students and teachers. The emphasis is also on the teacher's motivation, which is among the pre-requisites in the educational process: satisfaction for the chosen video and pleasure to perceive the students' curiosity about it are only some of the teacher's feelings that are likely to produce a positive repercussion on the students. However, the favourable aspects characterising the initial phase of a learning process do not guarantee the final results. The present paper faces the question of whether, with second-language university students at a B2 level and beyond, the practice of incorporating videos into the daily educational work should be considered beneficial to learning no matter what, due to the intrinsic appeal of audio-visual resources. Besides, it also draws attention on the fact that the valuable use of a video involves awareness of the students' comprehension process with ensuing preparatory work for a teacher.

The paper opens with a survey on selected literature regarding significant experiences of the use of videos for second language learning. Subsequently, it continues with an overview of the main studies in cognitive psychology to account for both a favourable and a critical response of learners to video resources: "dual-coding theory" (Paivio, 1969), "cognitive load" (Sweller, 1988), consequences and remedies (Chandler & Sweller, 1991; Mayer & Moreno, 2003). In order to find a balance between the two opposite views, the favourable and critical ones, evidence is given to the fact that videos can be used to activate pre-knowledge, to facilitate the approach to a new topic. Besides, if previous knowledge is not yet available in a student's long-term memory, a video can be employed to generate it and promote later learning.

Empirical Studies on Videos in the Classroom

Before 2005, the year that marked the advent of YouTube, the novelty within the field of audio-visuals consisted in the use of CDs, DVDs and recordings on VHS cassettes of broadcasts from satellite TV, like interviews and the news (Di Nisio: 2002). Since 2005, the net has gradually become a huge repository where to select the right resource for the right addressee, YouTube playing a pervasive role in the life of "digital natives" (Prensky: 2001). A short chronological review of empirical studies on the use of videos in teaching, language courses included, follows.

In his study about how language learners respond to digital video media, Gruba (2004) refers to the use of news broadcasts recorded from satellite television. His analysis draws on a constructivist view of the process that goes on while watching a videotext: comprehension is seen as an inner act of "constructing, and revising hypotheses gained through experience in the world [...]" (53). Among various theorists, he recalls concepts regarding text comprehension, such as *schema*, *frames*, *scripts* and *macrostructures* (Minsky, 1975; Schank and Abelson, 1977), which allow for the selection of complex data, the organisation of information, ultimately the construction of new meanings.

Bonk (2008) sees the use of a video as a way to "anchor" instruction: "the videos provide a macrocontext [...] a learning space that can be replayed or revisited and discussed from many perspectives and over an extended period of time". In this way a video becomes an "advance organiser" (Ausubel, 1963), which suggests that new input can be meaningful through the mediation of an audio-video text, if it is related to long-term memory.

Berk's (2009) article is an enlightening companion for a language teacher who is oriented towards the use of videos: it includes a list of "20 potential outcomes to ponder, like improving the students' attention, understanding, collaboration, mood or tone" (2). To account for the favourable influence of double-channel materials on language learning, thanks to the ensuing activation of the student's potentials, Berk focuses on how the learner's brain responds when watching a video, offering a rich overview of previous studies (2-4): Gardner's (1983) multiple intelligences, thanks to the verbal, the visual and the musical dimension of a video; Goleman's (1998) emotional intelligence, including the intrapersonal and the interpersonal, the former through "self-reflection [...] planning [...] and metacognition", the latter through various forms of interaction in classroom group activities; Sperry's (1973) theory of the right and left hemisphere, each spurring different ways of thinking; Millbower's (2000) "brain wave frequencies", according to which videos produce those waves that keep the student's state of awareness in the best conditions to comprehend and learn; Paivio's (1986) and Mayer's (2001) studies on the mental processes implied in the use of multiple channels.

Through their review of research studies on captioning in short videos, Montero et al. (2014) demonstrate that full captions with and without highlighted key words, as well as captions with key words only, all seem to produce a better comprehension performance in the second-language experimental group, as well as vocabulary retention. They also report about studies according to which this beneficial outcome is possible only with advanced-level students (118-120).

Costly et al. (2021) give an overview of studies on strategies, maintaining that "watching videos from start to finish may not be the best way for students to learn content." (22). Just watching a video has no magic influence on a learner per se, but it involves control over viewing strategies to mediate comprehension and data processing: as reading may require skimming or scanning, viewing necessitates specific strategies geared to comprehension tasks (24-33). The authors also list digital actions that should make "learner-controlled pacing" possible, like "pausing, repeating, accelerating, and decelerating while viewing a video" (22).

Teng (2021)'s book is devoted completely to the exploration of the use of captions in videos, from short YouTube clips to films. It underlines their usefulness, thanks to the reduced comprehension load on a second-language learner and the consequent positive repercussion on short and long-term memory, focusing not just on single word retention, but also on the acquisition of "multi-word units" (82), including collocation, register and formulaic language, together with chunking abilities (21). It also considers incidental vocabulary learning that occurs aside intentional-learning activities (5-8).

The studies that have been mentioned are far from giving full evidence of the attention that has been given to the growing role of videos in the classroom across all subjects. Still, the selection suggests the need for language teachers to be aware of favourable and critical implications stemming from the use of videos and of the need for strategic control over their inclusion in the educational syllabus.

Dual-Coding Theory and Cognitive Load

What follows is a short and chronological overview of studies about the adoption of multimedia resources in education. To prove the weakness of the widespread belief according to which videos in the classroom are good regardless, advantages and disadvantages are mentioned.

Paivio (1969) started reflecting on how human cognition processes stimuli when two mental channels are activated, one dealing with the nonverbal and the other one with the verbal: the “dual-coding theory” was developed and assessed. The initial belief was that the coexistence of the two channels should promote better understanding, storage and retrieval of the data.

The research on the dual-coding theory continued for decades, highlighting the challenges of the inclusion of videos in education. Considering that working memory is characterised by short-term and limited cognitive capacity during the comprehension process, while long-term memory refers to information retention beyond the act of comprehension and tends to last in time, Sweller (1988) elaborated on the risk present in multimedia learning of dealing inadequately with the two main types of memory, producing high “cognitive load”. Years later, the cognitive load that encourages or inhibits learning was described (Sweller, 2010; de Jong, 2010; Paas & Sweller, 2014) according to the following categories: “intrinsic”, the cognitive load of the subject matter to be learned with its degree of difficulty, which varies according to the number and nature of simultaneously interacting elements; “extraneous”, the cognitive load caused by inappropriate or nonessential instructional material used to accompany the main topic; “germane”, the load of the learning process that is activated to promote learning in interaction with “intrinsic” load. In education, cognitive load requires careful management not to overload working memory, which would be detrimental to the learning outcomes: “intrinsic” and “germane” categories should be reinforced against the confusing and disorienting role of “extraneous” load.

Chandler & Sweller (1991) underlined the fact that, rather than facilitating comprehension, a combination of verbal and nonverbal communication may obstruct it, producing cognitive load if not adequately handled: the idea is that both media should be carefully restructured into an integrated format (331). Sweller & al. (1995) continued the investigation on how to reduce cognitive load, considering the constraints of the simultaneous use of both systems on working memory capacity. Their suggestion was that information of the two types, the verbal and nonverbal, should be processed separately, rather than in one system.

Mayer & Moreno (1998) elaborated on the concept of the “split-attention principle”, which refers to the situation when information from multimedia sources is not well integrated, causing the learner’s double effort to follow images and commentary at the same time. Mayer et al. (2001) focused the analysis of the learner’s cognitive constraints due to a lack of consistency between the various channels, which would make learners split their attention between the different channels, missing relevant data in the text. While accepting the learning advantages embedded in Paivio’s (2014) “dual-coding theory”, Mayer & Moreno (2003) went deeper into the concept of cognitive overload. When stimuli from a multimedia resource may exceed the human capacity to retain information through working memory, they suggested various adjustments aimed to increase the inner coherence of the presentation, while enhancing the learning process: “Segmenting”, “Weeding” and “Eliminating redundancy” (46). Mayer (2014: 43-44) believed that learning is more effective and meaningful if both words and pictures are presented together, which should foster the success of a “multimedia instructional message”, when applied to classroom communication. To explain how information is processed in the learner’s mind, he produced a cognitive model of multimedia learning: a “multimedia presentation” triggers “sensory memory” through ears and eyes and reaches the “working memory” through three main cognitive acts, first “selecting” what is relevant according to the focus, then “organizing” it in a coherent way, and finally “integrating” the result with pre-existing knowledge, which, thanks to its meaningfulness, permits “long-term memory” (52-57). For the process to be successful, the psychologist stated that learners must be motivated to

learn and aware of the cognitive steps to have control over them (65): the two components, motivation and metacognition, were incorporated into what was considered the evolution of his cognitive model.

To conclude, the practice of multimedia per se cannot be seen as the panacea to face teaching and learning issues. The dynamics is still very complex, as is summarised by Hede (2002): “The independent variable in the overall model is learner style and the dependent variable is learning. The remaining variables are either intervening or moderating or both, namely, visual input, auditory input, learner control, attention, working memory, long-term storage, motivation, cognitive engagement, intelligence and reflection.” (187). The complexity of the process requires researchers’ attention to old and new issues in the field of educational psychology, especially considering the on-going technological progress.

Reducing Cognitive Load Through ‘Schemata’: Some Teaching Experiences

The experiences regarding the inclusion of videos the author is going to present took place in a degree course in foreign languages and literature with first-year and second-year undergraduates, the former at a B2 level of English and the latter beyond the B2 level of the same language. The presence of double-channel materials in class activities was exploited for various aims: besides offering motivating materials, potentially able to stir the students’ attention, most importantly the intention was to add a preparatory and promising initial step in the learning path.

The author’s language teaching experiences that are recalled in this section started with a careful choice of videos. The criteria that were followed included: the reliability of the video, the consistency between the verbal and nonverbal components, the short duration, the clarity of the speaker’s voice and the variety of the speaker’s age, accent and working status. As a matter of fact, videos often included presentations with young university researchers or young staff in language institutions: they may have recorded their presentations in informal places, like their bedrooms, or back gardens, they may have dropped some casual comments on the high temperature of the day or on the low battery of their recorders, at the same time safeguarding the high quality of their presentations. Of course, no matter whether they were not young any longer, linguists and academics with renowned competence were not excluded.

The features of the video, like its attractiveness and short duration, made it easy to approach and process it; the frequent return to its content during the various stages of the learning path encouraged a quick shift from sensory and working memory to long-term memory; the meaningfulness of its message turned the video into a landmark to go back to during the whole learning path and beyond, to highlight its overall content or its specific details. If thoughtfully chosen, a video would always draw the students’ attention: it was possible to detect how involved they soon got from the change in their postures, their eye movements and other non-verbal signals.

The viewing procedure usually started from the students watching a video for the first time without any structured task from the teacher, not to spoil their first impact through performance anxiety. As a second step, the teacher would provide students with questions implying a top-down or a bottom-up approach to the video, according to the objective, avoiding either an unstructured or a detailed request aimed at full comprehension. In so doing, students would direct their attention only to the overall message or focus it on selected aspects. Repeated viewing would be allowed according to their needs. At times, students were given different

videos to share comprehension with their class mates in pairs or groups. In this case, they could play the video according to their personal pace, stopping, rewinding, repeating, slowing the speed and reading the captions, if necessary. The teacher's presentation of the matter was given at the end of the whole comprehension path, as a wind-up final step the students could make sense of in the light of the previous comprehension activities.

The focus in each experience was on the initial stage of a comprehension process, when the learner is more likely to suffer from memory overloading: in this phase, a video became a means to trigger pre-knowledge in preparation for the study of a new topic from the syllabus. Bartlett (1932) was the first to theorise that, when exposed to new input, the human being activates a network of mental preexisting knowledge, called "schema", which promotes understanding through its own data; Rumelhart (1980) defined a "schema" as a "skeleton around which the situation is interpreted" (37). The examples of language teaching experiences based on the utilization of video clips indicate the centrality of the concept of "schema" (Bartlett, 1932; Rumelhart, 1980) to reduce the cognitive load in two different ways: activation of pre-knowledge, when it existed, or processing of new input, which, in the following learning stage, would become pre-knowledge to activate. Both cases were meant to assist comprehension of a new topic, the "intrinsic" (Sweller, 2010; de Jong, 2010; Paas & Sweller, 2014) cognitive load, through the "schema" (Bartlett, 1932; Rumelhart, 1980) strategy, the "germane" cognitive load.

The first three experiences took place with first-year undergraduates at a B2 level. The syllabus topics dealt with the main areas of linguistics included in a course textbook (Winkler, 2012). Serving the function of helpful "germane" cognitive load, videos were used before approaching a new chapter or its section, the "intrinsic" (Sweller, 2010; de Jong, 2010; Paas & Sweller, 2014) cognitive load in the comprehension phase.

The first experience had the objective of building the "schema" (Bartlett, 1932; Rumelhart, 1980) necessary to understand the chapter on phonetics and phonology (Winkler, 2012: 83-108), since the difference between the two areas of speech sounds were new to the students. The YouTube videos contained short clips of films drawn on Bernard Shaw's *Pygmalion*. The first one¹ showed the famous scene in which Professor Higgins teaches Eliza how to pronounce the aspirated h-sound in the sentence "In Hartford, Hereford, and Hampshire, hurricanes hardly ever happen". Through its auditory and visual enactment, the episode offered a conceptual example of phonetics, the branch of linguistics that refers to the mechanics of the pronunciation of sounds: the correctness of Eliza's performance in the aspiration of the sound is judged according to the occurrence of a flickering candle flame due to the stream of air from her mouth. The second clip from the same film portrays Eliza at Mrs Higgins's while introducing herself to the guests in a very amusing way: owing to her overemphasised attention given to the pronunciation of the phonemes in "How do you do, Mrs/Mr ...", she offers an example which is halfway between phonetics and phonology, still lacking social effectiveness, producing, instead, amusement. The third video² provides a clear example of phonology, with Eliza succeeding at speaking in a natural way, thus being able to communicate her dissenting thoughts to Professor Higgins effectively. The three videos were meant to make the distinction between phonetics and phonology clear and memorable at the same time. During the study of the text-book section on "voicing" (86-99), with emphasis on place and manner of articulation, and "suprasegmentals" (102-105), with emphasis on stress pattern, rhythm, intonation and

¹ Loewe, F. (1964). *My Fair Lady*. New York: Columbia.

² Asquith, A. & Howard, L. (1938). *Pygmalion*. Metro-Goldwyn-Mayer (MGM).

word juncture, the continuous reference to the preparatory activities through videos supported the students' comprehension, while reducing the "intrinsic" (Sweller, 2010; de Jong, 2010; Paas & Sweller, 2014) cognitive load of the subject matter. The teacher's final presentation on the topic was easily accessible to all students, since it recalled and systematised what they had already handled and comprehended.

The example that follows refers to the text-book chapter on "The History of English" (Winkler, 2012: 166-194), another topic that could not be supported by previous knowledge, since it was non-existing. Therefore, building up a "schema" (Bartlett, 1932; Rumelhart, 1980) was needed. The video that was chosen shows the distribution on a map of Europe of the translation of English words into the language of each country. The idea was to highlight the two main origins of English vocabulary, Germanic and Romance: according to a selected word of Germanic origin, as cow, chicken or snow, a divide between Romance and Germanic language countries would be displayed; with words like beef, poultry or chivalry a unitarian picture of words of Romance etymology across Britain and the Mediterranean countries would appear. Additional videos were used to make history tangible: one dealing with the Angle-Saxon boat unearthed in Sutton Hoo, accompanied by the presentation of an expert from the National Trust; another one displaying the Bayeux tapestry, containing an audio and visual chronicle of the 1066 Norman invasion, with its characters and events. The videos supplied a visible sign of the main developments that took place in the history of English, before and after the Norman invasion, thus contributing to the construction of a complex "schema" (Bartlett, 1932; Rumelhart, 1980), which proved useful when contextualising old and middle English through text-book activities and, finally, the teacher's comprehensive presentation to round up the whole topic.

The third experience with the same group of students refers to an introduction to the chapter on "Electronic-Mediated Communication and its Effects on Language" (Winkler, 2012: 244-259), a topic that could easily be related to the students' personal experiences of texting. In order to stir their memories and provoke a reaction for or against the issue, two videos with contrasting views on the topic were selected: one video showed an interview with the linguist David Crystal, who argued, in a very provocative way, that the habit of texting has no detrimental influence on language; the other video regarded an interview with a teacher who expressed his worries about the deleterious repercussions on his students' spelling, sentence structure, ultimately on their writing skill. The activity was organised in the following manner: students were divided into two groups; each group was given one of the two videos and asked to watch it and prepare to report to members of the other group; after the comprehension activity, each group member was invited to work with a member of the other group and report about the answers to the video interviews. As expected, while going through the task, the students' exchange produced the result of activating the students' previous knowledge on the matter together with their emotional responses, a very helpful way to prepare for the study of the text-book chapter.

What follows refers to experiences with second-year undergraduates in the same degree course in foreign languages and literature, beyond the B2 level of English, with a syllabus focused on the structure of the argumentative text in the press with its main components - claim, evidence and warrant, according to Toulmin's (1958) theory - and the repercussion of the speaker's perception of the audience on his or her language register and arguments to be persuasive (Di Nisio, 2020). Since the students had never worked on this type of text, they did not possess a specific mental "schema" (Bartlett, 1932; Rumelhart, 1980) to make new input immediately

meaningful. Therefore, a section of the film *Julius Caesar* (1953)³, featuring Marlo Brando as Mark Antony when delivering his funeral speech after Caesar's murder, was chosen. The whole activity was meant to become a landmark, the indelible "schema" (Bartlett, 1932; Rumelhart, 1980) to turn to every time a new press argumentative article was analysed and a new component was focused on during the course. The analysis of an argumentative text implies the identification of various elements interacting with each other, which produces high "intrinsic" (Sweller, 2010; de Jong, 2010; Paas & Sweller, 2014) cognitive load. If the cognitive process is not adequately supported, the various data may exceed the capacity of the working memory, leaving a student with weak retention in long-term memory. In the above teaching example, in order to overcome its "intrinsic" cognitive overload, "germane" (Sweller, 2010; de Jong, 2010; Paas & Sweller, 2014) cognitive load was intended to smooth learning through the knowledge and analysis of the funeral speech scene from the film.

A video was the support to hold on to during the whole course, even to make a reference included in an article meaningful: in the second-year course, before reading "How the sense of an ending shapes memory" (Hartford, 2016), which mentions psychologist Daniel Kahneman, a schema-building activity was needed to understand who he was, since the students had never heard his name before. The comprehension of a YouTube video, showing him while telling the same story in the article, became the pre-knowledge to understand the article, the new "schema" (Bartlett, 1932; Rumelhart, 1980) the students did not have before.

The videos and the accompanying tasks operated as "advance organisers", a concept postulated by Ausubel (1963), mainly based on resources - materials and tasks - presented before the learning material itself, meant to make new input significant from the very first approach. The schema-building and schema-activating questions were always accompanied by an awareness raising stage in which the teacher elicited the students' answers with regard to the efficacy of the procedure followed in the suggested tasks, and, finally, explained the rationale behind the adoption of videos and tasks to produce or recall existing knowledge, the first step in the comprehension of new materials. The teacher's belief was that a combination of practice and consciousness of its underlying rationale should lead students to gain greater control over the processes of learning.

The teacher's perspective that is presented in this paper with regards to the use of videos in in-class activities witnesses a type of care towards the learner that does not derive from the teacher's vague expression of willingness to help: starting from the teacher's understanding of how comprehension is processed, the learners' centrality implies also respect for their mental processes, together with their affective and emotional responses to them. Attention to involvement in the learning process, to awareness of cognitive processes and to ensuing autonomy in the management of strategic planning of learning is among the main aspects of a humanistic approach, as summarised by Bortoluzzi (2003:170).

Conclusions

Owing to the frequent inclusion of videos in teaching, especially since the advent of YouTube, literature on multi-media educational experiences has expanded. A partial overview of the wide-ranging scientific literature has been presented, to give a picture of some of the cognitive and language perspectives regarding the development of video comprehension: multiple

³ Mankiewicz, J. L. (1953). *Julius Caesar*. USA: Metro-Goldwyn-Mayer (MGM).

intelligences, right and left hemisphere, brain wave frequency, dual coding, comprehension strategies, formulaic language and chunking abilities from captioning.

The present paper has faced the question of whether the practice of using double-channel materials is always advantageous to learning, just because of the attractiveness of the media. In an attempt to deal with the issue, studies in cognitive psychology on multi-channel communication have been recalled with their main arguments: on the one hand, dual coding is regarded as a motivating device; on the other hand, exposure to two language codes, images and commentary, is seen as the source of cognitive overload in working memory, which hinders long-term meaningful retrieval.

Examples from the writer's experiences of teaching English as a second language to undergraduates have been given to illustrate how a teacher may endeavour to include videos in the learning pathway to activate or create a "schema" (Bartlett, 1932; Rumelhart, 1980) conducive to comprehension, with the aim to reduce the learner's cognitive load when approaching new input. First of all, criteria guiding the choice of a video have been indicated, such as the overall consistency between the visual and the verbal language. Then, evidence of two main teaching objectives, generating and activating a "schema", has been given.

The lessons that have been recalled ended with the students' metacognitive reflection on the main function of a video as the mediator between new and old input: through their considerations of the effectiveness of the process, the learners realised how the former, the new input, becomes meaningful and its storage more long-lasting, thanks to the pre-existence of the latter, the old input. It is the function that Ausubel (1968) called "advance organiser", the role of a learning support that reduces processing time, while increasing effectiveness in comprehension and organisation of new data, anchoring them to a long-term mental structure. Awareness of the process should lead students to their self-monitored employment of multimedia resources, like videos, within and beyond classroom tasks in everyday life.

Acknowledgements

I would like to thank Maria Bortoluzzi for her clarifying comments on an earlier version of this article.

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*The Social Aspects of Code-Switching in Online Interaction:
The Case of Saudi Bilinguals*

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This research aims to investigate the concept of code-switching (CS) between English, Arabic, and the CS practices of Saudi online users via a Translanguaging (TL) lens for more inclusive view towards the nature of the data from the study. It employs Digitally Mediated Communication (DMC), specifically the WhatsApp and Twitter platforms, in order to understand how the users employ online resources to communicate with others on a daily basis. This project looks beyond language and considers the multimodal affordances (visual and audio means) that interlocutors utilize in their online communicative practices to shape their online social existence. This exploratory study is based on a data-driven interpretivist epistemology as it aims to understand how meaning (reality) is created by individuals within different contexts. The participants were eight bilingual Saudi nationals (both men and women), aged between 20 and 50 years old. This study contributes to the DMC literature and bridges some of the existing gaps. The findings of this study indicates that online users' literacy lays in decoding multimodal communication, and that this multimodality contributes to the meaning. Either this is applicable to the online affordances used by monolinguals or multilinguals and perceived not only by specific generations but also by any online multi-literates, the study provides the linguistic features of CS utilized by Saudi bilinguals and it determines the relationship between these features and the contexts in which they appear.

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Introduction

It is generally agreed, at least from a linguistic point of view, that Code-Switching (CS) occurs when a speaker changes or alternates, in the course of a single conversation, between two or more languages or language varieties. This is a noticeable practice all over the world in various contexts, cultures and language contact situations. However, it has been noticed that the dawn of the internet has led to it becoming a part of everyday life, significantly changing the way in which people communicate with each other. Digitally-mediated communication (DMC) platforms offer opportunities for what is now regarded as written scale on an “unprecedented scale” (Androutsopoulos, 2013: 667). Research on CS on DMC studies have isolated patterns in a wide spectrum of platforms, linguistic contexts and social settings. Nonetheless, investigating the occurrence of CS on electronic platforms is a largely under-researched area, especially in relation to other fields.

However, these linguistic practices are more than just alternating between languages or varieties, thus, researchers have switched the focus for a more recent and more inclusive theory which is called Translanguaging (henceforth TL) proposed by (Wei, 2011). In this regard, the digital code can be considered as a performance of online multilingualism. Androutsopoulos (2013: 4) described these practices as “everything language users do with the entire range of linguistic resources” for the purpose of online communication which is supported by TL.

It is important to distinguish between CS and TL in both their contexts and how they have been applied in this study. According to Garcia and Wei (as cited in Molina & Samuleson, 2016), TL is different from CS. In this context, CS is defined as a process of changing two languages in a specific communicative episode, while TL is seen as a phenomenon about “the speakers’ construction that creates the complete language repertoire” (ibid, 2016: 3). More specifically, in TL, bilinguals are consciously aware and in control of their utterances in both languages. This so because TL is largely about meaning and sense-making (Wei, 2018). With regard to CS, the main feature is the purpose or motivation of the conversation. Ordinarily, CS is considered as a linguistically incompetent ability. All the same, the process is governed by grammatical, as well as interactional, rules. Both notions will be thoroughly discussed in the next chapters to highlight the positive aspects and limitations of each for the purpose of positioning the current study.

This research aims to investigate the concept of CS and TL between the English and Arabic practices of Saudi online users. It employs DMC, specifically the WhatsApp and Twitter platforms, in order to understand how the users, employ online resources to communicate with others. This project looks beyond language and considers the multimodal affordances (visual and audio means) that interlocutors utilise in their online communicative practices to shape their online social existence.

The Gap

Literature has mostly looked at types and purposes of language constructions/lexis that tend to be CS but without considering sociolinguistic aspects but never on the interconnection between the linguistic and social aspects in the online interaction which justifies why there is no one data analysis model to include this type of data as will be discussed in the next chapter. Also, most previous studies focused on oral CS or CS in academic contexts which forms the main gap this study is implemented to explore.

In addition, there is a need to study interactions on WhatsApp and Twitter from a communicative action perspective. For example, this study is an attempt to understand how people are “trying to be in public without always being public” (Marwick & Boyd, 2014: 2). Moreover, it aims to highlight the interrelation between linguistic choices and identity performance in social media. Identities, as Goffman (1990[1959]) puts it, are like masks that can be worn and taken off in different contexts. Thus, as DMCs are largely text based and support limited physical contextual cues, they represent an opportunity for people to perform different features of identities.

Furthermore, since the participants of this study are members of a specific society who share some sociocultural backgrounds and they are additionally members of an online speech community (bilinguals and users of WhatsApp and Twitter), studying their language use on social media becomes a sociolinguistic task especially with the rapid changes of the DMC. Thus, there is a need to document the up-to-date practices that occur in the online Saudi bilingual community and the communicative acts associated with these changes.

Based on the above-mentioned gaps and needs, this study aims to; first, provide a unique insight into the interactive sociolinguistic world of bilingual Saudis' DMC habits and motivations. Second, to build on existing knowledge by analysing the linguistic features (multimodal online affordances) and social behaviours of the participants. Third, to present Arabic data in a systematic way and explore what Arabic may add to or how it may challenge the current frameworks/knowledge of CS in online platforms to answer the following research questions:

- What CS practices emerge in online communication by Saudi bilinguals? For what reasons?
- How do the participants employ online interaction to fulfill their social purposes?

Thus, the significance of this research lies in how it will bridge the gap of the hidden aspects such as the motivations and sociocultural insights of bilingual Saudis and their online sociolinguistic presentation as a contribution to the online social interaction in the sociolinguistic realm. Therefore, this study fits in the connection between the linguistic repertoires and the social implications especially in a so-called conservative context like Saudi Arabia which has several cultural and religious considerations such as gender segregation.

Literature

It is fundamental to highlight that this study embraces both approaches, CS and TL for a more inclusive outcome because, as discussed in this chapter, each approach has both positive aspects and limitations for the purpose of this study. CS will be used via a TL lens to include all linguistic and non-linguistic practices with respect to the entities and boundaries of languages, varieties and multimodality because they present vehicles of communication and they are employed purposefully.

In addition, there is a need to pay increased attention to the language choices of non-native speakers in countries where the history of English is recent and English is largely used as a foreign language (EFL). It is worth noting that despite being used as a lingua franca on the Internet, the latter is mostly used by non-native English speakers (Danet & Herring, 2007a: abstract). On the contrary, English-based scholarly literature on CS in DMC does not truly reflect this diversity, and consequently, studies related to Saudi bilinguals are relatively

under-represented in the field. CS is a subject covering a wide range of interrelations between medium and situational factors. Androutsopoulos (2013: 667) shows the extent of its significance by stating explicitly that “CS in CMC is relevant not only because it is there (and not yet well understood) but also for the insights it can offer to pragmatics, sociolinguistics, and discourse studies”.

Based on early CS studies but with a more focused shift towards CS in DMC amongst Saudi bilinguals, this study intends to fill a significant gap in scholarly knowledge about the online/written CS practices of Saudis in various contexts. Consequently, the study focuses on language choice, practices and emotions, among other CS usages. In addition, the context of the current study presents on a small scale a conservative society that is deeply rooted and interrelated with several cultural factors such as religion, taboos and traditions, which shape and influence the participants’ interactions and cannot be isolated.

This study aims to provide a unique insight into the interactive sociolinguistic world of social networking. By capturing live, real-time interaction (posts of participants) on social media sites, specifically WhatsApp and Twitter, the study focuses on the interrelation between participants and language through a technological medium. It focuses on how individuals use the innovative linguistic features afforded by online platforms to communicate using a mixed-method approach. With social networking becoming an integral part of our communicative lives, it seems imperative that we understand the interaction that occurs on such mediums.

The analytical chapters examine code-switched passages in order to assess the mechanisms through which CS portrays meaning. In this regard, Gumperz (1982: 72) claims that “what we need are detailed investigations of speakers’ use of CS strategies, in actual conversational exchanges, to show that they exhibit some form of linguistic patterning that they contribute to the interpretation of constituent messages”. Consequently, for all the above-cited reasons, the study presents a first comprehensive and in-depth analysis of this nature on Saudi Arabic-English CS in DMC.

Methodology

The study adopts a mixed-methods approach with a mainly qualitative research strategy owing to the nature of the subject under study. It also uses a partial quantitative approach with regard to converting the findings into numbers and representing the percentages of some findings in charts. The chapter also discussed the ethics followed during the study.

This project is situated in the field of sociolinguistics and focuses on the interrelation between: first, CS between English and Arabic practices used by Saudi bilinguals in their online interaction and second, how these bilinguals employ online resources to communicate through a variety of online platforms specifically Twitter and WhatsApp. This project looks beyond language and considers multimodal affordances that interlocutors employ in their online interaction practices for the purpose of communication and self-presentation. This study investigates the people using online affordances and CS as tools to enhance their communication.

The methodology of this research has three phases (Crabtree, 2003). First, exploration. Second, a systematic collection and organization of posts, questionnaires, and interviews. Finally, linking that data with themes through data analysis.

There is a need to understand CS from a number of perspectives, which is one of the original contributions of the current study. This research surveys the chats of bilinguals when interacting on online platforms to explore possible linguistic and sociolinguistic practices of communication. Most studies on CS have focused on the linguistic features of CS, and even those that have examined the linguistic features have done so from a simple perspective that focused on the types of words that had been code-switched. Herring (2004) claims that the micro-discursive features and the interactive patterns are used by social actors to form communities. Moreover, these are used not only by individuals for self-development, but also online communities use different features to make their voices heard. Therefore, the data analysis model is based on three different models; Herring's CMDA (2004, 2007), Al-Wer's CS approach and TA.

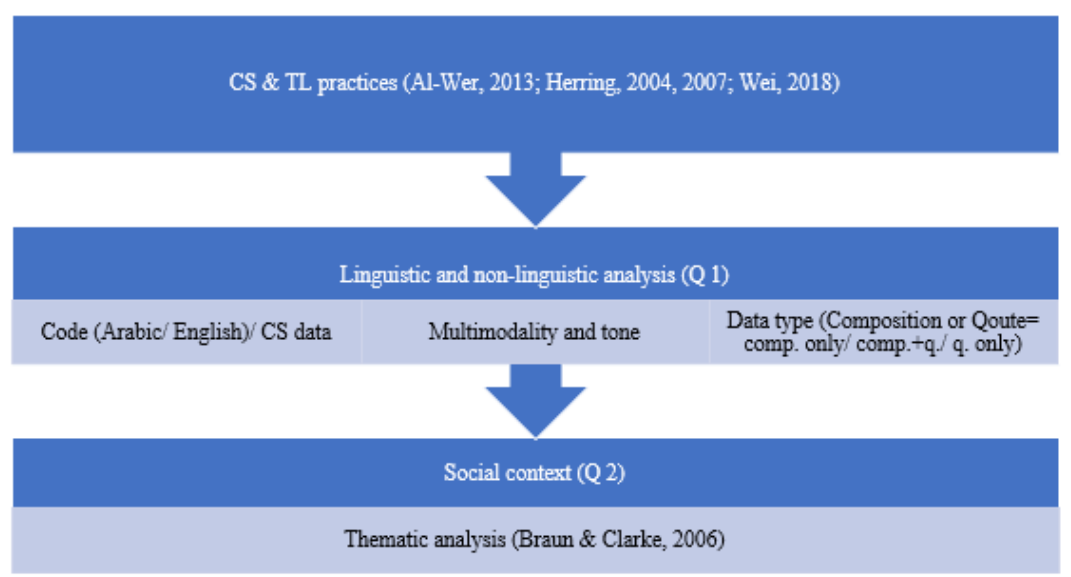


Figure 1: Data Analysis Framework

The aim is to provide a comprehensive approach to analysing the data, which is important to obtain an in-depth description for CSs and what they may mean for the study's objectives and research questions.

Findings

The data revealed that the participants in this study share five main CS practices which are presented in the table below in comparison to literature.

AlAbdulqader	Herring's CMDA (2004, 2007)	Al-Wer (2013)	Tagg (2015)
Arabization	Code No mention of reformation	Grounding the data	N/A
Nonce Borrowing	N/A	Linguistic data/ linguistic system	N/A
Multimodality	Channels of communication	N/A	N/A
Quoting	Quoting	N/A	Attribute
Prayers	N/A	N/A	N/A

Table 1: A comparison between this study findings & literature

The steps analyse data in two stages:

Stage one is concerned with the actual structure of the data: choice of language, choice of multimodal tools, additional aspects such as quotes, prayers and nonce borrowing. When looking at CS distribution, this is in line with Al-Wer's approach for the CS data – "grounding the linguistic data" (2013: 256) has been implemented in two ways. The first is by linguistic analysis in order to understand how these words are originated. In other words, this involves reverting each word to its original form by taking off all prefixes and suffixes. The second way is by linking the words to the context in which they are used.

When applying some principles of CMDA (Herring, 2004, 2007), the linguistic practices are concerned with data type, i.e., whether the data are composed, quoted or a combination of both. In addition, CMDA considers the tone of the data based on the choice of words and the multimodality used, for example, whether it is formal or informal, playful or serious.

Stage two is concerned with the social context, which explores how the interlocutors deploy these linguistic and non-linguistic choices they exhibit in the first question for communication purposes. This will be tackled by TA for two reasons: triangulation and in order to investigate the data thoroughly.

Practice/ Participant	Rakan (M/49)	Faris (M/36)	Tariq (M/25)	Amal (F/28)	Rana (F/33)	Maya (F/35)	Noor (F/24)	Dina (F/25)
English words/No change	X	7	4	10	25	12	3	1
English words written in Arabic letters	X	6	11	4	2	22	2	1
Arabization	X	2	4	x	1	2	x	x
Intra-sentential CS between linguistic & multimodality patterns	27	8	7	25	36	12	30	26
Qur'an verses	3	x	x	1	x	X	1	x
Prayers (du'a')	1	x	x	2	x	X	3	2
Proverbs	X	x	x	x	2	X	4	3
Poetry	X	x	x	x	x	X	2	x
Song lyrics	x	x	x	x	3	x	3	1

Table 2: Findings for research first question

In this context, it can be seen that intra-sentential CS between linguistic and multimodality practices features highly. This is due mainly to the informality and closeness between the participants. This is followed by the use of English words/No change. There is also a

significant usage of the Arabization practice. Qur'an verses do not feature highly, probably owing to their sacred nature.

To sum up, the findings show that multimodality (audio and visual) excessive usage as seen in the above table is used by men and women for the purpose of filling the communicative social purposes. Furthermore, the participants reveal a high ability to manipulate these online affordances for expression purposes. Also, these findings highlight that multimodality is considered a basic communication tool in the written DMC where in some posts, the participants rely solely on these affordances without any actual written contexts which means that multimodality is an online comprehensive language that can substitute the traditional language in some cases.

Other CS findings such as nonce borrowing either written in English or Arabic reveal that these foreign words become common to the Saudi online community even for those with a limited English competence which manifests how bilingual Saudis affect and are affected by their online linguistic attitudes. To illustrate, these common words become familiar due to the fact that most online users get exposed to them. The written CS words become common which enable the users to use them linguistically and pragmatically for two reasons; first, to update their vocabulary and means of online communication. Secondly, to enhance the belonging feeling to the online community which relates this research question's findings to the next section.

There are several significant findings in the current study in attempting to answer the research questions, and several findings come to the fore. First, multimodality plays a fundamental role in the participants' online interactions – all the participants use it to varying degrees. In addition, the participants' main CS online behaviour is interchanging linguistic and non-linguistic resources employing both Arabic and English and the multimodal affordances.

This result may be due to many facts. Firstly, multimodal affordances fill the gap arising from the limited view of body language, and using these affordances is easier for the users than composing text-based posts, which for most participants may cause misunderstandings on the recipients' side. Some multimodal affordances change according to trends; it was noted that most posts consist of stickers instead of emojis to show that the users are updated and keen on following the norms of online interactions. Multimodal affordances tend to be basic in online interactions as they are one of the mostly highly used features, making online interaction unique. In addition, these multimodal affordances allow the users to re-explore some of their personas' characteristics, for example they can revise their replies before sending them and listen to their voice-notes to work on some weaknesses. Moreover, the multimodal affordances are employed by the users to reveal other characteristics they lack in offline interactions, such as a sense of humour and wisdom.

With regard to the first research question, which is about the linguistic practices used by bilingual Saudis online and their motivations, the study identified several practices and their uses. Firstly, the most-used practice among the participants is Arabization. The participants' bilingual abilities enable them to manipulate the English words to fit their daily linguistic needs. Moreover, this linguistic competence seems to characterise specific generations or speech communities, which makes these Arabized words common and considered as a sign of social symbolism.

Secondly, a unique practice is reported in this study, that of prayers. This reflects the status of Classical Arabic and the Islamic teachings in some participants' posts. Also, the effect of the Qur'an can be detected in the rich and varied body of religious expressions, which creates a unique feature of the Arabic language. This practice can be found in many forms; i.e., the prayers quoted from the Qur'an, the prayers quoted from the Sunnah of the prophet Mohammad (peace be upon him), and the prayers composed by the users.

Next, with regard to the motivations of CS, the study found that showing off is the most reported finding amongst the participants – one not previously documented in the literature. This finding emphasises that English has a prestigious status in Saudi society. It is worth mentioning that most participants indicated that they viewed some code-switchers as showing off, but this may also be the case for themselves, but they cannot admit it because it is self-reported data. Moreover, they added that some CS is not necessary because Arabic alternatives are available, but their posts revealed that they used CS in many cases where it was not necessary.

Fourth, one of the reported motivations for CS is language development. Online interaction helps the participants to enhance their English language use. Some of them shared that this supports their second language use and encourages them to CS more because it enables them to, for example, avoid typo errors and use more advanced vocabulary. It is crucial to mention that online interaction may also help its users to copy other peers' linguistic activities in order to follow the norm of the online interaction. It may also have the effect of enhancing/developing their own language skills.

Fifth, with regard to the second question, several themes emerged from the participants' common reported data such as CS is an indication of lack of confidence and identity loss. Another theme is that the participants are now interested or tempted by the option of online anonymity in Twitter because they indicate their full awareness of their social limits. In addition, emotions are discussed as associated with language, it was found that most participants prefer switching to English for swear words because they believe that switching the code makes the impact less aggressive and negative for the recipients. This debates the notion that a realization and expression of emotion as a communicative act is more challenging in the second language learned later in life than in first language. Also, Dewaele's (2007) research which indicated that swear words in the first language have more emotional force than swear words in the second language, this finding has not been reported in the literature. This may be due to the fact that Saudi society has a unique sociocultural nature, at least among specific social classes that consider swearing in Arabic inappropriate and serious. Interestingly, this has become a norm among most of the participants because most of them reported it, even though it was not one of the interview questions.

In addition, one of the remarkable findings in this study is the caution among the participants when interacting with the other gender, either linguistically (formal language) or non-linguistically (multimodality). This view may be due to the limited informal interaction between both genders in the Saudi society – the context of this study's sample – especially because they all explained that this caution is to avoid misunderstandings such as flirtation or disrespect, which can be created by such attitudes.

Finally, after discussing the difference between CS and TL, the study's results show that the findings of this study are CS in nature via a TL lens to fill CS approach gaps and most of the results (discussed in this chapter), if not all, support Wei's notion of TL (2018) which is that

multiliteracy is one's ability to decode multimodal communication, and that this multimodality contributes to meaning. This is applicable to the online affordances used by either monolinguals or multilinguals and perceived not only by specific generations but also by any online multiliterate. The relationship between this study and TL is that, in the absence of paralinguistic cues online, this study's findings argue that language is limitless and continuously developing through a process of "linguaging" and demonstrate how bilinguals employ all textual and semiotic options purposefully to achieve their communicative goals and to create appropriate interactions.

Discussion

Most of the frameworks are mono-lingual biased, thus one of this study's strengths is that it points to the fact that standard sociolinguistic approaches are not adequate to cover data like those found in the current study. This is because it shows the differences between offline and online interaction, especially given the rapid changes of e-communication and the changes language is witnessing. There is nothing in the literature about this particular group in this technological context which allow for the evaluation of available models, their narrowness and lack of adequacy. This represents a significant contribution of this study. The major focus is the sociolinguistic approach and how it sheds light on the analysis of CS and TL. The data analysis model is based on Herring's CMDA framework (2004, 2007) to examine the social and technological factors of online platforms, on Al-Wer's (2013) approach of grounding the data to investigate the code-switched data, TL (Wei, 2018) to expand the view of CS and complete the missing components of this type of data, and on TA (Clarke & Braun, 2006) to identify the meanings from the data. This use of these mixed methods was adopted based on the complexity of the subject matter at hand.

The analysis, among other things, shows that the participants employ online platforms for the purpose of communication, facilitated by two factors. The first is the advantage of online affordances that act as a substitute for body language in offline interactions, and the second is the asynchronous nature of online communication, which supports readiness for communicating in a specific culture.

Socially wise, the specific conversational practices we select shape how we identify ourselves to our interlocutors which demonstrates that identity is not a fixed notion and that it is likely to change, especially when individuals are using online platforms, some of which provide leeway for anonymity or change of some personas' characteristics. CS is also found in multimodality, which represents an online interaction privilege from linguistic to non-linguistic practices and CS from English to Arabic or vice versa for the purpose of empowering their communication.

Relatedly, this study argues that for the participants, CS is more than a linguistic choice; it is rather a moment of making, taking a stance through 'footing', mirroring attitudes and making options and decisions 'positionality' which is why this project appreciates the work of Goffman (1974). This is because the participants act differently online according to the context, mood or topic from offline interaction, while in DMC more stances can be taken due to its multimodality and asynchrony. These enable the participants to reconstruct their online personas, to reveal or fake social characteristics that are missing in offline interactions, such as humour and wisdom.

Furthermore, this study indicates—with respect to non-generalisation—that the Saudi participants behave similarly to their offline communication because as they stated, they respect their social backgrounds and never try to use their Twitter accounts as masks to release their anger or aggression.

In this study, Saudi Arabic has been highlighted as many varieties not as one language. Standard vs non-standard varieties are used by the participants as many purposeful tools to achieve communicative goals. This study has shed light on the written Saudi Arabic which allowed this variety to be distinguished and recognized in a different way than face to face interaction.

Another point debated relates to the affections associated with each language. On the one hand, switching to English is considered by some participants as unnecessary and a way of show-off and yet still they are found CS. On the other hand, Arabic is viewed as a beautiful language and using it is a source of pride which may be due to their desire to show their feelings of belonging and their Arabic identity, even if the English competence of the interlocutors is good. The common perception of Saudis' CS as a way of showing off could be the motivation behind this view, which affects the credibility of this perception.

Conclusion

This exploratory study was conducted to investigate how Saudi bilinguals function on a daily basis in online interaction and employ their online linguistic and non-linguistic repertoires to achieve social communicative goals. It is about the interactional linguistic and social empowerment of online interaction to its users involving intellectual; cognitive, cultural and psychological understanding to explore how social media or online interaction is having an impact on its users and the way they interact with others in terms of achieving some interactive purposes such as expression and self-presentation.

This study has investigated the Arabic-English CS behaviour of eight Arabic-speaking Saudi bilingual participants living in Saudi Arabia. The data are based on 194 WhatsApp chats and 122 tweets that were collected by the researcher. The data were analysed and interpreted according to three aspects: conversational turn-taking and CS; the linguistic description of the data; and code-switching and identity.

This study contributes to the DMC literature and bridges some of the existing gaps. For example, much research has been conducted on offline CS, mostly on patterns and purposes in many contexts, yet much less has investigated online CS from a sociolinguistic perspective especially on that specific group of Saudi Arabia. Also, the study analyses the linguistic features of CS by Saudi bilinguals and determines the relationship between these features and the contexts in which they appear. The study also surveys the changes in CS according to the setting, situation and gender of the interlocutor(s).

Furthermore, this study examines the social aspects (virtual identity) that can be revealed by the Saudi bilinguals in their online communication. Through this virtual identity, they can do things they cannot do in real-life situations, such as using swear words in English, which they prefer not to do in Arabic due to their social values. There is evidence that these bilinguals' virtual sociolinguistic behaviours support the notion that identity is not fixed but negotiated. This study supports Thurlow et al.'s (2004) concept that the aspects of identities we present

online and offline are two sides of the same coin and the same constant progression, that of “*identification*”.

Therefore, it can be argued that CS is more than that theoretically defined at the beginning of this project as “the alternative use of two languages either within a sentence or between sentences” (Clyne, 1987: 40). However, this study has proven that this definition is not telling the whole story, it is rather a juxtaposition between languages, cultures and spaces that facilitates communication and expression. In addition, it is mirroring attitudes either in manipulating the linguistic choices or the non-linguistic resources purposefully not to fill lexical gaps but rather, to achieve communicative goals. One of the most significant theoretical implications in this study is to take that restricted segment of the Saudis so called ‘conservative context’ to the body of knowledge to investigate the development and empowerment of the means of communication which allowed to revisit the theory of CS.

In this study, online CS, which includes all linguistic and non-linguistic resources, is like owning several options for the delivery of your message. It is similar to Bourdieu’s (1977b, 1991) two key concepts: habitus, and symbolic capitals. Habitus refers to an individual’s own personality and motivations to behave in a specific way. This capital is formed by the person’s childhood knowledge and controls one’s attitudes and perceptions. It reveals the person’s deeply rooted social background. On the other hand, symbolic capital refers to one’s linguistic proficiency. These capitals represent a rich source of affordances when practised via DMC that assist interlocutors to either show unrevealed characteristics of their personas like humour and wisdom, or to communicate better due to the online interaction asynchrony and space. These virtual spaces are considered a third space between the interlocutors’ offline realities and their capitals, where they can deploy many means for self-presentation and communication.

In addition, As an Arabic speaker, there was the standard vs non-standard dichotomy. However, this study has gone beyond this dichotomy to indicate that each of these Arabics has a function to play for the purpose of completing the big picture of interactive repertoires. The findings showed that participants employ these Arabics not as low varieties but as adapted and purposeful sources for effective and appropriate communication. For example, the participants are found to be Arabizing some English words instead of using the standard alternatives. This is fascinating because the interlocutors find those English words fit more in the interaction than their native language alternatives because they are more common in their communities. They also distinguish some younger generations from the older ones which encourages this linguistic practice to be expanded due to some contexts.

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The Development Multimedia for Learning to the Achievement of English Grammar for Senior High School Students in Lampang, Thailand

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This research is an academic service project for schools in the service area of Lampang Rajabhat University. The objectives of this research were: 1) to develop multimedia for learning to the achievement of English grammar for senior high school students to be effective. 2) to compare the learning achievement of English grammar by using the average score of 70 percent and 3) to study the English Grammar barriers for Senior High School Students. The sample was selected by means of cluster random sampling. The instruments used in this research were: 1) Multimedia for learning English grammar 2) The test of English grammar with alpha coefficient equivalent to 0.75, discrimination value between 0.27-0.80, and difficulty value between 0.33-0.80 3) Quality assessment form. The statistics used in data analysis were percentage, mean, and standard deviation. The statistics used in the hypothesis test was One Sample Group t-test. The study results were as follows: 1) The multimedia for learning English Grammar for senior high school students indicated that the learning media application was of excellent quality (mean = 81.54) 2) About English Grammar barriers of Thai students were 1. Concept of Tense and Time, 2. Noun, 3. The Position of the Adjective, and 4. Active Voice and Passive Voice. 3) The achievement of students learning by multimedia for learning English Grammar shows that the mean score was 23.50 (78.33 % higher than 70%), the T-test value was 19.524, and Sig.=0.000 (2-tailed).

Keywords: Multimedia for Learning, Learning Achievement, Media Efficiency

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Introduction

Teaching English in Thailand has been a contentious topic in Thai society. Despite having studied English for at least 12 years, including kindergarten, primary, and secondary school, Thai individuals still struggle with language proficiency compared to other Southeast Asian countries. This essay focuses on using Multimedia for Learning to teach English grammar, specifically addressing the structural differences between Thai and English. Thai learners are immersed in a Thai language environment, where they primarily hear, listen, and communicate in Thai. When learning a second language like English, they tend to rely on their knowledge of Thai language structure, leading to errors and misunderstandings with native speakers (Juhana, 2012). The article suggests that teachers should pay attention to tense and time, word order before nouns, adjective placement, modal verbs, and active/passive voice while teaching English to Thai students. The use of multimedia for learning is encouraged to facilitate the understanding of these structural differences. Thai students prefer auditory and kinesthetic learning styles (Prince, 2004). Therefore, Thai teachers should prioritize the integration of multimedia into their teaching methods. Despite their familiarity with English grammar, Thai learners still encounter challenges due to the influence of their native language structure. To help Thai students improve their grammar skills, the article recommends utilizing multimedia development for learning as a helpful tool in the teaching and learning process of English grammar (James, 2014).

Objectives

1. To develop multimedia for learning to the achievement of English grammar for senior high school students to be effective.
2. To compare the learning achievement of English grammar by using the average score of 70 percent.
3. To study the English Grammar barriers for Senior High School Students.

Method

The study was conducted in Grade 11 of Bunyawat Witthayalai School. The student population: consisted of approximately 720 people. The Senior High School Students sampling: 50 students were selected by means of cluster random sampling. The experimental plan One-shot case design (Best & Kahn, 1993). Data analysis: The statistics employed for data analysis were mean (\bar{x}), standard deviation (SD), percentage (%), and t-test.

The experimental plan One-shot case design with 50 samples that Multimedia for Learning obtained (Best, & Kahn, 1993).

X \longrightarrow O

When

X = Using Multimedia for Learning

O = English Grammar skills results

Research Tools

The research The Development Multimedia for Learning to The Achievement of English Grammar for Senior High School Students. The data collection tool for use in research is as follows.

- 1) Interview form about English Grammar barriers: This interview form was created to investigate the unique characteristics of English Grammar for Senior High School Students people's use of multimedia.
- 2) Quality assessment form: Three specialists will utilize it as a Multimedia application quality inspector based on score interpretation; 4.01–5.00 = the most, 3.01–4.00 = very, 2.01–3.00 = moderate, 1.01–2.00 = few, $1.00 \leq$ least.
- 3) The test of English grammar with alpha coefficient equivalent to 0.75

Data Collection

Data were collected from a group of 50 senior high school students. All research processes took about 4 months and were operates as follows:

- 1) Setting process of focus groups, observations, and interviews with sampling groups to study the English Grammar barriers for Senior High School Students.
- 2) Analyze information gathered from focus groups, observations, and interviews to examine the peculiarities of English Grammar for designing and developing multimedia.
- 3) After making improvements with the advice of specialists, the multimedia was taken qualitative evaluations and efficacy testing: 3 experts' qualitative evaluations. They rated the quality of the application that showed the most level of quality.
- 4) Set up multimedia for learning to the achievement of English grammar applications in the classroom.
- 5) Experimental stage with a target group of 50 students, with the test of English grammar to obtain data on the effects of utilizing multimedia for learning to the achievement of English Grammar.

Results

To achieve the aims, The outcomes are as follows:

1) The Results of Analyzing the Information Gathered From Focus Groups, Observations, and Interviews of English Grammar for Designing and Developing Multimedia

Concept of Tense and Time

The concept of tense and time in Thai is not the same as it is in European languages. The words used to show action or verbs do not change their pattern with time. The surface structure remains the same whether discussing the present, past, or future. There are no specific standards for using additional words to explain past, continuing, or future actions. Many teachers should first teach their pupils about time and tension before describing the pattern and shape of tense. Students will become perplexed if a teacher assigns them to do an exercise. They may remember the rule and pattern, but they are unable to apply it in everyday life.

Table 1 Errors Caused by Found in Narrative Writing

Error Types	Mean	Percent (%)
Verb tense	7.32	26.25
Word choice	4.41	12.45
Sentence structure	3.36	10.57
Article	3.08	9.84
Preposition	2.66	8.21
Modal / Auxiliary	2.5	6.53
Singular / Plural form	2.22	5.71
Fragment	1.5	4.11
Verb form	1.48	3.33
Pronoun	1.44	3.25
Run – on sentence	1.21	3.01
Infinitive / gerund	1.04	1.68
Transition	0.93	1.55
Subject – verb agreement	0.75	1.49
Parallel Structure	0.52	1.34
Comparison Structure	0.49	0.68
Total	34.91	100

A common problem in Thai students' writing is incorrect verb tense. The error is explained by stating that there is no concept of time in Thai. Many students are unable to produce the correct sentence concepts in the order in which they appeared in the English sentence. This is the primary distinction between Thai and English. To represent time in English is quite straightforward because there is a particular pattern and usage. Although only 4-5 tenses are utilized in daily life, every native must understand the notion of time. However, there are no verbs or marker words in Thai to represent time systematically. As a result, the high verb tense mistake is on the top of the table 1.

Noun

Another distinction between the English and Thai languages is in the use of grammatical nouns. The error of article usage was ranked fourth. Many Thai pupils, it is indicated, do not grasp nouns and words before nouns in English. Teachers should teach children about the idea of nouns in English, including the distinction between countable and uncountable nouns. Students must first recognize this rule because it is related to other grammar at a high level. Many quantifiers, such as much, many, little, few, a, an, the, and so on, must be employed by the countable and uncountable noun rule. In Thai, nouns are not classed as countable or uncountable, and there is no plural form by adding the morpheme "s" or "es" or changing the form to a plural form like in English. As a result, Thai pupils are unfamiliar with the plural form of the English language. Many of them are unable to correctly employ words before nouns or quantifiers in English. This structure should be taught at the beginning of the lesson in the Thai classroom because it will be the first level of using the correct language. The following is an example of an ungrammatical sentence that Thai students may use when speaking or writing in English.

Thai students may translate this sentence to be as follows:

“I want to buy dog.”

The correct sentence must be:
 “I want to buy a dog.”

Most of them fail to put the article "a" before the countable noun "car" since there are no words before nouns in Thai, therefore they transfer this concept to English. It is an example of a mistake caused by first language interference.

The Position of Adjective

An adjective is a word that modifies a noun. The English language places it before the noun and has a specific method for ordering it when there are multiple adjective words before the noun. (Dickins & Edward, 1988). In Thai, it comes after the noun, and there is no set guideline for adjective order. In English, for example, "a big dog" is said. "a big" is an adjective that comes before a noun in English, however, "a dog big" is expressed differently in Thai. Many Thai students think in Thai first and then write or speak in English. As a result, they make certain errors. Many students say "A dog big," which is incorrect in English. Some foreigners may comprehend what they mean, but the grammar is incorrect. Another thing that teachers should mention to their pupils is this.

Active Voice and Passive Voice

The verb form undergoes modification by employing the verb 'to be' along with the past participle or 'be + v.3'. This construction is widely utilized in both written and spoken English. When immersed in a society where English is commonly spoken, we become accustomed to this practice and recognize that the use of passive voice does not carry a negative connotation, but rather emphasizes the subject's activity. In contrast, the Thai language possesses a distinct passive voice structure, which differs from English in terms of conveying the idea of practice. Thai individuals tend to adopt this communication style particularly when expressing negative sentiments. Examples of its usage can be found in newspaper headlines and everyday conversations. For instance, Thais employ the passive voice when discussing topics related to punishment, violence, or traumatic experiences. In Thai, one might say:

“The thief was punished.”
 “The police officers were killed.”

However, the passive voice structure is not commonly employed in a positive sense. For instance, Thais do not say, 'That student is invited on stage.' When someone states that a student is invited on stage, it could be misinterpreted as punishment or coercion.

2) The Designing and Developing Multimedia

Designing and Developing Multimedia

Due to the need for English language skill enhancement among students, the implementation of Drill and Practice multimedia has become a preferred format for cultivating proficiency in English grammar. This multimedia approach is specifically designed to emphasize skill training and practice, catering to students' progression from basic to advanced levels of competency. It is particularly prevalent in subjects that necessitate continuous practice, such as English grammar, where consistent practice is essential. In order to enhance speaking,

reading, listening, and writing abilities, the multimedia package encompasses a wide range of resources dedicated to skill development and practice. Through interactive features, users are presented with a variety of questions and exercises that progressively challenge their abilities. Furthermore, the system incorporates a tiered difficulty level, allowing users to gradually reinforce their skills. Reinforcement can also be reinforced through the implementation of diverse incentives and consequences, drawing inspiration from Skinner's work (Skinner, 1971).

The Structure of Drill and Practice Multimedia

The multimedia structure begins with "Program start part" which is an introduction to the program that informs the user of what and how much training content they are accessing. This section is common in all structures. The training option is followed by the "Program work part" Given that the structure of the multimedia training is unique, the program will focus on looping and repeating many times. The procedure for each round of training is as follows.

The item for training has been chosen.

For training, a training list appears.
 ↓
 The user participates in the training process.
 ↓
 User Response Evaluation Program.
 ↓
 Users receive feedback on their work.

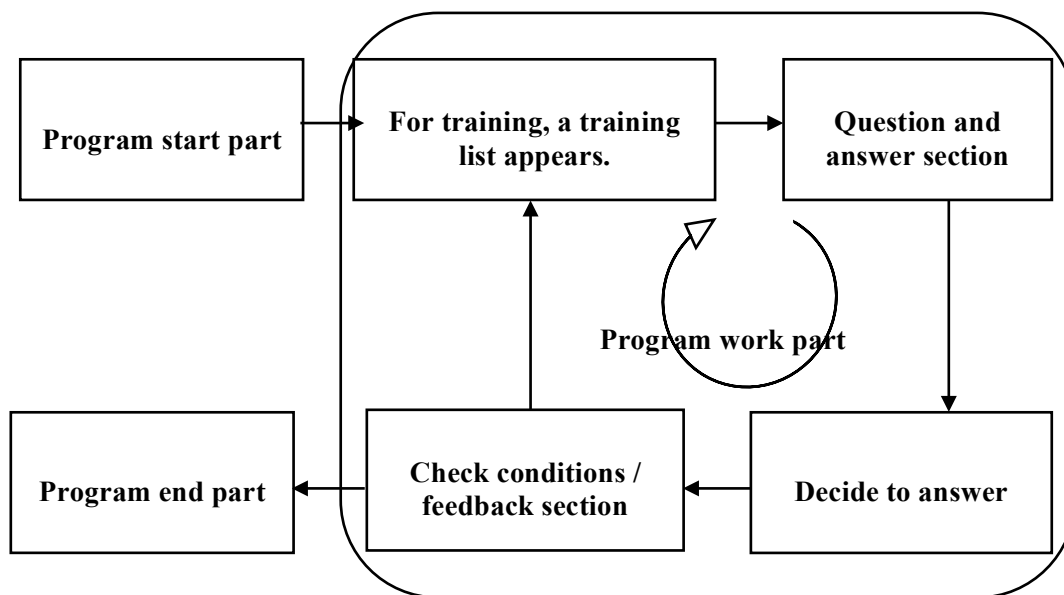


Figure 1. The structure of Drill and practice multimedia (Buakanok, 2021)

Quality Assessment of Multimedia
 Qualitative assessment step

Quantitative data obtained from assessment results can be converted into qualitative data using the average score of answers on each item assessed (Koul, 1984). The criteria for evaluating media feasibility is based on the interpretation of scores. The formula (Riduwan, 2013) was used in the assessment of the learning media:

$$P = \frac{\text{Total score} \times 100}{\text{Number of items}} \times \frac{100}{5}$$

P = Percentage

Total Score = Total sum of questionnaire scores

Number of Items = Total number of items in the questionnaire

100 = Percentage (%)

5 = The highest value for each item

According to the above formula, the assessment scores of the three media experts are as follows: 81.27%, 81.36%, and 82.00% (mean = 81.54) indicate that the learning media application was of excellent quality.

Results of the Media Experiment

The experimental stage with a target group of 50 students, with the test of English grammar to observe the results of 4 skills: 1) Listening 2) Speaking 3) Reading, and 4) Writing. The average score of the participants when taking the skill test was required to be not less than 70% (21 points out of 30).

One Sample T-test

$H_0: \mu = 21$ (The average of skill points is equal to 21)

$H_1: \mu \geq 21$ (The average of skill points is more than 21)

The results are shown in Table 2.

Table 2. Four skills achievement of English grammar.

	Test Value = 0					
	t	df	Sig.(2-tailed)	Mean different	95% Confidence Interval of the Difference	
					Lower	Upper
Score	19.524	49	.000	23.50	22	25

Table 2 shows that the mean score was 23.50, the T-test value was 19.524, and Sig.=0.000 (2-tailed). About hypothesis testing, if Sig. < 0.000 shows, H_0 is rejected and H_1 is accepted.

Summary and Suggestion

Over time, four persistent concerns have been identified among Thai students, which seem to endure despite their long-standing presence. Thai children, starting from kindergarten and spanning throughout high school, dedicated over ten years to studying the English language. Despite being exposed to comprehensive instruction across various English skills, only a

limited number of students achieve proficiency. The following examples illustrate this prevalent trend:

Structure Differences Between Thai and English

Thai has no tense system, and sentence construction differs greatly from that of English. Many words are arranged differently, verbs change when they are employed to describe the passage of time in both present and past acts or events, or nouns change when plural. These forms are difficult for Thai students to understand.

Interference From Thai Language

The influence of the Thai language on the process of learning English is widely recognized as a significant factor contributing to errors among Thai students. Often, they tend to think in Thai before constructing English sentences, leading to a multitude of mistakes in both spoken and written forms. As Thai is their native language, students often incorporate elements of Thai when communicating in English.

Inadequate Practice

Effective language acquisition for learners of any language requires consistent practice. To enhance their language skills, individuals must engage in daily activities encompassing reading, writing, speaking, and listening in the target language, such as English. Numerous resources and media outlets are available to facilitate these practices within their everyday lives. Examples include reading English newspapers, listening to radio news or English songs, writing emails to international friends, and engaging in conversations with foreign tourists. There are abundant opportunities for students to engage in practice. However, Thai students, in contrast, often face a lack of encouragement when it comes to language practice. Additionally, they may exhibit hesitancy or reluctance in communicating in English with individuals who are not familiar to them.

A Word-for-Word Translation

Thai students often rely on the structure of the Thai language when using English, influenced by the interference of their first language. For instance, they may incorrectly state, "I never go to England," instead of the correct English construction, "I've never been to England." Such non-standard English sentences can pose challenges for native English speakers to comprehend. Many Thai students are unaware that direct translations of certain Thai expressions may not accurately convey the intended meaning in English.

Conclusion

Thai students continually encounter persistent challenges when it comes to mastering English grammar. These difficulties stem from their status as non-native English speakers and the limited opportunities for English language immersion in many regions of Thailand. Determining whether the issue lies with the students themselves or the teaching methodologies employed becomes a complex task. To address these challenges effectively, the integration of multimedia as a tool for illustrating grammatical rules and structures during the learning process becomes paramount. Multimedia aids students in comprehending the intricate aspects of English language formation.

However, a mere understanding of grammar alone falls short in achieving proficiency in English usage. It is crucial to integrate grammar instruction with various skill development activities. Students should be encouraged to actively engage in speaking, writing, reading, and listening exercises facilitated by multimedia resources within the classroom. Grammar should be seamlessly incorporated into all exercises that focus on these skills while emphasizing the four key points outlined in this article. By adopting such an approach, students will gain a comprehensive understanding of the English language and improve their overall proficiency.

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*Investigating the Effectiveness of Feedback Loop on Second Language Writing Accuracy
Among Young Learners*

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

Feedback and its effectiveness on L2 writing performance has been studied by many scholars, and the debate about its effects has been a controversial topic for over two decades (Cao, 2021). Apart from the inconclusive results, most studies on this topic have been conducted with postsecondary students (75%) and adult learners (86%), which highlights the need to pay more attention to young learners (Liu & Brown, 2015). Driven by this gap, this study aims to clarify whether the feedback loop has an impact on young learners' second language writing. 40 EFL Second grade students were divided into two groups: the experimental group and the comparison group. During the treatment period, the experimental group received a continuous feedback loop for 5 weeks, while the comparison group received feedback only once. At the end of the treatment period, the results of the Kruskal-Wallis test showed that the experimental group performed better than the comparison group on the post-test. ($H(1) = 17.094, p < .005$). Pedagogical implications are presented at the end of the article along with suggestions for future studies.

Keywords: Feedback, Feedback Loop, L2 Writing Accuracy, Young Learners

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Introduction

Feedback has been a topic that educational researchers have been studying to determine its role, impact, and meaning. Shute (2008) defines feedback as “the information communicated to learners to change their thinking or behaviour to improve learning” (p.154). Studies on the subject have demonstrated that feedback improves students' performance on the given task (Hendry et al., 2016). Thus, it is argued that “giving feedback to students on their performance provides valuable information that facilitates learning” (Tricomi & DePasque, 2016, p.175). Therefore, providing feedback in the writing process is considered beneficial to L2 learners' writing performance (Wahyuni, 2017). Feedback, as a concept based on Vygotsky's (1978) sociocultural theory, ensures that learning occurs through social interaction. According to this theory, “language development occurs when learners have sufficient and efficient scaffolding so that they can be supported by agents such as teachers and then become self-regulated learners who can use the L2 freely in their zone of proximal development” (Bitchener & Ferris, 2012, p.18). According to Hattie & Timperley (2007) the definition of feedback is “the information provided by an agent (e.g., teacher, peer, book, parent, self, experience) about aspects of one's performance or understanding, and this can help learners identify their strengths and weaknesses in writing” (p.81).

There are several types of feedback to provide information about L2 learners' writing performance: “Teacher feedback, peer feedback, self-feedback, and technology-based feedback” (Lee, 2020, p.5). Since the focus of this study is on teacher feedback, it should be mentioned that there are also different types of teacher feedback. These include: written corrective feedback (feedback on errors made by the writer), written commentary (written comments on other aspects of writing such as content and organisation), and oral feedback (given face-to-face rather than in written form) (Lee, 2020). Several studies have examined the effectiveness of feedback on L2 learners' writing skills. The study by Fathman and Whalley (1990) found that the group that received error feedback had fewer grammatical errors in their revised draft than the other groups that received only content feedback or no feedback at all. Another study by Bitchener (2008) examined the effectiveness of written corrective feedback with 75 ESL university students and found that the experimental group, who received corrective feedback outperformed the control group in terms of writing accuracy.

Although the effect of feedback on second language writing has been a topic of interest for the past two decades and studies state that young learners also benefit from feedback (Roothoof, Lázaro-Ibarrola & Bulté, 2022), the number of the studies that have investigated the effectiveness of feedback on young learners' writing performance is small (Liu & Brown, 2015). Therefore, further research on the effectiveness of feedback on young learners' writing performance is needed to provide helpful information on this topic. Besides, there are studies in the literature that have investigated the effectiveness of different types of feedback to compare them (Saed, AbuSa'aleek, RahmtAllah, 2022), but experimental studies that focus exclusively on oral feedback in the context of EFL are scarce (Alfalagg, 2020). And although studies have attempted to investigate the effectiveness of oral feedback on students' written performance, the results are uncertain and inconclusive (Erlam, Ellis, & Batstone, 2013).

Moreover, most of these studies in the literature examined the effects of feedback on revision accuracy, and few of them focused on the effectiveness of feedback on new written work (Ferris, 2010, 2012). As Ferris (2004) explains, revising an incorrect form may show improvement, but it does not guarantee that learners will use the correct forms when writing a

new text. Therefore, researchers (Sheen, 2007; Truscott, 1999) have pointed out that it is important to examine the effects of feedback not only on the accuracy of L2 revision but also on the newly written texts. This is referred to as the transfer of feedback (Karim & Nassaji, 2018) and has been explained in previous studies as a reduction in errors from one written work to another (Truscott & Hsu, 2008; Van Beuningen et al., 2012).

Therefore, as previous literature shows the importance of focusing on new texts when studying the effects of feedback, this study addresses L2 accuracy in learners' new texts. And given the lack of studies on the effectiveness of feedback on young learners' writing performance and the inconclusive findings on the impact of oral feedback, further studies are needed to investigate the effects of oral feedback in the context of young learners.

Feedback and its effectiveness on L2 writing performance has been studied by many scholars, and the debate about its effectiveness has been a controversial topic for over two decades (Cao, 2021). The debate began with Truscott's (1996, 1999) claim that written corrective feedback was ineffective and also damaging to the accuracy of L2 writing. He therefore suggested that teachers should refrain from it. Ferris (1999, 2004, 2006), on the other hand, held that feedback can significantly improve the accuracy of L2 writing if it is used carefully and continuously. Due to these conflicting statements and suggestions, Hyland & Hyland (2006) stated that the impact of feedback is still unclear.

As the number of studies on the impact of feedback has increased, the debate on this topic has also expanded. As mentioned earlier, most of these studies have demonstrated a positive effect of feedback on L2 writing performance. For example, the study by Karim & Nassaji (2018) showed that the group, which received feedback performed better on revision tasks than the group, which did not receive feedback. The study by Stefanou & Revesz (2015) also showed that the experimental group, which received direct feedback performed better than the comparison group that did not receive feedback when their article usage for specific and generic plural references was assessed through a text summary and truth value judgement test.

However, there are also studies that show feedback has no positive effect on writing in the L2. For example, Truscott and Hsu's (2008) study showed that the group that received feedback performed better on the posttest than the control group did. However, in the delayed posttest, which was administered one week later than the posttest, both groups performed equally well. Therefore, the study concluded that feedback had no lasting effect on writing in the L2. Similarly, in Gorman & Ellis' (2019) study, the results showed no difference between the groups that received corrective feedback and those that did not. All three groups had similar results and showed no significant difference. Liu & Brown (2015) pointed out that most studies on this topic have been conducted with postsecondary students (75%) and adult learners (86%), highlighting the need to pay more attention to young learners. Therefore, there is a need in the literature to fill this gap and conduct studies that shed light on the literature on the effectiveness of feedback in second language writing by clarifying it in the context of young learners.

The Present Study

Within this frame, the purpose of this study is to fill this gap in the literature and clarify whether the feedback loop has an impact on second language writing among young learners. Thus, it aims to answer the following research question:

1. Does providing feedback loop have an effect on second grade EFL students' writing performance?

Methodology

Research Design

The design of the study is quasi-experimental because the participants are not randomly divided into experimental and comparison groups. Instead, they are selected as a whole class as either the experimental or comparison group (Best et al., 2017). The number of participants in both groups is the same, 20 in the experimental group and 20 in the comparison group (total $N = 40$).

Participants

Participants in both groups were 8-year-old second grade EFL students of the same school. The genders in both groups were mixed, i.e., male and female, and their English proficiency was in the same range (A2 on the CEFR). They could understand frequently used expressions and communicate in everyday situations. All participants were monolingual and native Turkish speakers.

Instruments & Data Collection

Participants took a pre-test and a post-test to collect data. The English exam, which all second graders in the school take twice in a term served as the pre-test and post-test. Their performance on the writing section of this exam provided the data to compare the two groups. Since the participants were young learners and their language proficiency was low, they only had to write one paragraph on a given topic in the writing part of the exam. The reliability of the exams measured using Cronbach's alpha was .677 and .856 for the pre-test and post-test respectively.

Treatment Procedure

In order to investigate the effect of feedback loop on young L2 learners' writing performance, two groups were formed in this study. One group served as the comparison group and the other as the experimental group. Before the start of the treatment, both the control and experimental groups took a pre-test to ensure that the groups did not differ. After data collection on the students' writing scores from this pre-test was completed, the experimental group received the treatment. As part of the treatment, the experimental group received feedforward from the teacher on their writing performance as well as feedback. This cycle of feedback and feedforward engaged the experimental group in a feedback loop. During the feedback process, students were asked to pay attention to their grammatical errors. The teacher provided indirect feedback to the students, i.e., the errors were not directly shown to the students, but they were guided to find and correct them themselves (Karim & Nassaji, 2020). The feedback loop was provided to the experimental group in every writing session for 5 weeks until the post-test. To avoid bias, the control group received a placebo, i.e., they received feedback only once. The experimental group received the treatment until they took the second English exam at school. And this second English exam served as a post-test. Based on the data collected from both groups in the pre-test and post-test, their writing

performance was graded and compared. The results of the two tests from both groups were used to determine if the treatment group would perform better than the control group.

Scoring Procedure

Students' writing performance was graded according to the school's grading policy, thus the teacher graded students' written work only on their grammatical errors. Therefore, the focus was on the accuracy of the texts by evaluating the grammatical errors. Following the study of Van Beuningen (2011), the grammatical errors that were considered included errors in the syntax and morphology of a sentence. To ensure the reliability of the scores, interrater reliability was calculated. Another EFL teacher, who is a native speaker of English scored the participants' writings individually and the Pearson correlation coefficients for the two scores in the pre-test and post-test were calculated. Pearson correlation coefficients in pre-test and post-test were: 0.99, 0.99 respectively, which refers to 98% positive association. The results indicated that there was a strong positive agreement between the raters.

Data Analysis

The results of the two groups were subjected to descriptive and inferential analysis using SPSS 26.0 software to obtain sufficient information on the significance of the results. Since the data did not meet the normality assumption of the parametric tests, the non-parametric tests were used to analyse the data. Therefore, to examine the effect of feedback, Kruskal-Wallis and Wilcoxon signed-rank tests were used to determine if there was a statistically significant difference between the experimental and comparison groups.

Results

Normality Testing

In this study, the Kolmogorov-Smirnov test was used to measure the normality of the data distribution. The data distribution was normal if the significance level was higher than .05. The results of the normality test are shown in Table 1.

Groups	Pre-Test	Post-Test
Experimental	.200	.000
Control	.061	.200

Table 1: The Summary of the Result of the Normality Testing

As Table 1 shows, not all values obtained exceeded the .05 significance level. Therefore, the results showed that the data deviated from the normal distribution and the non-parametric tests had to be used for further analysis to answer the research question.

RQ: Does providing feedback loop have an effect on second grade EFL students' writing performance?

Groups	Tests	Minimum	Maximum	Mean	Std. Deviation
Experimental	Pre-Test	3.00	10.00	7.10	2.17
	Post-Test	6.00	10.00	8.65	1.46
Comparison	Pre-Test	2.00	10.00	6.60	2.99
	Post-Test	1.00	9.00	4.90	2.82

Table 2: Descriptive Statistics of the Results of Experimental & Comparison Groups in Pre & Post Tests

Table 2 shows the descriptive statistics of the results of the experimental and comparison groups in the pre- and post-test. It shows the minimum and maximum scores obtained and the mean of each test with its standard deviation. To answer the research question, the pre-test and post-test scores of the experimental and comparison groups were compared to determine if there was a difference between the groups. For this purpose, the Kruskal-Wallis test was used.

Tests	Kruskal-Wallis H	df	Asymp. Sig
Pre-Test	.136	1	.712
Post-Test	17.094	1	.000

Table 3: Kruskal-Wallis Test Statistics

As shown in Table 3, the results of the Kruskal-Wallis test indicate that there was no difference between the groups at the pre-test $H(1) = .136$, $p = 0.712$. However, there was a significant difference between the groups at the post-test $H(1) = 17.094$, $p < .005$.

To determine the differences within groups, the Related-Samples Wilcoxon Signed Rank Test was used to compare the scores of each group on the pre-test and post-test.

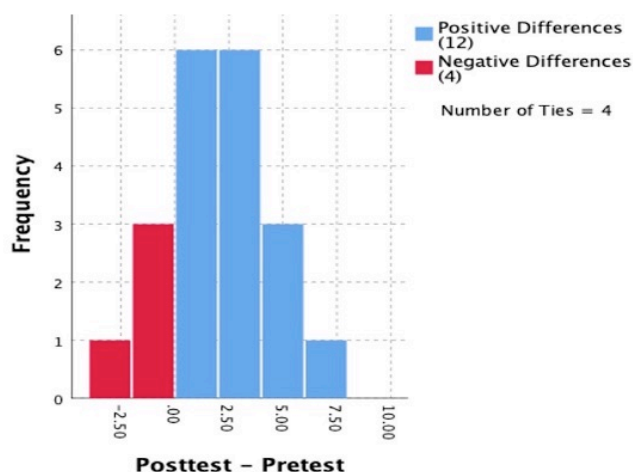
Null Hypothesis	Test	Sig.	Decision
The median of differences between Pretest and Posttest equals 0.	Related-Samples Wilcoxon Signed Rank Test	.021	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .050.

Table 4: Related-Samples Wilcoxon Signed Rank Test Results for Experimental Group's Scores

Table 4 shows that the results of the related-samples Wilcoxon signed-rank test indicated that post-test ranks were statistically significantly higher than pre-test ranks in the experimental group $Z = 112$, $p < .05$.

Graph 1 visually represents the differences between the pre-test and post-test results of the experimental group in a bar graph. It shows that the results were higher in the post-test than in the pre-test.



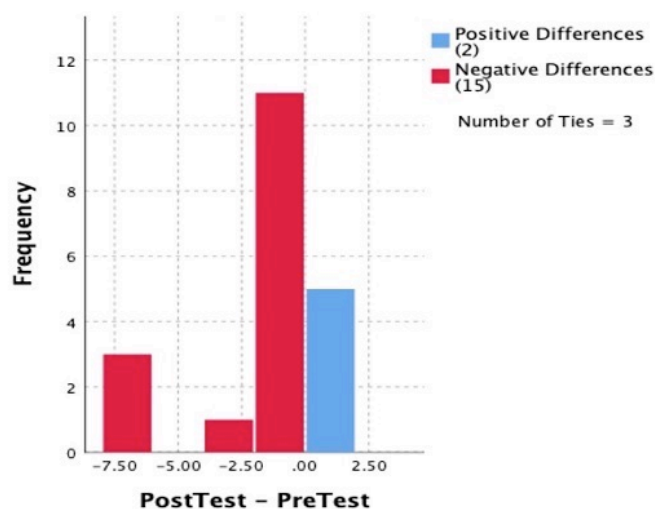
Graph 1: Related-Samples Wilcoxon Signed Rank Test Results for Experimental Group’s Scores on a Graph

Null Hypothesis	Test	Sig.	Decision
The median of differences between Pretest and Posttest equals 0.	Related-Samples Wilcoxon Signed Rank Test	.002	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .050

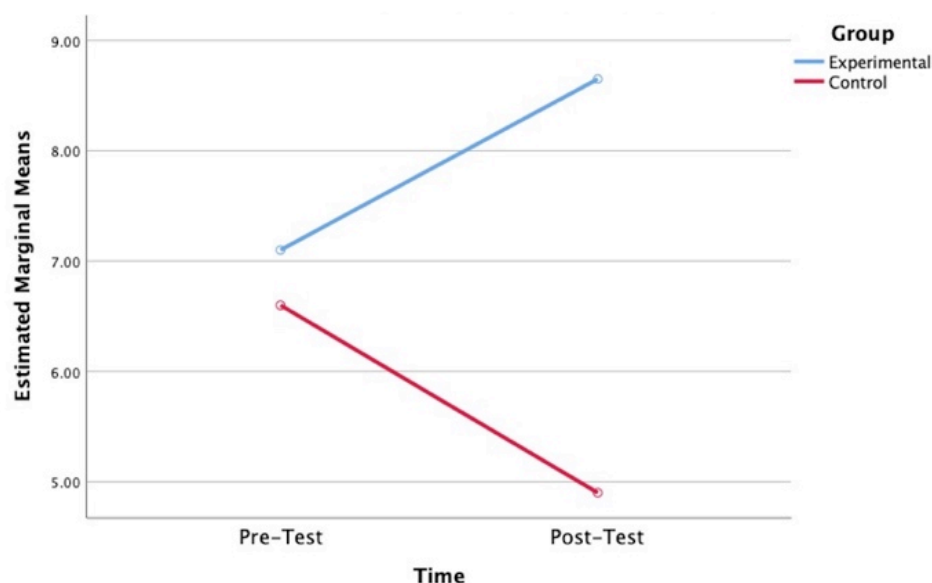
Table 6: Related-Samples Wilcoxon Signed Rank Test Results for Comparison Group’s Scores

Table 6 shows that the related-samples Wilcoxon signed-rank test indicated that post-test ranks were statistically significantly lower than pre-test ranks in the comparison group $Z = 14, p < .05$.



Graph 2: Related-Samples Wilcoxon Signed Rank Test Results for Comparison Group’s Scores on a Graph

Graph 2 visually represents the differences between the pre-test and post-test results of the comparison group in a bar graph. It shows that the results in the post-test were lower than in the pre-test.



Graph 3: Estimated Marginal Means of Groups in Pre-Test and Post-Test

Graph 3 shows the estimated marginal means of the groups at two different time points, the pre-test and the post-test. It graphically demonstrates that the experimental group's post-test scores increased while those of the comparison group decreased.

Discussion

The purpose of this study was to answer the question of whether providing a feedback loop to young EFL learners would have an impact on their writing performance. The results of the study showed that both the experimental and comparison groups had similar pre-test scores at the beginning of the 5-week period, as there was no statistically significant difference between them. At the end of the 5-week treatment period, both groups were subjected to a post-test to determine whether they were significantly different from each other. And the results of Kruskal-Wallis test showed that the groups were significantly different from each other.

To compare the results of each group in the pre-test and post-test, the Related-Samples Wilcoxon Signed Rank Test was used. The results showed that the experimental group's scores significantly increased in the post-test, while the comparison group's scores significantly decreased. Thus, the treatment was effective for the experimental group and the feedback loop had an impact. Therefore, the answer to the research question of this study is that providing a feedback loop has an effect on the writing performance of second grade EFL students.

However, the findings showed that the results of the comparison group did not even stay the same, but actually worsened. Since they did not receive a feedback loop, they may not have had the opportunity to identify their errors and understand where they needed to make changes to correct their errors and how to do so. Consequently, it is possible that the post-test

challenged them more and they performed worse because there was no correction and scaffolding from a superior agent.

The results of this study support the theories that there is an effect of feedback on learners' writing. Therefore, the results seem to be consistent with some previous studies that also found that feedback has a positive effect on students' written work (Fathman & Whalley, 1990; Ashwell, 2000; Ferris & Roberts, 2001; Bitchener, 2008; Bitchener and Ferris, 2012). Thus, the results are in contrast to the studies that say feedback is ineffective (Kepner, 1991; Polio et al., 1998) and teachers should not use it (Truscott, 1996; 1999; 2004).

Another important point is that the results also show that feedback is effective on new written work, not just revision, which supports Bitchener's (2008) study. This is important because many researchers (Truscott, 1999; 2004; Ferris, 2004) have stated that accuracy must be measured on new written work and only then can the effectiveness of feedback be measured (Bitchener, 2008). Thus, the results of this study provide evidence that oral feedback has an impact on students' new written work, which supports previous research (Ellis et al., 2006).

Moreover, these findings can help shed light on the effectiveness of feedback on young learners' writing, as there are few studies that have examined this issue in the context of young learners (Liu & Brown, 2015). And, they support the earlier findings of Roothoof et al.'s (2022) study by showing that feedback is effective and young learners can also benefit from it.

Conclusion

The purpose of this study was to investigate whether providing a feedback loop to second grade EFL students has an effect on their writing performance. The results were discussed in detail in the section above. There are also some noteworthy implications, applications, limitations, delimitations, and suggestions for further research to mention.

Implications and Applications

Several conclusions can be drawn from this study. Providing feedback with feedforward that engages students in a feedback loop has an impact on second language learners' writing performance. And young learners can also benefit from this feedback loop, which enables them to improve the accuracy of their new writing. Therefore, a feedback loop is an important application for young learners that teachers can provide in their sessions. In particular, teachers who teach young EFL learners to write in their second language can provide their students with as much feedback and feedforward as possible to increase the intensity and impact of the feedback loop they offer. In this way, young learners can hopefully improve their writing performance and acquire better writing skills with the help of the persistent feedback loop.

Limitations and Delimitations of the Study

There are several limitations and delimitations of this study. Groups were selected from pre-formed classrooms to conduct this study. Therefore, two classrooms were selected for each of the experimental and control groups. This results in a lack of randomization of participants and may affect the validity of the study. In addition, the number of participants is small, which in turn affects the generalizability of the results. In addition, the researcher has only 5

weeks to study the effect of the treatment. Thus, the time limitation may pose a problem in determining the effect of the intervention. It is not known what would happen if the treatment lasted longer. In addition, there is no delayed post-test in this study. Therefore, we do not know whether the experimental group would still perform better than the comparison group after a certain period of time and whether the feedback effect would last. In addition, this study does not consider different types of feedback and only examines oral teacher feedback. Therefore, the results of this study do not provide information about the effectiveness of other types of feedback on the writing performance of young EFL learners, but only about the effect of oral feedback.

Acknowledgements

The author appreciates the contribution of Professor Hossein Farhady for all his support and feedback to make this study a publishable one.

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***Digital Gender Gap at the High School Level:
The Case of Computer Technicians in Mexico***

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

The gender gap has generated inequalities in women due to barriers that limit their progress and participation in various areas of their lives. Barriers and inequalities that bound women within the digital world have been identified, generating a fracture called the digital gender gap or gender digital divide. This phenomenon can be maximized or decreased depending on diverse factors such as access to education or development of digital skills. In this regard, a lack of aspirations to select scientific and technical paths among young people has been observed due to this digital fracture. The complexity has been evidenced in young women underestimating their digital abilities and having a technophobia that directly limits their interaction within the digital world. This study presents the results of the digital media literacy level of 124 participants (men=73, women=44, and non-binary students=7) in a technical high school in Mexico related to their educational experience and their perception of activities and school spaces. Men with a positive perception exhibit a higher level of media literacy ($M=75.26$, $SD=11.675$) compared to those with a negative perception ($M=67.05$, $SD=15.309$). On the other hand, women with a positive perception have a higher level of media literacy ($M=77.78$, $SD=10.744$) than women with a negative perception ($M=64.25$, $SD=13.134$). These results highlight the importance of promoting activities and school spaces that foster communicative and media skills, especially among women, with the aim of closing the gender gap in the digital realm.

Keywords: Digital Gender Gap, Media Literacy, Digital Literacy, High School, Learning Process

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Introduction

The gender gap refers to the situation where women have fewer opportunities than men to develop themselves equally in various areas (Davies, 2011). It is a complex phenomenon that involves various social conditions and psychological mechanisms that reinforce it, such as sexism or implicit stereotypes within social interaction (Pesce & Etchezahar, 2019). Additionally, violence against women, the employment and wage gap between sexes, the inactive population by sex, and traditional gender roles incentivize this situation (Mouronte, 2022). It has been identified that this phenomenon creates inequalities for women in education, work, and society (Olarate, 2017).

In education, it has been recognized that the disparity between genders affects students' learning (Skelton & Francis, 2011). Additionally, gender stereotypes impact how students' progress throughout their school life (Vantieghem et al., 2014). As a result, it is crucial to acknowledge the significant role that gender plays in the educational gap, especially in the years following basic education (Vantieghem & van Houtte, 2018).

On the other hand, the digital divide is a term used to describe the unequal access, use, and utilization of Information and Communication Technologies (ICT) across different groups in society (Hamburg & Lütgen, 2019). This divide has led to inequalities that directly impact social structure and wealth distribution (Olarate, 2017; Rodríguez & Jiménez, 2020). Several types of digital divides have been identified: a) generational, b) disability-based, c) based on usage or location, d) based on educational level, and e) based on gender (Arias et al., 2018; Colom, 2020; Galperín, 2017). It was recognized that women are particularly affected by this situation due to gender roles and stereotypes established by Western society (Acosta et al., 2020).

From this context, digital gender gap or gender digital divide refers to the inequality women experience in accessing, using, and benefiting from ICT compared to men. Structural and cultural barriers, such as societal roles and expectations, contribute to this issue (Berrío et al., 2017; de Andrés et al., 2020). This inequality can limit women's opportunities in various areas, including social, political, economic, and cultural spheres, due to their underrepresentation in the digital world (Bala & Singhal, 2018).

Women may encounter barriers or inequalities compared to men due to numerous factors such as nationality, social class, race, education, qualifications, age, and social position. These factors can amplify or diminish this phenomenon (de Andrés et al., 2020). Studies have identified three main components of the digital gender gap: 1) access to and use of ICT and the internet, 2) development of necessary skills to participate in digital design and production, and 3) advancement of women towards leadership roles and decision-making in the digital sector (Pedraza, 2021). Furthermore, factors such as technophobia and gender stereotypes that encourage different uses of ICT between males and females have been identified as contributors to the gender digital gap in current generations (Masanet et al., 2021).

Numerous studies have identified significant discrepancies and digital inequalities that affects women in several scenarios, including education (Alozie & Akpan, 2017; Anguita, 2018; Balayy Singhal, 2018; Bikos et al., 2018), the workforce (Berrío et al., 2017), entrepreneurship and business (Acosta et al., 2020; Alozie & Akpan, 2017; Balagopal, 2020), and society at large (Arias et al., 2018; Basco et al., 2018; Bradić & Banović, 2018; Cussó et al., 2017; de Andrés et al., 2020). Women experience disparities and disadvantages relative to

their male counterparts, in addition to internal factors that impact women's engagement with ICT (Alozie & Akpan, 2017).

For example, studies have found that women face symbolic and structural gender violence in the digital world. This can occur when negative sexist patterns are reproduced online (Berrío et al., 2017; de Andrés et al., 2020; Domínguez & Portela, 2020). Additionally, the lack of digital skills and competencies can harm women's lives and development (Mallawaarachchi, 2019). It can also limit their participation in the workforce (Watson et al., 2018) and lead to lower wages (Basco et al., 2020; Del-Valle, 2020).

The digital divide between genders also affects women in education because of the lack of content that includes a gender perspective (Alozie & Akpan, 2017; Pedraza, 2021; Pérez et al., 2021; Wong & Kemp, 2018). This results in girls and young women losing interest in the digital world and not aspiring to technology-related professions (Berrío et al., 2017; Gebhardt et al., 2019; Martínez & Castaño, 2017). On the other hand, society continues to limit the inclusion of women in the digital world due to various gender-specific issues, such as unequal access to technology and discrimination in hiring and promotions (Kerras et al., 2020).

The United Nations (UN) (2021) has identified a concerning situation regarding gender equality. Less than 45% of countries support women's access to employment in the industrial sector, and only 8% of executive positions are held by women in the 95 countries within the organization (UN Women, 2021). This global and national problem must be addressed through efforts to increase women's participation (WEF, 2022). In Latin America, gender gaps persist, creating inequalities between women and men in employment, social life, and education (Marchionni et al., 2018).

It is evident in the educational field that young women underestimate their digital capabilities and needs more confidence in using ICT, directly impacting their utilization of technology (Masanet et al., 2021) and their ability to learn through technology (Pedraza, 2021). Male students, on the other hand, tend to have more positive attitudes toward computers and greater interest and enjoyment in using ICT from primary or secondary levels (Gebhardt et al., 2019). Furthermore, there are differences in digital skills, content, evaluation, and use of ICTs between men and women in universities (Rodríguez, 2018). In fact, the digital divide starts early in education and is further magnified in high school and university due to obstacles like the absence of gender-inclusive materials (Palomares et al., 2021). Women also face exclusion in technological education and STEM fields due to multiple factors like expensive technologies, financial and institutional constraints, limited traditional knowledge, and restricted access to educational institutions (Bala & Singhal, 2018; Perifanou & Economides, 2020).

Therefore, it is important to examine the factors affecting women's digital skills and competencies in the educational sector. Therefore, Technical and Vocational Education and Training (TVET) are particularly relevant in this context, as they have historically been dominated by men, resulting in disparities in areas such as employment, society, and education (Bloj, 2017). Nevertheless, recent policy initiatives and programs have been introduced in Latin American countries to encourage greater participation by women in technical and professional fields (UNESCO, 2022).

According to Muñoz Rojas (2019), educational spaces not only equip students with necessary job skills, but also promote social equity and inclusion. TVET is crucial in bridging the gap between education and employment, and in addressing extreme inequalities (UNESCO, 2016). Furthermore, TVET programs should focus on preparing students with the skills and competencies required to enter the job market and improve their employability (UNESCO, 2022).

In this context, it is essential to emphasize the significance of digital literacy and the development of digital skills in light of the challenges posed by incorporating technology in employment, production relocation, worker protection, and economic and social inequalities (UN, 2022). In this regard, TVET should focus on guiding the development of specific skills and knowledge for future professional technicians in the job market (Álvarez et al., 2021). Furthermore, they should equip students to use digital technologies critically and effectively for communication, problem-solving, information retrieval, and everyday tasks in various contexts (Martínez et al., 2021).

Digital literacy is a key element for future professionals who must possess digital and technological skills to adapt to constant changes and new demands of Industry 4.0 (Coldwell & Cooper, 2019). Future professionals must know how to effectively manage and use digital technologies (Rosalina et al., 2021). In this context, media literacy has become an integral skill in the digital age, where media plays a significant role in the daily lives of young people (Hobbs, 2022). It is a crucial dimension of digital literacy, as it contributes to developing other essential competencies in the workplace (Jalik, 2018). According to Ozdamar et al. (2015), media literacy is divided into three dimensions: Access to Digital Information (ADI), b) Interpretation of Digital Information (IDI), and c) Production and Socialization of Digital Communication (PSDC).

Regarding the aforementioned, this study aimed to analyze the media literacy levels of TVET students and their educational experience, as it is recognized that educational environments are spaces for knowledge transmission where students need to be prepared to face the challenges and demands of the current world (Tejera & Cardoso, 2015). Additionally, educational environments and school activities play an essential role in the comprehensive development of students, facilitating the acquisition of knowledge and skills (Espinoza & Rodríguez, 2017). Moreover, these educational spaces can promote active student participation in their learning process (Alvis et al., 2019). At this point, a specific analysis was conducted regarding the relationship between the media literacy level and students' positive and negative perceptions of the learning spaces and activities promoting participation and communication. It is worth mentioning that this study is part of a main research effort that focused on analyzing the development of communicative literacy through education 4.0.

Methodology

This research used a quantitative approach to collect data through a questionnaire examining how male and female students perceive their educational experience in Technical and Vocational Education (TVE) and their media literacy level. The study focused on media literacy determined by Ozdamar et al. (2015) and students' learning experience in a) activities promoted by the school to participate and b) learning spaces to communicate at school to answer the questions: 1) Are there significant differences in media literacy level between male and female students' positive and negative perception of school activities that promote participation? 2) Are there significant differences in media literacy levels between male and

female students' positive and negative perceptions of school communicative learning spaces for sharing experiences?

This research conducted a case study in Mexico City (Mexico), focusing on a specific group of TVET students. The study population consisted of students enrolled in the morning shift's first, third, and fifth semesters at a public TVE institution in the city's southern area. The sample was chosen using intentional and convenience sampling methods. Participants were selected based on their accessibility and availability within the institutional setting. It is important to note that student participation in the study was voluntary, and the students and their guardians provided informed consent before participating.

The school's consent was adequately recorded to ensure that everyone involved was fully informed and agreed to conduct the study in the school environment. Participants were guaranteed that the information collected would remain confidential and only be used for research purposes without disclosing the identity of the school or any individual student.

The data collection instrument was based on adapting the e-complexity instrument of Vázquez et al. (2022). It had 18 questions that were divided into three dimensions: ADI ($\alpha = .820$), IDI ($\alpha = .849$), and PSDC ($\alpha = .735$). We evaluated the reliability of the instrument by Cronbach's Alpha coefficient and got a value of $p = .917$, which indicates that it was internally consistent (Viladrich et al., 2017). Additionally, the survey included two questions that asked students about students' perceptions of a) activities that promote their participation and b) communicative learning spaces for sharing experiences.

Results

The first step in analyzing the data was to describe the study sample, which consisted of 124 participants. The sample consisted of 73 males (58.9%), 44 females (35.5%), and seven non-binary students (5.6%). The participants ranged from 15 to 21 years, with 17.7% being 15 and 1.6% being 21. The most common age among participants was 16, with 38.7% falling in this age group. In terms of semesters, the first semester had 24 participants (19.4%), the third semester had 57 participants (46%), and the fifth semester had 43 participants (34.7%).

During the descriptive analysis, we identified the number of participants in each group based on their positive and negative perceptions of a) school activities that promote their participation and b) communicative learning spaces for sharing experiences at school. Regarding students' perception of school activities that promote their participation, 52 males (71.2%) perceive that there are school activities that promote their participation. In contrast, 21 (28.8%) have a negative perception as they do not recognize activities promoting participation. Out of the 44 female participants, 36 (81.8%) have a positive perception of school activities that promote their participation, while eight participants (18.2%) do not perceive such activities. Lastly, out of the seven non-binary participants, 6 (85.7%) perceive participatory activities in class, while only 1 participant (14.3%) does not perceive them at their school (See Table 1).

Table 1. Study sample by negative and positive perceptions of their formative process

	At my school, there are activities that promote students' participation.				At my school, we have communicative learning spaces for sharing experiences.				Total	
	No		Yes		No		Yes			
Gender	N	%	N	%	N	%	N	%	N	%
Male	21	28.8	52	71.2	20	27.4	53	72.6	73	58.9
Female	8	18.2	36	81.8	15	34.1	29	65.9	44	35.5
Non-binary	1	14.3	6	85.7	2	28.6	5	71.4	7	5.6
Total	30	24.2	94	75.8	37	29.8	87	70.2	124	100

Regarding the perception of communicative learning spaces at school for sharing experiences, 53 male participants (72.6%) positively perceived these spaces at their school. In contrast, 20 students (27.4%) negatively perceive these communicative learning spaces. The group of female participants shows a similar trend, where 29 women (65.9%) positively perceive these communicative learning spaces, while 15 (34.1%) do not perceive these spaces at their school. As for the seven non-binary participants, five (71.4%) have a positive perception of these spaces, and two students (28.6%) do not perceive these spaces at their school (See Table 1).

The media literacy level was analyzed among groups with positive and negative perceptions of school activities to enhance participation and school learning spaces for sharing experiences and communication. The findings for the male group are concerning, as students who perceive that their school conducts activities that promote their participation ($M=67.05$, $SD=15.227$) have the same level of media literacy as students who do not perceive participatory activities in their school. Further analysis is required for this group, as the interaction and participation in school are not reflected in their media literacy level. However, the female group shows that participatory school activities impact their media literacy level, as females who perceived these activities during their school education had a higher media literacy level ($M=77.78$, $SD=10.744$) compared to females who did not perceive participatory activities in their school ($M=64.25$, $SD=13.134$). A similar case is observed for non-binary students, where students with a positive perception of participatory activities had a higher media literacy level ($M=74.67$, $SD=5.785$) than students with a negative perception of school activities ($M=62.00$) (see Table 2).

Table 2. Descriptive Statistics of Students' Formative Process and Media Literacy

Questions about student's perception of their formative process		Media literacy					
		Male		Female		Non-binary	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>M</i>	<i>SD</i>	<i>M</i>
At my school, there are activities that promote students' participation.	No	63.95	15.227	64.25	13.134	62.00	N/A
	Yes	63.95	15.227	77.78	10.744	74.67	5.785
At my school, we have communicative learning spaces for sharing experiences.	No	67.05	15.309	70.40	13.394	70.00	11.314
	Yes	75.26	11.675	77.86	10.993	74.00	6.205

On the other hand, it can be observed that the media literacy level is higher in male students who perceived communicative learning spaces at their school ($M=75.26$, $SD=11.675$) compared to those who did not perceive these communicative spaces in their school ($M=67.05$, $SD=15.309$). For female students, the trend is similar, as females with a positive perception of communicative spaces in their school had a higher media literacy level ($M=77.86$, $SD=10.993$) than females who did not identify communicative school spaces ($M=70.40$, $SD=13.394$). It is important to note that non-binary students had a similar media literacy level ($M=70.00$, $SD=11.314$) to females with a negative perception of these spaces. It is crucial to acknowledge that when comparing male and female groups with positive perceptions of these communicative learning spaces, females have a higher media literacy level across all groups (See Table 2).

Finally, the Mann-Whitney U test was used to determine if significant differences existed between groups of men and women. Since the data did not pass the normality test ($D = 0.44$, $p = 0.00$), this test was the possible option to check if there are significance differences. Results showed that both groups had significant differences in their perception of school activities and media literacy during their educational process (men: $z = -2.113$, $p = 0.035$; women: $z = -2.680$, $p = .007$). Additionally, significant differences were found in school spaces for educational purposes and media literacy for both groups (men: $z = -2.291$, $p = .022$; women: $z = -2.291$, $p = .022$).

Discussion

The study shows the importance of students' perception of educational spaces in developing their skills and promoting participation. From this context, the study's results indicate that a positive perception of learning spaces and communicative activities can reinforce skill development in students, as student groups with a positive perception of these activities and school communicative spaces demonstrate a higher level of media literacy than students who perceive that the school does not encourage such activities and participation. Based on these findings, one can support the significance of educational spaces in promoting student participation, directly impacting their learning, as mentioned by Alvis et al. (2019).

From this standpoint, the results suggest that school activities promoting female student participation can help reduce the gender digital gap, as female students with higher levels of media literacy perceived the proposed school activities as positive for their involvement. It is worth mentioning that promoting female student participation in school not only directly relates to their higher level of digital literacy compared to male and female students who did not perceive these participatory activities and communicative spaces in school, but it can also encourage their engagement (Watson et al., 2018) and access to leadership roles and decision-making in the digital and work sectors (Pedraza, 2021).

Finally, it was found that both male and female students exhibited similar levels of media literacy overall. However, female students with a positive perception of school activities showed a higher level of media literacy than those with a negative perception. A similar case was observed with male students with a positive perception compared to those with a negative perception. In this scenario, it is essential to recognize that the students' formative process directly influences their digital skills development, as Espinoza & Rodríguez (2017) mentioned. Thus, these findings suggest that school experiences and perceptions can influence students' communicative and digital skill development and promote spaces of social equity and inclusion for women, as stated by Muñoz Rojas (2019).

Conclusions

In conclusion, these results highlight the importance of fostering a school environment that promotes communication activities and spaces where both men and women feel confident to participate and develop their communicative skills. Likewise, it is acknowledged that this study presents the results from a specific scenario of technical and vocational students in Mexico. However, this sample needs to represent the country's complete landscape of technical and vocational education. These spaces have traditionally been associated with men and continue to perpetuate the exclusion of women in STEM fields due to various factors, such as a lack of conventional knowledge and limited access to educational institutions. For instance, the representation of female students in the study indicates a lower presence of women in that technical and vocational school.

Although this study provides valuable insights into media literacy and gender differences among technical and vocational education students, there are limitations, such as the sample size. Therefore, generalizing the results to other educational institutions and regions in the country should be done cautiously. Expanding the sample size in future research is advisable to obtain a more representative and generalizable understanding of the relationship between gender and digital media literacy.

Acknowledgements

The Center for Educational Leadership Innovation (CILED) and the Publication Support Fund at Tecnológico de Monterrey are sincerely thanked for their valuable support in disseminating this research project. Their collaboration has played a crucial role in the success of the study, enabling it to reach a wide audience of professionals and researchers in the field of education. The opportunity and trust extended by these organizations are greatly appreciated, and it is hoped that this partnership will continue to foster development and innovation in educational leadership.

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Students' and Teachers' Perceptions on ESP Teaching and Students' Willingness to Communicate in English

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This study investigated how English language instruction in Vocational and Technical High Schools affected English use in practice, students' willingness to communicate, and their motivation to improve their English. For this purpose, to have a practical perspective on the issue, students who have attended the internship project and teachers who accompanied them are asked open-ended questions via online forms. Qualitative research and purposeful sampling are conducted. Students who attend vocational schools are often seen and stereotyped as non-achievers regarding school success. Hence, this study is crucial to determine whether this notion is correct. Especially, it is important to gain insight from students and teachers who have been abroad. Vocational and Technical Anatolian High Schools have a special method of English teaching, and it is termed as ESP (English for Specific Purposes). It is significant to find an answer to whether this special teaching method, which should be used in Vocational and Technical High Schools, has been implemented purposefully. Moreover, how effective this method is investigated. Results showed that both students' and teachers' perceptions on ESP teaching are affirmative; however, there are issues such as limited class hours, unsuitable coursebooks designed for ESP, and lack of authentic environment. Therefore, based on these issues, this study confirmed that ESP teaching in Burdur still has a long way to go unless these issues are fixed.

Keywords: Vocational High School, ESP, VHS, English for Specific Purposes, English Language Teaching

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Introduction

Education in vocational and Technical Anatolian High Schools has been a controversy considering its different nature. According to Yılmaz (2020), English education in Vocational and Technical Anatolian High Schools (VTAHS) in Türkiye has been a topic of interest in recent years, as the country looks to improve its language education in order to support the economic development and global competitiveness of its workforce. Unlike other schools, in vocational and Technical Anatolian high schools there are fields for different crafts such as: culinary arts, hair care and beauty, child development, electric-electronic technologies, machinery technologies.

1.a ESP (English for Specific Purposes)

Although English education in VTAHS is significant because of their special education, the required attention to English education seems inadequate. The instructions have just concentrated on teaching English grammar and reading activities that do not include content relating to the students' vocational field (Mahbub, 2022). A suggestion would be to incorporate both general English and English for Specific Purposes (ESP) into this language program. Students require effective language usage skills for their future careers. Additionally, they also expressed a need to excel in their respective specialized fields, indicating the importance of incorporating ESP into the program (Aktaş & Doyran, 2017).

1.b ERASMUS+

A twin school program, bilateral agreement or protocol, or international project can also grant students internships and skills training in overseas businesses (MoNE, 2018, p. 30). These aforementioned projects are granted by European Union. The program is called 'Erasmus+'. Thanks to this program high school students have a chance to go abroad. For vocational high schools Erasmus+ programs work differently. They offer a vocational education and training for VTAHS students. Unlike Anatolian high schools, VTAHS students have a chance to experience internship abroad. These internships are field specific, and they are arranged according to the project prepared for the related field.

1.c Purpose of the Study

The purpose of this study is to understand the impact of the ESP approach on students' use of English, their willingness to communicate, and their motivation to improve their language skills. The study will examine the perceptions of both students and teachers who have participated in the Erasmus+ program, which offers students in VTAHS the opportunity for field-specific internships abroad. The study will investigate how this internship experience has changed students' perceptions of the English language and their motivation to improve their second language.

1.d Aim of the Study

This research aims to identify how English language instruction in vocational schools has affected English use in practice, students' willingness to communicate, and their motivation to improve their English. For this purpose, students who have attended the internship project and teachers who accompanied them are asked open-ended questions.

Students who attend VTAHS are often stereotyped as non-starters when it comes to success. In Türkiye, students are placed in high schools based on the results of the High School Entrance Exam (LGS). Hence, this study is important to determine whether the notion is correct. Especially, it is important to gain insight from students and teachers who have been abroad.

When it comes to English teaching research in general, vocational schools are seems to be ignored. Thus, it is crucial to gain a deeper understanding of this topic and to identify what can be done further. It is significant to find an answer to whether the special teaching method, which should be used in vocational and Technical Anatolian high schools, implemented purposefully or not.

Conclusion

This paper studied perceptions of students and teachers on ESP teaching for revealing the results open-ended questions are generated separately for both teachers and students. Additionally, this study unveiled the willingness to communicate of the students since the participants are chosen among the abroad apprenticeship projects.

According to the results, there are ineluctable improvements in students' motivation towards English and teachers' views are partially approve these improvements. Furthermore, both teachers and students found apprenticeship beneficial. The research suggests that improving English education in vocational high schools in Türkiye may require a shift towards ESP programs and away from traditional methods of language instruction.

Teaching can be a valuable component of language instruction in vocational and Technical Anatolian high schools. Helping students develop the language skills they need to succeed in their future careers. By focusing on the specific language needs of students' future careers, ESP programs can help support the overall success and competitiveness of vocational high school graduates in Türkiye.

In this study, students and teachers are chosen among the ones who have been participated in apprenticeship program abroad purposefully. Yet even a chance of real-life communication and practice was not enough. Therefore, results of this study confirmed that ESP teaching in Burdur still has a long way to go. The present study has some limitations. There are three teacher participants since the participants are chosen from the project on abroad. Therefore, the sample could not be increased. Considering that the data was collected from only one high school, it is important to keep in mind that the findings cannot be generalized beyond the context of this study. This topic can be further delved into with a different context and larger sample.

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Students' English Learning Exposure: Preferable Type and Geographical Location

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

Indonesia has a vast region with thousands of islands within it. Distributing equal learning exposure to English foreign language learning across the region is an inevitable issue. Several studies have been conducted either in the area of learning exposure or descriptive inferential on the effect of geography on education. However, rarely any study traces causal relation between English exposure which is affected by students' geographical area. Many aspects influence exposure, yet the location is not mentioned. Therefore, it is an important issue to be discussed, especially for distance learning institutions since it has difficulties controlling students' learning environment. By observing this case, Universitas Terbuka which employs open and distance learning can formulate a better learning approach. Using data that is extracted from 76 participants from 28 regional offices located all over Indonesia, the researcher expected to see whether there was any meaningful relationship between the exposure and the geographical location where the students live. By using a nested sampling design, the researcher administered a questionnaire followed by in-depth interviews with selected participants. A mixed method with quantitative and qualitative analysis is applied in this study. The first finding from the questionnaire showed a similar result that English exposure either in the form of watching a movie, practicing English with a friend, or listening to music is preferred over learning English in school despite the various geographical background of participants. Second, the geographical location where the students live shapes their preference for certain types of exposure.

Keywords: English Learning, Exposure, Geographical Location

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Introduction

Education as an instrumental element of human life needs to be embraced by each individual. Ideally, in each state, every person needs to have equal access to education and learning exposure. It is crucial to consider this since it will increase students' achievement and robust national development. According to Sahek (2019), school facilities in urban areas need to be similarly available to those in rural areas for all students to enjoy the facilities fit for a developed country. Sahek also added that to cultivate children's self-potential through school education, the education system must consider their developmental needs. However, it is not an easy task since the development in each area is not always equal. A state with a vast geographical area tends to deal with inequality issues. Urban and suburban achievement gaps have received a lot of attention in research on the geographic variation in educational outcomes, and these studies typically find that these achievement gaps are larger in cities or metropolitan areas with higher levels of racial-ethnic and socioeconomic inequality and segregation. (Owens 2018; Owens and Candipan 2019; Reardon, Kalogrides, and Shores 2019).

In addition, the literature on neighborhood effects on educational outcomes in densely populated areas is robust (Chetty, Hendren, and Katz 2016). Although they do not include rural areas, these analyses offer crucial insights into how educational opportunity is distributed across the biggest urban areas of the country as well as racial-ethnic and socioeconomic differences in opportunity. Moreover, the 2019 covid catastrophe put all countries on a real challenge to reach their citizen and to make sure each of the students within the nation can access available learning exposure.

Learning exposure is crucial, especially for speaking skills. The specific linguistics environment affects the second language user's proficiency towards the target language in terms of the extent of exposure. However, providing good exposure, particularly in speaking competence is not a trivial matter. It remains challenging even in a state where English is a second language like the Philippines, as it is stated by Candilas (2016) that the competencies in learning to speak the language remained a challenge at all school levels in the Philippines. We can imagine how difficult for a country like Indonesia where English is a foreign language to be able to have sufficient speaking exposure. Students need to get exposed significantly to the English language not only inside but also outside the classroom. Following Al-Zoubi (2018), it is believed that learning the English language needs to be encouraged and developed in the classroom and outside the classroom through appropriate techniques. It means we need to make sure we have given our students both exposures but before that, we need to know to what extent the exposure we have given to them. By knowing it we can fix and plan better exposure for students.

On the other side, due to the geographical issue and the pandemic, gaining good exposure is difficult. Students who live far away from the big city, where technology and access to sufficient English exposure are located, tend to experience a lack of exposure. The pandemic, on the other side, worsens the situation. Based on Global Education Monitoring Report (2021), the outbreak of COVID-19 has given an effect on the educational systems. More than 1,5 billion children around the world are affected by school closures which represent 90 percent of total enrolled students in 194 countries. Governments are challenged by the reality to have the ability to accommodate students in various kind regions or geographical backgrounds either rural or urban areas. However, a finding from Global Education Monitoring Report confirms that decisions regarding remote learning solutions were affected

by a country's income, especially when it came to "differences in adoption of online learning platforms," which highlights that "low- and middle-income countries are at a far more disadvantaged starting point for an effective transition to online learning platforms.

Speaking as one of the English skills relies on native English exposure since it is the best way to learn a foreign language as accurately as possible. To do so, teachers or language instructors often count on the internet or technology. The problem is not all students have that privilege due to economic disadvantage and that is not a good condition. The evidence shows that the disparities observed in access to the internet and information communication technologies (ICTs) at home due to the differences in socio-economic standing could widen already severe learning inequities. (Hereward et al., 2020; Dreesen et al., 2020). Although normatively, equality for learning exposure is a must, empirical finding shows otherwise. Students from rural and underdeveloped economic backgrounds experience a lack of exposure. The argument is supported by the Global Education Monitoring Report (2020) that highlights around 30 percent of students in the world cannot continue learning through remote channels, and almost three out of four in this disadvantaged population are living in rural areas and/or belong to the poorest community in their countries. Due to the social phenomena, research is interested in establishing a study on learning exposure and its relationship with the geographical background. By dividing Indonesia's area based on three time zones, the researcher wants to see how different geographical locations can have a relation or affect learning exposure particularly English speaking.

Indonesia as an archipelago nation consisting of over 17,000 islands puts the nation as a state that has a vast region that encompasses from Aceh to Papua Island. The geographical proportion of Indonesia which stretch from 1,904,569 km² (nationsonline.org) generates a problem for the stakeholder to provide accessibility of good learning exposure. Even though the state is rich in terms of natural resources, it faces difficulty to cover equal learning rights. Based on Fadhil, et.al (2020), due to their poverty or the poor educational infrastructure in the areas of Indonesia where they live, many Indonesians are unable to advance their knowledge and abilities. Additionally, he asserts that there are not many Higher Education Institutions (HEIs) in Indonesia's less developed regions.

With the spirit of making higher education open to all (www.ut.ac.id), Universitas Terbuka (UT) Indonesia tries to reach all locations by providing 39 regional offices or UPBJJ (Unit Program Belajar Jarak Jauh). Referring to the condition, it is interesting to explore how far UT can provide learning exposure at least in a small scope such as an English class. In conducting the research, the researcher takes UT students as the sample and focuses on speaking class students. Several considerations are taken into account. First, UT students are spread from Aceh to Papua and abroad. It means that taking the sample from UT can be a representative sampling to see whether geographical location affects students' preference for a certain type of exposure compared to others. Second, long before the pandemic, UT students dealt with distance learning, something that they were familiar with. Third, speaking can be considered a lesson that demands good exposure. Pollard (2008) states that speaking is one of the most difficult aspects for students to master due to several reasons, where one of them being the demand for enough exposure to English. Therefore, selecting a speaking class can lead to the objective of this research, which is to find to what extent earning exposure, in this case, English can affect learners.

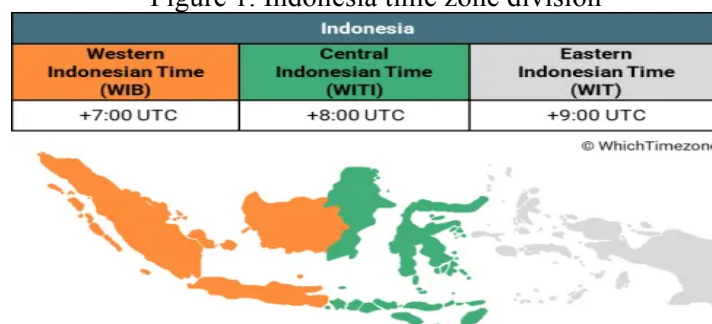
There is much research that has been conducted on the area of exposure (Domingo, 2020; Liberman, 2016). Domingo showed that students were exposed most to the English language

when they are at school or with the use of different media compared to when they are at home or communicating with friends. Liberman (2016) suggested that early exposure to multiple languages can enhance children's communication skills, even when children are effectively monolingual. On the other side, the geographical issue has been a concern in educational research such as a study from Raychaudhuri, et al (2010) that confirmed the geographical location of school result in several problems including poor attendance, resulting low achievement, increases in dropout rate and amplifies a host of social problems. Another research on geography and education can also be seen in Walter (1998). He contends that one of the factors which influence academic performance is the school location/site of the school. Most developed countries realized this, and the environment makes sure their schools are situated in the best location to minimize failure. Bradley et al. (2008) review geography and socioeconomic status, which are two major factors affecting the educational outcomes of young people. However, there is rarely research that combines learning exposure and geographical location. To conduct the research, I develop two research questions to answer. First is to what extent English exposure affects their English ability. Second, does the geographical location of the learner affect their preference toward exposure?

Research Method

In conducting this research, the researcher used a mixed method with an exploratory design. In a research study, the mixed method involves mixing or integrating data from qualitative and quantitative sources. In the mixed method, qualitative data typically has open-ended questions without predefined answers, whereas quantitative data typically has close-ended questions, such as those on surveys or psychological tests (Creswell, 2014). In the quantitative approach, we measure a quantitative range of learning exposure students gained as well as answering the first research question. We use Landell (1997) as the indicator to decide the range of questionnaire results. He divided the range of mean scores into low (1 - 2.33), moderate (2.34 - 3.67), and high (3.68-5). Meanwhile, the researcher explores qualitative data on the students' perspective on the geographical location where they live and how it affects their preference for certain types of exposure. The data is simultaneously used to answer the second research question. The research examined 76 participants from 28 regional offices across Indonesia. We divided 28 offices into 3 areas based on the division of time zone in Indonesia where the offices are located. The difference in the time zones themselves is generated based on the geographical position of the area within the Indonesia zone. The division can be seen below:

Figure 1. Indonesia time zone division

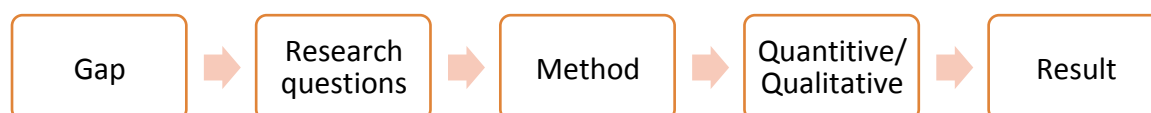


Source: <https://whichtimezone.com/asia/indonesia/>

In collecting the data, the researcher chose nonprobability with purposive technique as the sampling method. The participant accepted a questionnaire with a Likert scale which is

adapted from Al-Zoubi (2018). The questionnaire consisted of 16 questions that will measure the extent of speaking exposure students usually get. The result of it is measured and presented in the form of quantitative data. After that, the researcher chooses 6 participants that represent each of the time zones in Indonesia and interviewed them. A semi-structured interview is developed to fulfill the needs of this research. The result of the interview method is used to answer the second research question on whether does geographical region where students live affects their preference toward certain exposure.

Figure 2. Research Process



Result

Before presenting the result, we confirm that the results of this study are used to answer two research questions. The first question is to what extent the exposure affects students speaking skills and the second is whether the geographical location of the students affects their exposure preference. After analyzing the research, we found two findings.

The first finding shows that English exposure indeed affects students speaking from 3,889. If we refer to Landell (1997) on the Likert scale of measurement, those scores can be categorized as high. It means that students' level of satisfactory perception toward the learning exposure they have experienced is high. By meaning, it confirms the fact that the exposure affects their speaking skill to the extent of around 3,889. The table of questionnaire results can be seen below:

Table 1. Mean and Deviation Standard

<i>Number of Regional Offices (UPBJJ)</i>	<i>Mean</i>	<i>Deviation Standard</i>
<i>All (28 UPBJJ)</i>	3,889	1,364
<i>WIB</i>	3,833	1,396
<i>WITA</i>	4,109	1,191
<i>WIT</i>	4,875	0,083

The second finding, we found after analyzing interview results. The result shows that geographical location matters concerning their exposure preference. At the beginning, of this study we limit to types of exposure based on four types of learning exposure (Magno, et al. (2009) where he claims there 4 types of learning exposure such as home (bilingualism), dormitory (friends), school (formal and informal), and all forms of media, both aural and printed. Thus, we found that students from more developed places or tourist spots prefer to have a friend as their learning exposure. Meanwhile, a student from an underdeveloped for instance Sorong in Papua Island prefers to have exposure to media. It happens to the ability of media such as the Internet to break geographic and economic constraints.

In addition, we also found that all interviewees are considered satisfied with the geographical location where they live. It is found that if the students are given the option to move, based on the questionnaire, none of them are satisfied and want to remain in their hometown. All of them prefer to move to other developed places like Bali or Jakarta. It means geographical

location is highly likely important in their learning or in terms of acquiring better exposure to support their learning process.

Discussion

1. Quantitative Data Analysis

The researcher conducted quantitative data analysis to answer the first research question on to what extent English exposure affects English speaking skills. To answer it, the first researcher develops a questionnaire and address it to 76 students in 28 regional offices around Indonesia. All the participants are selected using purposive sampling and all of them are the students of the speaking class. It is found that from 16 questions in the questionnaire, all of them are indisputably show English exposure does affect students speaking skills with around 3,889 which is considered high if we refer to the Landell indicator on the Likert scale interpretation.

If we break the 28 regional offices into three divisions based on the time zone, we can find that the perception of the impact of English exposure on the speaking skill of the students is also high with 3,889, 4,109, and 4,875 for students in the regional western, central, and eastern office with a standard deviation that is not significantly different. It means average students are choosing or responding to almost, if not, similar answers to the questionnaire. Although the students are not in the same geographical region. The geographical division can be seen in the tables below:

Table 2. Indonesian Time Division

No.	Regional Offices (UPBJJ)	Western Indonesian Time	Central Indonesian Time	Eastern Indonesian Time
1	Bandar Lampung	V		
2	Bandung	V		
3	Batam	V		
4	Bengkulu	V		
5	Bogor	V		
6	Jakarta	V		
7	Jayapura			V
8	Jember	V		
9	Kendari		V	
10	Kupang		V	
11	Majene		V	
12	Makassar		V	
13	Malang	V		
14	Medan	V		
15	Padang	V		
16	Palangkaraya	V		
17	Palembang	V		
18	Pekanbaru	V		
19	Pontianak	V		
20	Purwokerto	V		
21	Samarinda		V	
22	Semarang	V		
23	Serang	V		

24	Sorong			V
25	Surabaya	V		
26	Surakarta	V		
27	Yogyakarta	V		
28	Malaysia		V	

Another finding in this study is the fact that school or institution is not the most favorite and effective means of exposure for the student. In contrast, practicing outside the classroom is students' second favorite after listening to English programs and listening to music. Despite it is still categorized as a highly impactful exposure for English speaking skills, it is not the highest based on the questionnaire result. We can see from Table 3 below that the highest score is exposure that comes from "listening to English programs and songs". This finding partially rejects Domingo's (2020) claims in his study that students who expose inside the classroom perform better compared to the ones who expose at home or communicating with a friend. It means their exposure to formal English learning in the classroom is better than exposure to informal or practicing English language outside the classroom in many contexts. We can see the table of student's preferences for exposure below:

Table 3. Questionnaire on Students' Perception

No.	Statement	N	Mean	SD	SA	A	N	D	SD
1.	Practicing English outside the classroom improves my speaking skill.	78	4	1,329	52.6%	19.2%	10.3%	9%	9%
2.	Getting more exposure to English develops my proficiency in speaking.	78	3,987	1,334	53.8%	15.4%	15.4%	6.4%	9%
3.	Doing English homework assignments and project work expands my speaking skill.	78	3,885	1,319	46.2%	21.8%	15.4%	7.7%	9%
4.	Encouraging myself to speak English even when I am afraid of making a mistake.	78	3,910	1,301	44.9%	26.9%	11.5%	7.7%	9%
5.	Having exposure in English helps me to get good marks in exams and a good job.	78	3,885	1,348	46.2%	24.4%	11.5%	7.7%	10.3%

6.	Watching English TV programmes, videos, or movies facilitates speaking skill acquisition.	78	3,962	1,427	55.1%	16.7%	10.3%	5.1%	12.8%
7.	Using social media (Facebook, Whatsapp, Twitter, Instagram ...) helps me improving my speaking ability	78	3,795	1,380	43.6%	23.1%	14.1%	7.7%	11.5%
8.	Communicating in English outside the classroom makes speaking English easy.	78	3,910	1,369	48.7%	23.1%	9%	9%	10.3%
9.	Using English in real life situations increases my fluency.	78	3,974	1,386	55.1%	15.4%	11.5%	7.7%	10.3%
10.	Travelling to English speaking countries develops speaking skill.	78	3,936	1,380	52.6%	16.7%	12.8%	7.7%	10.3%
11.	Applying variety of techniques in the classroom by the teacher increases speaking skill.	78	3,910	1,341	47.4%	23.1%	12.8%	6.4%	10.3%
12.	Listening to English programmes and songs helps me to speak English language better.	78	4,026	1,358	57.7%	12.8%	12.8%	7.7%	9%
13.	Listening to English programmes and songs improves my English pronunciation.	78	3,897	1,373	48.7%	21.8%	10.3%	9%	10.3%

14.	Talking face to face with English native speakers is beneficial and enjoyable.	78	3,833	1,427	47.4%	21.8%	10.3%	7.7%	12.8%
15.	Talking on the phone with English native speakers increases my English proficiency.	78	3,744	1,343	38.5%	28.2%	12.8%	10.3%	10.3%
16.	Talking with English native speakers helps me to overcome my grammatical errors.	78	3,654	1,317	34.6%	25.6%	20.5%	9%	10.3%

Description:

SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree

**Adapted from Zoubi (2018)*

2. Qualitative Data Analysis

The second research question is "Does the geographical location of the learner affect their preference toward exposure. To answer the question, we develop an interview protocol and address it to some selected participants who represent each division of the time zone. As it is previously mentioned in this study, we purposively choose 76 participants from 28 regional offices to make it easier in categorizing. We divided the 28 regional offices into 3 big areas based on their division of Indonesia time zone. The time zones are divided due to geographical location. By referring to that concept we can locate students' positions and assess their perception. The prior assumption is that the geographical location where they are located can have a meaningful relation to their perception of learning exposure.

Based on the analysis of the interview data, we found 3 findings. The first is all participants in the interview session confirm that they agree that exposure is important. The importance of learning exposure confirms the high perception score on the questionnaire in all three regions: western, central, and eastern time zone. Another finding is despite the positive response on the importance of exposure, not all students are satisfied with the amount of exposure they get. The interviewee from Samarinda argues in the interview session:

interviewer: Do you think that English exposure to improve your Speaking skill which you have received so far is enough? Why?

interviewee: Not enough. Because I never speak in English in my community. And all this time, I learn through websites or social media. I also set the language of my handphone in English.

The interview result shows an unsatisfactory response regarding the amount of exposure she has received due to a lack of ability to have active practice or the real opportunity to use her speaking skill in a real context. As we know, speaking is a skill that demands high exposure because the speaker needs to have the ability to use it in a real context. The fact that her region cannot provide it confirms the assumption of the geographic location where students live is affected by their exposure preference. As we can see that she only has access to social media or websites without having any opportunity to try her English with people around her place. Of course, this is a different matter if she lives near a tourist spot or a developed place like Bali or Jakarta where access to foreigners is not an issue.

In line with the discussion above, it reveals that of 4 interviewees only 1 interviewee prefers school as a place to get good exposure. The rest prefer the media and/or friends. This confirms the questionnaire where a school is not something that becomes the most favorite choice to gain exposure and the geographical location where students live can lead their choice toward a certain time of exposure preference. The students from more developed places or tourist spots prefer to have friends as their learning exposure. Meanwhile, a student from an underdeveloped, for instance Sorong in Papua Island prefers to have exposure to media since it is easier to be found in their location. The last finding confirms all interviewees agree that their place is not the best place to gain exposure. They see other places which are economically more developed like Jakarta or tourist spots like Bali as the best place which once again confirms the importance of the geographical matter in shaping their perspective toward exposure.

Conclusion

Exposure is one of the important factors that need to be considered in teaching speaking. The amount of exposure is crucial to know to make us aware of how far we provide it to our students as the more exposure given the better possible improvement students possibility will get during their learning process. In this study, we try to find the relationship between exposure and the geographical location where students live. Collecting data from UT students in 28 regional offices around Indonesia, based on the questionnaire, we reveal that the extent of exposure UT students have are high and learning outside the classroom and from media is the most preferable form of exposure students enjoy most. Another finding is the fact that the geographical location where students live does matter in directing the types of exposure they chose.

On the contrary, even though this study reveals some new perspectives on exposure and geographic issues, further research is needed since there is the possibility to explore and can add more comprehensive information regarding a similar study. Furthermore, bigger aggregate data and statistical inference research design can show the area that this study has not yet revealed.

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Using Blended Learning for EAL Interventions With Elementary/Primary Students

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This paper puts forward a case for the use of blended learning as a form of pull-out intervention, specifically for EAL (English as an Additional Language) elementary students who need to rapidly catch up on basic interpersonal communication skills. Practical suggestions are provided. This approach is based on both quantitative and qualitative data from a 2020 study which explored best practice in EAL interventions for students who were progressing to the elementary stage of education. Beyond this, research and literature backed, best practice approaches to EAL interventions and online learning are considered. Finally, teacher interviews were conducted for the purpose of checking the practitioner perspective on the validity of this approach in the current educational climate. The limitations of this paper, as well as consideration for future study of this topic, are provided.

Keywords: Blended Learning, EAL Intervention, Online Education, Elementary, Online Learning

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Introduction

In recent years, there has been a global shift towards teachers needing to be fully equipped as online teaching competent. This is down to a range of reasons, but most prominently the Covid-19 epidemic which occurred, as well as the improvement in platforms and technologies available for this endeavour. Terms like blended learning, flipped learning and digital homework are now commonplace in schools around the world (Macur, 2022). It has been and still is the case that language barriers for students in classrooms negatively impact their social integration, academic performance and self-confidence (Adesope, Lavin, Thompson & Ungerleider, 2011). With increasing numbers of international schools around the world (Brummitt, & Keeling, 2013), and high numbers of non-English speaking children moving to English-speaking countries, it is essential that educators keep up with developing technologies and innovate their practice. Given that teachers are now better trained, prepared and more competent in regards to teaching online (and that technologies and training to support this are more easily available) an opportunity to integrate these two critical components of education manifests. This paper looks specifically at the integration of a BICS (Basic Interpersonal Communication Skills) intervention and Blended Learning. More specifically, whether using online sessions to deliver pullout BICS interventions after school could be appropriate and beneficial. The purpose of this is to find out if the literature backs up a need for this approach to be considered, as well as to find out teacher perspectives in relation to this concept. The final purpose is to provide practical suggestions which arise from this research process.

The Initial Research

The initial research followed a mixed methods data collection approach, including teacher interviews and student assessment results. 10 students lacking the Basic Interpersonal Communication Skills to join Grade 1 went through an intensive 6-week pullout EAL intervention (a context-specific test was used to determine their need for this). All students who had initially failed their entry test passed their retake of the this test, the average score went up from 31% to 81%. Off the back of the teacher interviews, it was found that most teachers strongly agreed that the intervention improved all 4 key language skills & that the students were now ready for Grade 1. This intervention took place during the summer holiday between the Kindergarten phase and Grade 1 (Macur, G. 2020).

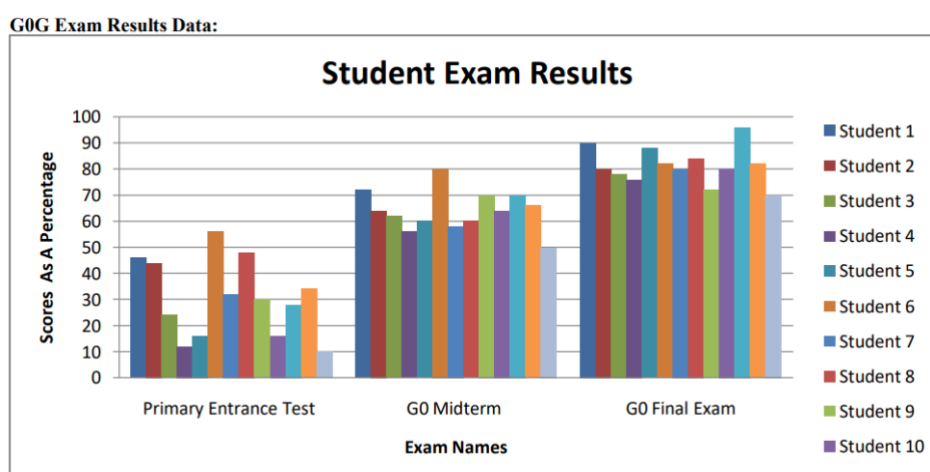


Figure 1: This is an image of the 10 students test results at the Entrance Test stage, the midterm test of the intervention and the final exam of the intervention. (Macur, G. 2020)

The findings of this study indicated that a pullout method was effective for targeted language acquisition in a BICS intervention context. It was also found that: Leadership must be competent; Teachers must be trained; Tailored language teaching for the educational context can be taught effectively; Context relevant language required for Grade 1 can be taught via a 6-week EAL intervention; Interventions must be well-planned and content should be cumulative (Macur, G. 2020).

The Next Steps

For this paper, the use of a mixed methods research style was adopted. This was done to better inform data triangulation and the reliability of results (Almalki, S. 2016). A combination of a literature review of best practices, three elementary/primary specialist teacher interviews, and the data from the 2020 study were used. The literature review gives context to the problem of language barriers for students. Its other purpose is to provide information about pullout interventions, blended learning and BICS language acquisition. The teacher interviews are to gain necessary practitioner insight into the viability, problems and benefits of using blended learning for a BICS intervention. Finally, the 2020 study and its data provide much-needed insight into key considerations for running a pullout intervention effectively.

After the findings were gathered, a comparison of these findings was done, to see what patterns would emerge from the three research areas. Major patterns which stand out would form the basis of practical suggestions and considerations for using a blended learning approach when developing a BICS intervention. Finally, the limitations of this paper were listed to ensure clarity and transparency.

The Findings

The first area of research was a literature review. It was found that one of the prominent reasons students with language barriers have negative experiences, such as the three key ones listed, is that they are often forgotten by teachers and peers. Not necessarily in a malicious way, but in a busy classroom, louder students often garner more of the attention and students with language barriers tend to be quieter (Cassar, & Tonna, 2018). It was also found that whilst in the context of Macur's 2020 study a pullout intervention was effective, there are circumstances where pullout interventions make students feel singled out. This can lead students to negative experiences and perceptions of school. Another issue which arose was the missing of essential mainstream class time (Honigfeld, & Nordmeyer, 2020). In relation to blended learning, it was evidenced that this approach was effective as a method of teaching key facts and basic information. Teachers should use class time with the teacher physically present for the creative high order thinking tasks, and the online time for key facts (Tayebnik, & Puteh, 2013). Finally, in relation to BICS, it was found that this basic survival skills aspect of language should be taught cumulatively (Sun, F, 2016). No examples of a BICS intervention being run through blended learning were found in the peer-reviewed literature. Positive results from the teacher interviews would indicate a need for further research within a school to test the effectiveness of this approach. More specifically, developing and rolling out a BICS blended learning intervention and reporting on the effectiveness of this process. A two-group approach would reap the most reliable results, with one group being pulled out from class during lesson time, and the other group being left in their classes and having an after-school session instead.

The second area of research was a set of three elementary specialist EAL teachers. The two questions asked to each of these teachers were: “Would an EAL intervention for BICS be successful if ran through blended learning?” and “What problems and benefits can you predict?” In response to the first question, each teacher agreed it would be successful. Three relevant statements included: “It would save our class time.” “Blended learning would mean we can teach the basic classroom language more quickly, helping the students to integrate and communicate their basic needs and wants.” “I could use the online time to review lesson content and ensure the students are learning.” The final statement highlights the need for proper teacher training, even experienced practitioners can make this mistake, a targeted BICS intervention would not be used to review lesson content, it would be used to teach the key BICS language needed for that school's context. The problems and benefits which arose were as seen in the table below:

Problems	Benefits
Internet issues.	Class time can be more purposeful.
Lack of equipment.	More time spent using the language intended to be learnt.
Extra work for teachers after school.	Online time can be hyper focused on the BICS required for the classroom.
Extra screen time for students.	Students can gain their BICS more quickly, avoiding some of the issues they may face as a result of language deficiency.
Students may not attend the online classes.	Class time can be more purposeful.

Table 1: This is a table to show the problems and benefits listed by the teachers interviewed for the creation of this paper.

Thirdly, the initial 2020 study findings were mentioned in “This Initial Research” section of this paper.

The Common Findings

It was found that all three research areas (the initial research, the literature review and the teacher interviews) agreed that: A pullout/blended learning approach could be effective as an EAL intervention; Learning BICS for the classroom context as fast as possible will have positive impacts; There are problems and benefits to consider when running EAL interventions. These common findings indicate that the use of a BICS intervention through blended learning is an appropriate method. They also indicate that when doing this, proper planning and consideration of benefits and problems need to be implemented. The major benefits which stood out were reducing the chances of students feeling singled out, and ensuring they do not miss out on mainstream class time. The major problems which stood out were increased work and screen time for students and teachers.

Practical Suggestions

The practical suggestions for practitioners who consider using blended learning for a BICS intervention with elementary students include: Ensure language teaching is cumulative; Ensure the intervention is short and focused on the BICS relevant for the context in question; Use teachers competent in language teaching; Keep intervention sessions short to minimise extra work & screen time for teachers and students; Use a BICS test to place students and pass them through the EAL intervention; Use small class sizes for EAL intervention.

Limitations

Limitations of this paper include: There was no practical practice of a blended learning intervention; Teacher perspective can be skewed and context-specific; The data for the intervention from 2020 was from an intervention run in a physical classroom, however, it was still a pullout intervention.

Conclusion

This paper looked at a novel way to deliver a BICS intervention to elementary students, specifically, using blended learning. The purpose of this was to alleviate the negative impacts of pullout interventions on students in schools, such as missed class time and a feeling of being singled out (without losing the progress in BICS that would be made during this pullout time). To achieve this goal, data from a 2020 study was reviewed. Alongside this data, three elementary teachers were interviewed and the literature on this topic was reviewed. The findings revealed a consensus of the three teachers, that this would be an effective approach, saving them time and helping students catch up in their BICS. Beyond this, the data from 2020 indicated that BICS could be taught using a short intervention with targeted learning goals. To achieve this, the literature review highlighted the need to teach BICS cumulatively. Problems, benefits and practical suggestions were provided.

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Semiautomatic Study of Handwriting Development in Basque Children at Primary School

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

The aim of this case study is to understand the connections between process factors of writing, such as bursts and fluency/speed, and product factors related to linguistic complexity and the quality of the final text. With this purpose, we conducted a (pilot) study with 13 developing writers in Basque from the second year of Primary School in two scholar periods to compare their progress in writing. The analysis of the process factors was based on bursts' measures and pauses duration described using HandSpy, a tool that allows one to describe and observe the process of handwriting in a digital platform. Thus, the HandSpy tool automatically analyzed the bursts and pauses, but the linguistic analysis of the texts produced were manually coded by aggregating a linguistic classification at both sentence- and word-levels while taking into account all the letter revisions that the child attempted. A cursory analysis of our data points to a link between the length of the bursts and the child's fluency, on the one hand, and the complexity /quality of the text produced, on the other. The overall study is a valuable contribution for education practitioners to encourage them to consider not only the handwriting product, the final text, but also the entire process of writing to address the needs of a wide diversity of learners and design new forms of feedback when teaching writing.

Keywords: HandSpy, On-Line Handwriting Research, Teaching Basque Handwriting

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Introduction

Because handwriting is a basic tool used in many tasks –taking notes, doing classroom tasks and exams in almost every area of content– handwriting can have a widespread effect on school performance (Vanjari et al., 2023). The detection and intervention of writing difficulties from the beginning of schooling is very important for the development of the student learning process, since currently most school assessment systems at Basque primary schools are based on written production (Ibarra et al., 2021). However, despite its importance, we perceive that the Basque educational community does not have enough clear guidelines on how to teach handwriting and how to perform early detection of potential literacy problems.

We present a pilot study of 13 students by analysing the handwriting process with the HandSpy tool (Monteiro y Leal, 2013). In the literature, it is a well-established fact that writing development should be best understood from a process perspective (Pascual et al., 2023). More specifically, Hayes (2012) states that graphomotor activity, captured by bursts, is closely associated with linguistic competence. This author speculated that the length of bursts could help the diagnosis of writing problems. Our work is in that vein and the research questions that guides our case study were as follows:

1. What is the connection between fluency (burst length) and text quality in Basque primary school students?
2. What are the linguistic features that play a role to determine the quality of written Basque by developing writers?

Figure 1 shows a preliminary coding system used to determine the linguistic features taken into consideration in this study:

ANSCRIPTION								
	Hiposegmentation	YES	WHERE	joansen	apurtusuen			NOTE: Same pattern+ verb auxiliary
	Hipersegmentation	YES	WHERE	ospita lera	lagune xxekin			NOTE: Same pattern Noun+morphology (declension/affixation)
Spelling deviations from Standard Basque	-x instead of tx z instead of tz s instead of ts -s/z letter mixing -h omission -ts/tz mixing			Basen	joansen	apurtusu en	bisikdet arekin	

Figure 1: Coding system example.

This study can benefit the educational community (students, teachers and families), giving information about those students' handwriting abilities or disabilities, which can be applied for designing personalized intervention plans. For example, Ibarra & Iruskieta’s 2022 work shows a contribution of this kind of approach to detect children with dysgraphia problems.

In what follows, we summarize the pilot study by means of HandSpy and describe the linguistic features identified for the linguistic analysis. Then, we show the validity and reliability of HandSpy as well as its value in moving writing research forward. In our empirical investigation, we compared the same group of students' handwriting in two periods of the same school year to compare their progress in writing.

The Pilot Study

In order to delve into the nature of the process of handwriting of Primary education students, we conducted a pilot study with 13 developing writers in Basque from the second year of Primary School in two periods of the academic year. The analysis of the process factors was based on bursts' measures and pauses duration thanks to the use of HandSpy, a tool that allows one to observe handwriting in real-time.

In the academic year 2021-2022 for the first data collection, we arranged a visit to a school of the Basque Autonomous Community to talk to the teachers about the need for more instruction in writing and explain the objective of our study: to know and improve the writing of the students. We explained to the teachers the goal of the project and what each child would do in their classes. Three tasks were performed:

First, the student was asked to write the alphabet in small case by heart, after hearing a song that everyone knew in which the names of the letters in Euskara are sung.

The student was then asked to copy a series of common Basque words in one minute.

Finally, they were asked to write a brief narrative text from an illustration (Jiménez, 2018). After 30 seconds for the student to look at the image and plan a story, s/he was asked to remember a similar story that would have happened to him or her, or someone s/he knows and to write it.

These three tasks were performed in two stages of the school calendar of the year 2021-2022: a) In November/December 2021 (T1), the children completed the three tasks for the first time. Here, half of the class first wrote the alphabet and then copied the words, while the other half did the reverse order. Everybody wrote the narrative text at the end. b) In May 2022 (T2) all completed the tasks in the same order: first, they wrote the alphabet, then copy the words and ended with writing the narrative text.

The three tasks gave us an idea of the development point of writing in which this group of students find themselves. In general, the texts produced were brief and the children did not perform text reviews or post hoc reviews. Moreover, we observed, as expected, that students needed fewer seconds to complete the tasks both at T2 and at T1.

We will concentrate on burst analysis, and we will leave out of our work the analysis of pauses, which may be due to multiple and complex causes (Prunty et al., 2014). In line with this, a study by Alves and Limpo (2015), found that neither handwriting nor spelling made a significant contribution to explaining variance in pause length in primary school children between the ages of 7 and 12. In their work they established that the length of writing bursts, in turn, explained significant variance in text quality (narrative or expository) at all grade levels.

In particular, we will focus on studying the bursts of the third task from a linguistic point of view. Regarding the quality of the writings of the third task, we addressed the question of how these children write, paying special attention to the spelling, punctuation marks and syntax of standard Basque (Euskara batua). As for the linguistic analysis itself, we used some NLP tools for Basque (Otegi et al., 2016) to analyze the texts produced by the students, but we need to complete the analysis with manual labeling, because the tools were not designed for this type of texts. Two linguists examine the texts according the following features:

- i. The number of lemmas. We compared the text that corresponds to what they have written (transcription) with production, and only the correct lemmas are counted.
- ii. Spelling errors
- iii. Letter omissions
- iv. Hiposegmentations
- v. Hypersegmentations
- vi. Language errors. Among the most frequent are the lack of agreement with the verb.

In general, we observed an improvement in terms of the reduction of words written together or hiposegmentations, but we appreciate that there are still quite a few deviations from the conventions of the written language in the two stages of the school year. We were able to document gaps of spelling nature, either by writing words together or separated hiposegmentation or hypersegmentation respectively, or deviations from standard by syntactic issues.

The third task was the most demanding for these participants, as they had to plan, generate a text, transcribe and review from an illustration. In this task, we observed apart from the length of the bursts, the most common linguistic structures that appear in the longest bursts:

- i. Many of them are periphrastic verbs. These verbs must inflect with the help of an auxiliary verb.
- ii. There is a greater use of past tense verbs.
- iii. Noun phrases with the determiner bat “one”.
- iv. Coordinating conjunction eta “and” as the linking element for the longest bursts.

It is important to note that the building of an auxiliary form in Basque implies to choose all its agreement markers or the paradigms of agreement morphology. While longer bursts in many cases do not constitute whole sentences, verbal forms are complex. In this line, Kim's work (2022, p. 216) points to the relationship between burst length and text linguistic quality: “In other words, children who wrote more words and letters per burst episode had higher quality of written composition, even after controlling for the included language, transcription, and domain-general cognitive skills”.

We must add that Basque, unlike Romance or Germanic languages, is a rich morphology agglutinative language, so that the students should know the form of the paradigms involved in each case. Thus, in addition to the length of the bursts, we consider that morphology is the cornerstone to understand the development of Basque handwriting.

Conclusions

We consider that HandSpy has been a valuable tool for analyzing writing in real time, mostly for research purposes. It has been the starting point of our research design and we have applied this methodology in this pilot study. To sum up, we consider that to improve our study we need to extend the corpus and refine/rethink the linguistic categories for the study of

children's writing corpus. We agree with Durrant (2022), when he notes that “defining linguistic and textual categories is a crucial step in designing research into children’s writing”.

One of the linguistics features that plays an important role in Basque is morphology. Bartlie et al. (2022) consider that it has not received proper attention in former studies: “Still morphology has received little attention in previous studies of language minority children”.

Finally, we consider that we have contributed to promote written Basque and to pay attention to the importance of children's handwriting at Primary or elementary school level. Limpo and Graham (2020), in their work, offer an extensive summary of the extant evidence on this topic, which subject, highlights the importance of researching and promoting handwriting.

Acknowledgements

The Provincial Council of Gipuzkoa, Etorkezuna Eraikiz Initiative.

The Basque Government (IXA excellence research group IT1343-19).

COST Action CA19102 project ‘Language in the Human-Machine Era’ (LITHME).

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*The Use of Words in Thai Language in “Viral” Communication of Thai People
in the Present Era*

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This academic article has a purpose to study the use of words in Thai language in “viral” communication of Thai people in the present era as the collection of information on the use of words that appears on viral social media and compares the use of viral words with the use of correct words in Thai language principles as a model for using appropriate language to be able to communicate and understood in society in the future. The method used in this study was document studies, i.e. researching academic documents and searching for messages from viral social media during 2021-2022. Findings or important conclusions from the study found that the use of Thai words in “viral” communication of Thai people in the present era is the use of language without regard to accuracy, i.e. using words that do not match the meaning, using improper words, using informal or colloquial words with the correct spelling according to the context of the word. Furthermore, an unclear use of words was also found, i.e. using implied words and using slang words whereas using vague words was not found. The results of this study are useful for studying the use of Thai language and encouraging the Thai language users to be more careful to use the language correctly according to the context and linguistic conventions. In addition, this study can be used for further research studies and it is useful in teaching and learning at the higher education level.

Keywords: The Use of Words, Thai Language, Communication, Viral

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Introduction

Language has been a part of human life since the past. Humans use language for living and communicating whether a communication within the family, commodity, trading or building good relations in living together which cause a community, society, and finally become the culture and traditions of the country. Language is therefore very important in human communication.

Language, in a broad sense, refers to the expressions that can be understood. In a narrow sense, it refers to language as a system through which humans communicate. The study of human language through scientific methods is called linguistics (Royal Institute Dictionary, 2013), and Thai is one of the world's languages mainly used in Thailand. Thai language is a culture that represents the uniqueness and independence of Thailand which happened and has been used for a long time since 1826 in the era of King Ramkhamhaeng the Great, who invented it for Thai people to use to communicate until now. Language is an important tool in the communication process, starting from having a messenger (Sender) to the receiver (Receiver) via messages conveyed (Message) and the media used to send messages to each other (Channel) to achieve the intention of communicating between each other (Thanu Thodthankhun and Kanrawee Phaetpitak, 2021).

Thailand has progressed progressively and has undergone rapid changes in all aspects, whether the buildings, social conditions, environment, cultural traditions or even the use of language changes according to the context of society all the time, as well as various advanced information technologies and connect the whole world to each other in just the blink of an eye. These cause the use of language and communication today to change dramatically.

It is well known that Thai language is an evolving language with a change and constant movement, especially in today's society when technology is very important to life. Despite how volatile it is, the use of language will inevitably fluctuate according to technology and then create a new language. New words are being produced rapidly all the time in a fast-paced manner that some words that had been used for less than a week had disappeared. This is a change in language in the dimension of today's technological world. In particular, words are used to communicate or understand each other in online communities in a manner that occurs rapidly and spreads rapidly which has not yet confirmed or verified any accuracy. The use of words must take into account various matters, including accuracy, namely the using words correctly according to the meaning, using words correctly, using words at the correct language level and using the correct spelling of the word. There must also be a matter of clarity, namely the use of words that have an implied meaning, using words ambiguity and the use of slang. There must also be elegance, conciseness and unity.

However, Thai language scholars have commented on the use of Thai language through advanced technology in the present era that the use of language in this era may indicate a problem that can lead to a language crisis. If some people still misuse Thai language and do not realize how to use the language correctly as follows "... Even though the problem of using the Thai language has existed for many decades. But in present era, the problem is becoming more and more critical and serious, with the main driving factor being the rapid advancement of technology. Therefore, we encountered so many misuses of Thai that it almost became familiar, especially among teenagers, the most worrisome. It is a group that uses a language that has evolved for a specific group. It is a language that has almost no grammar from short

text messaging (SMS), electronic mail (E-mail), online chatting (MSN), or even expressing opinions on the Internet...” (Fatina Wong secretary, 2023).

However, the use of language in online media is not only specific to teenagers, it also distributed to many groups of people. Because online media is a fast communication channel, it is a new communication channel that arises to share information and news in various forms, causing discussion and exchange of ideas between the sender and the receiver. Uraivan Khamphila and Talteerada Naksen (2022), cited in Pichit Wijitbunyarak (2010), have consistently commented on this issue that “...Nowadays, online social networks are being developed for more convenient use from the form of a website to an application. (Application), which is an application created to support and facilitate users on the Internet. Which applications that are becoming very popular for communication in today's era is the Line application (Line). There are also Facebook Twitter Tiktok and others, which are popular among teenagers. Language is used by cutting words, abbreviating words, or combining words, creating words, expressing emotions and spelling words differently from the original vocabulary. Typing the last consonant or vowel of a word repeatedly create meaningless words These communication languages are either correct or wrong. Therefore, users can type easily, misspelling sometimes, and may use words incorrectly according to the vocabulary...” The use of such language may result in the use of words that eventually become corrupted. Anyway, in this study of the use of Thai words, the researchers did not look at the use of language in today's society as a way of leading to disaster but aims to study to reflect the dimensions and perspectives of language use that new words are being created all the time and the way the language is transmitted or communicated via online media, which is a tool that most people use to communicate a lot in the present era.

For the above reasons, the researcher therefore wants to study the use of Thai language in “viral” communication of modern Thai people by researching academic documents and search for messages from viral social media during 2021-2022 to collect information on wording appearing in viral social media and to study and compare with correct wording according to the principle of using Thai words, which will be a model for using the correct Thai language in the future.

1. The Direction of the Changed Language Usage to Communicate in the Present Era

As mentioned in the introduction, it can be seen that the direction of Thai language communication in today's society has significantly changed from traditional communication such as meeting to talk face to face, talking on the phone, writing letters, sending telegrams, etc. to the means of network communication that directly affect the use of the Thai language because it must be communicated in a short time, hastily, timely whether it's basic communication or business communication. Online channels whether Facebook, Twitter, Line, Tiktok or others are used due to their characteristic of convenient, fast, easy to access, and able to transmit information around the world without limits. Sometimes the use of Thai words in such communications becomes incredibly “viral”. This is partly due to the influence of celebrity communications (Influencer) that communicates on social media clearly, directly to the point, and can reach all groups of people with the speed of just pressing Enter button. Nowadays, no one would not know about the virus because online society or social media flows out into real life society and used to communicate widely.

Viral is word-of-mouth communication through social media whether Facebook, Twitter, Line, Tiktok or others as already mentioned. If any story becomes a trend, it will be discussed

and shared everywhere quickly that the main goal of viral is marketing use. Viral success can be attributed to advertising or marketing with the lowest cost and unprecedentedly high effectiveness. In the industry, this is called Viral Marketing that comes from the form of advertising through the media or Social Network in a form that spreads quickly like a virus that is a disease. Typically, viral forms are short postings starting with interesting words or funny jokes.

2. Viral Words Between 2021 and 2022

From observing and monitoring the use of Thai words that appeared on social media between 2021 and 2022, it was found that there were many famous people in the society (Influencer) using words that went viral. But in this article, the researcher selected Thai words that are viral, catchy, polite, and not related to politics, religion, or belief and has been widely popular to study, analyze and compare with the correct use of language according to the principle as follows:



Figure 1: shows the origin of the words:
Chan Pen Prathan Borisad (I'm the president of the company)
Source: Sanook.com, 2023.

2.1 “Chan Pen Prathan Borisad” or “I’m the President of the Company”

This speech occurred on November 23, 2021 and became a famous viral clip at the time. Its origin is from the event that the actress "Ploy Chidchan" filmed a short drama clip on TikTok with her family and team members in the company. She made many clips and a lot of them are in the form of series. But the story that has been widely mentioned on social media is the story of "Spy, Security Guard." The plot of “ Spy, Security Guard” is about the president who disguised herself as a security guard to find out the truth until seeing that the employees in her company have a bad attitude, speaking insultingly, humiliating and conduct physically abusing. She finally saw the cause of such problems and then identified herself as the company's president and discharged the employee with bad behavior including ordering to suspend branch manager who neglect his duties. This clip has been viewed by a large number of audiences and the speech “*I’m the president of this company*” have been widely used and posted on users’ own channels (Sanook dot com, 2023).



Figure 2: shows the origin of the words.
Rak Mi Chai Duang Dao Mue Praw Saeng (Love is not a shining star)
Source : Manager Online, 2023.

2.2 “Rak Mi Chai Duang Dao Mue Praw Saeng” or “Love Is Not a Shining Star”

“Rak Mi Chai Duang Dao Mue Praw Saeng” or “Love Is Not A Shining Star” became a trend on September 24, 2022 from the song “ Rak Kue Fan Pai (Love is just a dream)” by the girl group “Sao Sao Sao (Triple Girls)”, a highly successful girl group in the 80’s. Its viral trend started from the web page "Kham Thai (Thai words)", posting a message to educate about Thai words that says, "Condescending not convulsing, noticing not notising, allowing not allowing. Love is not a shining star. After that, people posted on every of their channel in their own way and ended with "...Love is not a shining star when it's dazzling". For example, the US Embassy posted a post “Arkansas is not Arkansas, D.C. is not the state, Rhode Island is not an island, Love is not a shining star.”, Swedish Embassy posted "Vikings are not fertilisers, Zlatans are not storms, IKEA is not bats, love is not a shining star." followed by NISSIN Foods Thailand posted that" Nissin is not Nissin, Tonkotsu Ramen flavor, not Tonkatsu Ramen flavor, Nissin Cup Noodle not Nissin Kub Noodle, love is not a shining star. # Can I playyyyyyyyyy?; The Cinema Cineplex posted that "Avatar (in the theater) part 1, not part 2. Coldplay shot live, not a con recording, Doraemon, not Doraemon. Love is not a shining star.". Similarly, The Mirror Foundation posted "The Mirror Foundation is not a program of six-sided mirrors. Hire me, not hire someone to kill, Faith is not forced. Love is not a shining star" as well as many more pages (manager online, 2023).

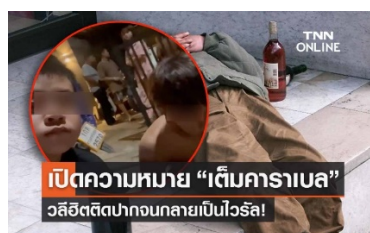


Figure 3: shows the origin of the words.
"Tem carabel (Full carabel)"
Source: TNN Online, 2023

2.3. "Full Carabel"

"Full Carabel" is another word that emerged on October 1, 2022 and has become a new word that many people wonder, especially on TikTok where this wording is widely used, until it become a viral trend that many famous people use to follow each other and wondered what this word meant and where did it come from? The origin of this viral comes from the clips of TikTok users @22_2001n or Sor Phor Tem Carabel posted a clip on October 1, 2022, in which the clip shows a picture of a man in a state of complete drunkenness sat motionless in front of the house until a friend pretended to take a clip along with jokingly speaking with the sentence that "It's full carabel. it's ful caramel, isn't it? I told you not to fill up with carabel ..."

That speech then became humorous viral and reached 8 million views. Many tiktok users has used this speech and sound to their own clips. Most of them are video clips of people who are so heavily drunk that they can't control their mind. However, “full carabel” can be used in a variety of ways without limitation, for example, you can use it when you go to a party asking everyone to have fun and say, "It's full carabel today," or when your friend vomits as "I told you not to full carambel," and if you're having a full meal, they'll say, "It's full carabel for this meal." etc. (TNN Online, 2023).



Figure 4: shows the origin of the words
" Tua Tueng (The tight one)".

Source: Google, 2023.

2.4. "Tua Tueng" or “The Tight One”

"Tua Tueng" or “The Tight One” is a word that emerged on October 19, 2022. It is a slang term widely used by teenagers and the online world referring to being the best, the peak or superb, similar to the word " Tua Tueng” or favorite" that is often used in competition circles to praise those who are eligible to receive rewards or winning, for example, the beauty contest or the horse racing, Etc., However, the word " Tua Tueng" is a word that does not always need to be used in the competition. If you meet someone with outstanding abilities or have eye-catching behavior in any way and create a viral trend for the online world, that person will also get a " Tua Tueng" position from social people to win as well. That is, the origin of “ Tua Tueng" that has become a story spread in TikTok overnight are mostly from the people in the news whose video clips go viral and are shared with each other. There are a lot of “ Tua Tueng” cases that many people pay attention to and talk about such as Tua Tueng Rayong: the story of a homeless woman who walks and knocks on the gallon to a song with the utmost beat. Tua Tueng Yaowarat : the story of a man wearing colorful clothes who walk along the streets of Yaowarat and sing along with his beloved loudspeakers on. His dancing is eye-catching for the sneaky snake dance that creates smiles and draws affection from onlookers; Tua Tueng Yala: A clip of a boy aged just a few years old who raises his middle finger and making an annoying face and Tua Tueng Ladprao: The shocking news and calling for hilarity when a man living in the Lat Phrao area invaded and punched Mr. Srisuwan Secretariat of the Association for the Protection of the Thai Constitution, at the face (Thai Rath Online, 2023).



Figure 5: shows the origin of the wording.
 “Ngan Mai Yai Nae Na Vi (Is it definitely not a big deal, Vi?”
 Source: Google, 2023.

2.5. "Ngan Mai Yai Nae Na Vi" or " Is It Definitely Not a Big Deal, VI?"

"Ngan Mai Yai Nae Na Vi" or " Is It Definitely Not a Big Deal, VI?" has gone viral online on October 25, 2022, and many people use it to speak and write to create content. These words came from a scene in the famous drama “Tawan Tok Din” (Falling Sun) that has been broadcast on Amarin TV for some time now. In this scene, there is a famous actor "Yui Jeeranan Manojam" playing the role of "Withu". Withu invited his older sister Wajee to the party, saying that it was a small event that could be dressed comfortably, Waji did not want to go to a big event, so she asked Withu, “Is it definitely not a big deal, Vi?”. However, Wajee was deceived because she dressed casually to the event, but others in the event fully dressed in fishtail skirts with a full set of jewelry. After that, it was found in short time in the applications TikTok, Facebook, Twitter Line, etc., has many celebrities and people imitating the use of this wording. “Is it definitely not a big deal, Vi?” is therefore used as a connotative term that conveys bullying (see Digs Blog, 2023).

3. Comparative Analysis According to the Principles of Thai Language Usage

From the words that are mentioned in this academic article, the researcher analyzed and compared according to the principle of Thai words usage as Thanu Thodthankhun and Kanravee Phaetpitak (2021) stated that the use of Thai words must take into account the principle of correctness namely using words correctly according to the meaning, Using words correctly according to the function, using words correctly according to language level, using words correctly according to spelling principle. In addition, the principle of clarity must be taken into account, namely not using words that have an implied meaning, not using words with ambiguity sense and not using slang terms. The study was analyzed and compared according to the aforementioned principles as follows:

3.1. Accuracy

Care should be taken to correct the meaning, function of words, spelling or tact and level of language which are divided into:

1) To use the word correctly according to the meaning, the meaning of the word must be checked to be accurate, clear, in accordance with the image of the word that the users want to convey, such as squeezed (seeking benefits by forcibly surrendering) and extorted (demanding unreasonable prices or interest). For the sentence “He was ...even though he was

poor”, the words to be chosen should be extorted so it would be the correct word in its meaning. From these viral words, it was found that 1) I'm the president of the company.

2) Love is not a shining star, 3) Full carabel, 4) Tua Tueng, and 5) Is it definitely not a big deal, Vi? are the use of the words with the direct meaning for almost every words. Except for the word “full carabel” which does not match the meaning by using English transliteration to say that Carabel in English is the name of a girl referring to *loved* or *a promise of God*. The term is derived from *carabelle* in the Italian, Irish, and Hebrew (TNN Online, 2023). Similarly the word "Tua Teung" is also a misnomer because it does not refer to the body that is firm in Thai language, but rather the use of words that imply something else as the researcher explained in Item 3.2 Item 1. However, when considering the meaning that the word users want to convey according to Item 2.3 and Item 2.4, it can be seen that the meaning is incorrect and is not related to any meaning. 2) It is important to use the words correctly and the functions of the words in Thai. Placing words in the wrong place or position will change the meaning. For example, *Who* force you to come? You force *who* to come? and *Who* will you force to come? The words "who" in the example will convey different meanings depending on its position. According to these viral words, 1) I'm the president of the company, 2) Love is not a shining star , 3) Full of caramel, 4) Tua Tueng, and 5) Is it definitely not a big deal, Vi? This is the correct use of almost all words, except for the word "Tua Tueng", which can perform two meanings in Thai when the position of words are switched, e.g. "Tua Tueng. The body is firm, not slack, rather tight while "Tueng Tua" is an adverb which means fixing to alleviate difficulties or difficult grievances (Royal Institute Dictionary, 2013).

3) The use of words at the correct language level. Thai language has 3 levels: informal language or oral language, semi-formal language and formal language which need to be used in the right place, person and place, such as children *take* food, dog *eats* food, father *has* food, grandmother *consumes* food. From these viral words, it was found that 1) I am the president of the company or Chan pen Phathan Borisars is semi-formal language with inappropriate 1st person pronouns in Thai are used. It should be "Dee-chan or Kha Phachao" instead of “Chan” in formal events or meetings. But the context in which the phrase goes viral is when talking to a security guard, “Chan” may be used. 2) Love is not a shining star is an informal or colloquial language and the use of the word "shining", which is a descriptive type of rhetoric; 3) Full carabel is the use of informal language or oral language with transliterated words that need to be translated; 4) Tua Tueng is an informal language or oral language which is classified as a slang term used among teenagers and 5) Is it definitely not a big deal or it is, Vi? is an informal language or oral language as well. Thus, when using these words to communicate, it must take into account the language level as appropriate.

4) The correct spelling of the word is important. If the spelling is different, the meaning will be different. If there is a misspelling, it will also distort the meaning. From these viral words, 1) I'm the president of the company, 2) Love is not a shining star, 3) Full carabel, 4) Tua Tueng, and 5) Is it definitely not a big deal, Vi?. All words are written and spelled according to the correct usage context.

3.2. Clarity

Wording needs to take into account the meaning of the intended communication. And in general communication, the use of words that have an implied meaning, ambiguity of words

and the use of slang should be avoided according to the study's comparison with the viral words as follows:

1) The use of words that have an implied meaning are words that have a meaning that is not literal. It may be a comparison or hidden meaning under the letter. It requires interpretation from the audience to understand that meaning. As for the words that have the same meaning as the word you want to convey, it is called the direct meaning, for example, **This work is a piece of cake** means easy work is a word that has an implied meaning while **cake is a useful food** is a word with a direct meaning. From these viral words, it was found that that 1) I am the president of the company is the word that has a direct meaning; 2) Love is not a shining star is the use of words that have an implied meaning by comparing love with a star that shines brightly; 3) Full carabel is the use of words that have an implied meaning that requires translation; 4) Tua Tueng is a word that has an implied meaning. It's the use of words to convey the meaning of being the best, the peak, the apex, similar to the word "favorite" whereas 5) Is it definitely not a big deal, Vi? is the use of word with direct meaning.

2) Use of ambiguity. Ambiguity is the use of words with unclear meanings that may convey many meanings, for example, nutshell may refer to a shell of the nut or may mean the conclusion of some issues. From these viral words, it was found that 1) I'm the president of the company, 2) Love is not a shining star, 3) Full carabel, 4) Tua Tueng, and 5) Is it definitely not a big deal, Vi? are the use of language without any ambiguity.

3) Use of slang vocabulary. Slang is the use of language that is a word or expression in informal occasions. Most of them are special and specific languages. For example, people with the same profession or society will use the language to communicate and understand each other. To communicate emotions, feelings, behaviors occur according to social trends, starting from certain people or groups used only for a certain period of time. It's not a language that's accepted as correct, such as Mong Lon (received the crown), Naem Pa Yon (wearing a very tight suit), Dinosaur (prehistoric), Bong (wrong, failed), imagination (just thinking about it), etc. (Chakrin Julprom, 2021 cited in Hawkins, J. M., & Allen, R., 1991). From these viral words, it was found that 1) I'm the president of the company, 2) Love is not a shining star, 3) Full carabel, and 4) Is it definitely not a big deal, Vi? are the use of words that are not slang for almost every word except the word "full carabel" is clearly a slang term because it is the use of words to convey emotions, feelings, and manners, where this word is a word that occurs according to social trends. It started with a friend posting a picture of a man in a state of extreme drunkenness sitting motionless in front of the house and that friend teased a friend by taking a clip to share. The word "Tua Tueng" is also a slang word. It is the use of the language of a group of teenagers who communicate with each other in a fun way, creating new words that are derived from the behavior of the people in the clip, using language only for a certain period of time. It is a language that is not a correct language according to the principle of using the language.

Conclusion

When analyzing according to the use of Thai language according to these four examples, it was found that these words are the linguistic phenomenon that use informal language or oral language as the main communication in a hurry, fun, iron, comparative, etc., manner mixed with the context that one wants to communicate to make it fun, challenging the attention of the public or create interest in knowing the messages or words that they use to communicate

without regard to formality or accuracy. Everyone can use this form of language but it must not be used to communicate in situations or contexts that require standard language communication.

From this linguistic phenomenon, it is common for people to use language in society but it also gives us a perspective on the use of language in a fast-paced dimension. Such usage was applied quickly and disappeared quickly as well. It is undeniable that technological media has a significant effect on the process of using this form of language. Therefore, language users must be careful in using the correct Thai language and view what is happening with knowledge, understanding and caution in order to preserve the language culture to remain with Thai people forever.

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***From Linguistic Expressions to Intercultural Communication:
The Significance of Pragmatics in EFL Teaching and Learning***

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

The variety of norms across languages and cultures poses a challenge to second language (L2) speakers in engaging in meaningful intercultural communication. This study discusses the incorporation of pragmatics in an English as a Foreign Language (EFL) Freshman course at the tertiary level, and in particular, through teacher reflections and teaching assistants' observations. When immersion in the target language and culture is limited, explicit teaching and conscious learning may facilitate acquisition of linguistic and pragmatic features so as to promote successful communication across languages and cultures. However, L2 textbooks often lack coverage of pragmatics. The instructor's mindful incorporation of authentic pragmatics materials when opportunities arise can help students engage in meaningful conversations. Differences in cultural norms can cause unintentional communication misunderstandings during intercultural interactions. Some nuances (e.g., backchannel) in naturally occurring conversations might be challenging for L2 learners to decode. When necessary, explicit instruction can be more effective in raising students' awareness. The instructor's reflections and incorporation of pragmatics in language teaching help to raise students' awareness. To encourage analytical skills and promote implicit learning in language classrooms and beyond, we propose 1) teaching and learning of both linguistic and non-linguistic features, 2) enhancing communicative skills with topics relevant to the students, 3) use of authentic materials for illustrating the pragmatics aspect. Acquisition of pragmatics in an EFL course can have a significant impact on students' intercultural communication in various contexts, such as academic/professional settings, home country and abroad, given the increasing mobility of individuals in our globalized world.

Keywords: Pragmatics, Linguistic Features, Intercultural Communication, English as a Foreign Language (EFL), Teacher Reflections

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Introduction

Following from the National Development Council's (NDC) blueprint, the Bilingual 2030 Policy, the Ministry of Education (MOE) of Taiwan has initiated numerous policies directed at promoting English as not only a foreign language, but also a lingua franca, in the education system and the wider environment in Taiwan (NDC, 2018). Nevertheless, underlying the bilingual policy, it is also solely “presented as the extension of English across levels of schooling for Taiwan’s domestic student body, specifically as part of a greater plan to integrate Taiwan into the world through internationalization” (Ferrer & Lin, 2021, p. 7). In other words, the aim is to promote language competency by increasing the knowledge and skills of the next generation of students in Taiwan to advance the nation’s global competitiveness on the world stage.

However, a major goal of language learning should be to prepare learners to use the target language for meaningful communication, for them to cultivate “a communicative desire to use language for a real purpose” (Tin, 2013, p. 385). Whether in the first, second, or foreign language, it is a highly complex process (Kroll & Bialystok, 2013). In general, language learning involves two basic processes: lower-level comprehension processes that involve translating the written code into meaningful language units, and higher-level processes that involve combining these units into a meaningful and coherent mental representation (Kendeou et al., 2014). Moreover, researchers have also highlighted how texts cannot be understood without contributions from the learners as it requires them to scaffold their prior knowledge and experience to build new understandings (Velasco & García, 2014). Language learning is not a passive activity as it demands that learners engage in an active search for meaning (Thomas, 2019). This study, drawing on reflective practice with sociocultural theory as its underpinning framework, thus attempts to investigate how the teaching of pragmatics can be better incorporated in one English course for first-year university students to fully make sense of, comprehend, adapt and utilize different languages to convey their communicative intent, to become competent global citizens.

Pragmatics and Its Role in Intercultural Communication

Pragmatics concerns the interactional use of language in social contexts (Fernández & Staples, 2020) and the intended message the speaker tries to communicate (Parajull 2022). As pragmatic rules are subconsciously used, even native speakers of the target language may not be aware of them until rules are not followed as expected, leading to feelings of hurt or offense (Bardovi-Harlig & Mahan-Taylor, 2003). Acquisition of pragmatics is even more challenging for English as a Foreign Language (EFL) learners in an environment where input of authentic discourse is limited. A common goal for language learners is to appropriately understand and communicate intents in various contexts, making pragmatics highly relevant in language teaching and learning. Cultivating awareness can help mitigate pragmatic breakdowns in intercultural communication contexts involving both native and non-native speakers. Sabirjanovna (2022) provides a brief definition of intercultural communication (IC) as “the interaction of representatives of different cultures” and argues for “culture” being the primary element of IC. Arasaratnam & Doerfel (2005) point out the difficulty of defining intercultural communication competence (ICC) as “competence” itself is subjective, and ICC is usually influenced by each person’s culture. Similarly, “communication” cannot be easily defined since it involves different contexts, such as mass communication in sociology and personal communication in psychology (Sabirjanovna, 2022). Although a precise definition

of these terms is elusive, there is a widespread consensus that pragmatics plays a crucial role in achieving effective intercultural communication.

Pragmatics varies across languages and cultures. Different cultures have diverse pragmatic norms, such as politeness conventions, preferences for being (in)direct, and conversational implicatures. The failure to express a communicative intent or being unaware of the differences underpinning pragmatic norms may result in misunderstanding, misinterpretation, or miscommunication, leading to the interference of making good and engaging conversation. Moreover, as O’Keeffe et al. (2019) remind us, second or foreign English language learners may also show significant differences in the way they convey and comprehend certain speech acts, such as greetings and leave takings, or when making short responses.

Communication involves linguistic and non-linguistic features. Linguistic features (e.g., words and expressions, intonation) may be more obvious than non-linguistic features which can be more subtle (e.g., gestures, turn-taking, back channeling, personal space). Language involves form and meaning, and meaning depends on contexts. It is thus crucial to learn not just the form, but also the use of it in appropriate contexts. The use and interpretation of language is largely influenced by the context and its intended message may go beyond literal interpretation. The teaching of pragmatics thus aims to cultivate English language learners' ability to adaptively and appropriately respond to diverse social contexts and scenarios. To effectively help language learners, authentic materials and communicative activities can be used for developing pragmatic skills (Soler & Flor, 2008; Bardovi-Harlig & Mahan-Taylor, 2003; Félix-Brasdefer & Cohen, 2012). Parajull (2022) thus highlights how more input of pragmatic features through explicit teaching, as well as the provision of opportunities for peer-interaction and group work, can help to raise learners’ awareness and acquisition of linguistic expressions and their functions.

Furthermore, prosody and formulaic language (including conventional expressions in interactions) play a crucial role in communication, and prosodic patterns produced deviate from anticipated norms can potentially lead to a negative impression for the listener (Fernández & Staples, 2020). Prosody, however, frequently remains underemphasized within EFL instructional materials, despite its capacity to significantly alter the intended meaning of a message through variations in intonation, including rising and falling patterns, the infusion of sarcasm, and the selective emphasis on specific words within utterances. For instance, the utterance “This is great!” conveys entirely different meanings when spoken with genuine sincerity as opposed to articulated sarcastically. However, this distinction remains imperceptible in written form, and even when audio recordings are available, the nuanced difference may not always be obvious and readily perceived by the learners.

In an increasingly interconnected global landscape, using English as a Lingua Franca in intercultural communication has become more common than ever. While the adoption of native speaker norms is typically regarded as socially appropriate, Taguchi (2011) cautions that diverse native speakers may diverge in their judgements of appropriateness; moreover, some learners may opt not to conform rigidly to these native speaker conventions. As O’Keeffe et al. (2019) further remind us, the goal of teaching pragmatics is not about conforming to native or any particular language norms, but it is to guide English language learners to become familiar with some of the norms and practices of the target language as pragmatic errors may cause them to appear rude or abrupt of which the learners themselves may not even realize. Instructors’ mindful incorporation of authentic pragmatics materials

when opportunities arise facilitates students' engagement in spontaneous communication in real-life situations.

In the case of Taiwan, learners have limited exposure to interactions in English and have little chance to acquire pragmatics implicitly and informally. Furthermore, the lack of coverage of pragmatics in EFL textbooks is not uncommon. Researchers thus suggest the importance of incorporating pragmatics into EFL curricula through explicit instruction (Bardovi-Harlig & Mahan-Taylor 2003, Parajuli 2022). Meanwhile, it is important to allow time for students to develop their pragmatic skills and show sensitivity to students' choices. For instance, a learner from a culture where indirect requests and responses are considered appropriate may find it difficult to make a direct request, despite having the knowledge of it. In a setting where interlocutors have fairly different norms and neither are aware of the fact, misinterpretation can easily occur. Cultivating pragmatic awareness helps students to learn the language and interpret messages through a broader lens when communicating with people of different cultural backgrounds.

Reflective Practice and Sociocultural Theory

As teaching and learning becomes more student-centered, reflective practice has gained wide recognition as a concept whereby teachers do not only prompt themselves to reflexively adapt their teaching practices to better facilitate students' diverse learning styles and preferences in the here and now, but also reflectively think about how to foster and enhance their students' learning motivations and outcomes with self-determination as a way forward. According to Farrell (2015), reflective practice promotes self-awareness and improves teaching skills. Teacher reflections impact students' performance in the classroom and beyond (Torres-Goens & Farley, 2017). As previously mentioned, pragmatics involves moving beyond literal meaning of words and expressions. When instructors notice nuanced use of language in preparation for class or in reflection of classroom teaching, making time to address the point may seem insignificant, yet such effort can gradually help student to develop their awareness and acquisition of pragmatic competence. As Golombek and Johnson (2021) remind us, "what is learned is fundamentally shaped by how it is learned" (p. 102605). Reflecting on how students can better learn from what is taught and how to teach it, is just as important as thinking about what to teach. Echoing Vygotsky's sociocultural theorization, Golombek and Johnson (2021) also highlight that "method is something to be practiced, not applied" (p. 102608). Thus, teacher reflections should be regarded as a tool that allows teachers to learn from as well as to enhance and improvise on future actions from what is practiced.

Furthermore, Vygotsky's sociocultural theory views knowledge as products of socially constructed realities shaped by an individual's cultural backgrounds and worldviews (McKinley, 2015). In other words, how students make sense of and generate the knowledge they acquire in the learning process is largely underpinned by their cultural backgrounds and prior knowledge. Kress (2011) also reminds us that for learning to be meaningful, it is important for teachers to situate teaching and learning in the context of the students' sociocultural environment, rather than unidirectionally through textbooks or teaching materials that are foreign to their everyday beliefs and practices. Ybema et al. (2010) thus highlight how a constructivist perspective, in the way it recognizes that "social realities as collectively or intersubjectively constructed in an ongoing interplay between individual agency and social structure, in and through which individuals and structures mutually constitute each other" (p. 7), and of which this study draws on, is an appropriate approach that seeks to investigate how pragmatics can be better incorporated in an EFL course as

students learn to communicate and interact in a foreign language (English) that aligns with, rather than contradicts, the prior knowledge and sociocultural environment of their everyday lives.

Background of the Study

This pilot study, conducted within a freshman English class of 35 students, primarily focuses on the incorporation of pragmatics and students' communicative competence. Specifically, it was achieved through the instructor's reflective practice and TAs' observations. The duration of the study spanned 10 months. The team comprises an instructor, and three TAs (two international TAs and one Taiwanese TA) in the first semester and four TAs (one international TA and three Taiwanese TAs) in the second semester.

Given the constraints of a curriculum bound by time, it is easy to overlook opportunities when a brief explanation, or even more effectively, a more extensive discussion on the topic could be provided. Incorporating pragmatics necessitates instructors to recognize the significance of pragmatics as well as a heightened sensitivity to cultural differences and language use in various contexts. It is worth noting that incidental exposure of pragmatics (e.g., requests in various situations) in the classroom can be acquired by the learners. Taguchi (2011) suggests incidental learning of pragmatic features through classroom discourse such as interactions with the instructor and peers. For pragmatic instruction, Parajull (2022) lists practical tasks focusing on linguistic and socio-linguistic dimensions. Linguistic tasks that familiarize learners with the forms include analysis of vocabulary in context, notice and practice intonation, discourse fillers, etc. Social-linguistic tasks include analysis of speakers' goals, practice of politeness/directness, speech acts, and identifying L2 norms and language use. Whenever possible, we took advantage of these practical tasks and further engaged students in a brief or extended discussion, which at times were spontaneous and incidental. In addition to explicit instruction, we also believe in the importance of allowing students to discover and discuss what may be "hidden" rules/messages. This aligns with what Parajull (2022) argues for, a combination of inductive methods (bottom-up approach; examining samples to form rules) and deductive methods (top-down approach; apply rules in examples), and stresses that students' higher order thinking can be developed through analysis of pragmatic samples.

Findings and Discussion

In this section, we mainly focus on the three major elements of this pilot study in the EFL setting – oral skills, incorporation of pragmatics, and intercultural communication – through teacher reflections and TAs' observations. Students' questions, thoughts, and suggestions voluntarily shared with us are reflected on and taken into actions. For instance, a discussion on cultural differences in a textbook article was expanded to a special session so we could delve deeper than the confines of the textbook, allowing for extensive exploration of authentic materials (videos, pictures, etc.) and discussion on relevant issues.

One of the main goals of the course is to help students improve their oral skills. In order to better understand what may prevent students from sharing their thoughts in English in class, we conducted an informal survey. Factors that may discourage students from actively engaging in speaking include *lack of confidence*, *worries about making mistakes*, and *not knowing a particular word or phrase*, etc. We asked: *If you hesitate to share your thoughts or answer a question in class, what are some of the reasons that cause the hesitation?* Students

could choose all factors that apply, with a category *other* where they could freely add any unlisted reasons that are true for them. Based on the results, a number of causes preventing students from expressing themselves in English were confirmed (See Figure 1).

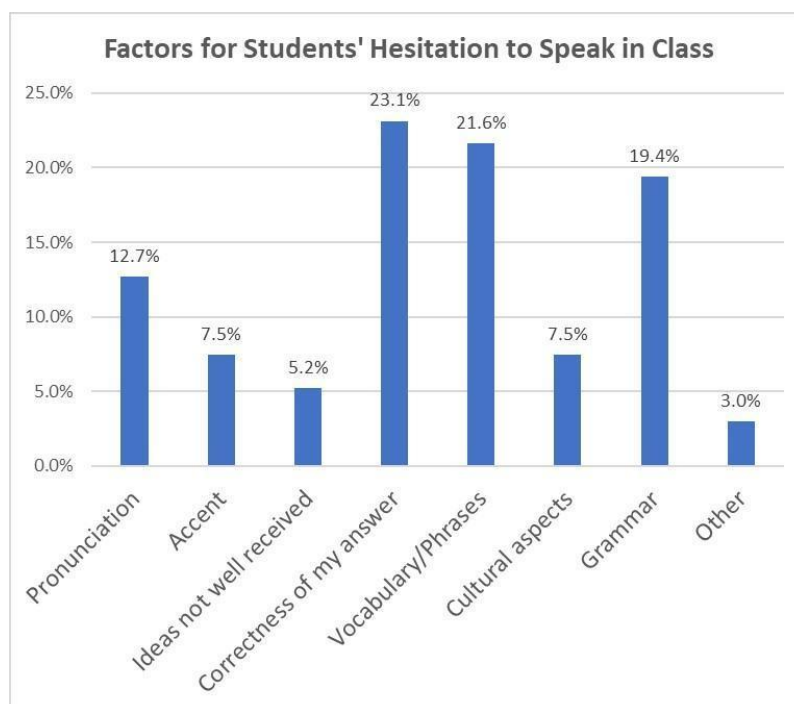


Figure 1: Factors for Students' Hesitation of Speaking English in Class

Results (calculation based on total number of responses) show that *correctness of the answer* (23.1%), *limited vocabulary/phrases* (21.6%), and *grammar* (19.4%) are the top three factors that prevent them from expressing themselves. Simply put, *avoiding making mistakes in front of others, not having the words or phrases to express the thoughts, and building words and phrases into sentences* are students' real struggles. Besides the top three factors, *pronunciation* (12.7%) and *accent* (7.5%) caught our attention, with the former indicating the "correctness of pronunciation" and the latter referring to students' perception of his/her own accent being non-nativelike. If we collapse these two factors, we have a combined category of 20.2% concerning pronunciation. A reflection entry reads:

Students' difficulties, expressed in numbers (in the chart), somehow seem more real. The most difficult one to overcome is "correctness of the answer" that students are worried about. Graduating from high school just a few months ago where correctness of answers is very much emphasized, students may need some time to adapt to changes. Earning their trust and providing a friendly environment where they can express confidently and through critical thinking will be what we need to work on. Remember, though, that a change from test-oriented learning in high school to active participation in discussion which requires critical thinking and oftentimes with no fixed answers will take time. Be patient.

However, it is not uncommon that Asian students are thought of as passive, compared to their counterparts from a western culture. For instance, Lin et al. (2017) point out Taiwanese high school students participated in blog activity passively, while their British counterparts did it voluntarily, and it may be due to a different Taiwanese high school culture where standardized answers are common, and students are not encouraged to think critically. In the

initial stage of our study, only a small number of students regularly shared their thoughts in class voluntarily. One of the teacher reflection entries revealed that students were going through the change:

One of the students mentioned that this English course is very different from all his previous English classes because in high school, there was test after test, and they were not used to open-ended questions. It is encouraging that the student now (in the middle of the semester) feels more comfortable with this learning process constantly requiring group discussion that is quite different from all his previous English classes. It took some time for him. Another student expressed being surprised by how we conducted the course, similar to his foreign teacher guiding them to learn new knowledge through articles, rather than test-oriented English classes in high school. When students are quiet, I will need to remember that their prior English-learning was commonly test-oriented, and their aim was to score high in written tests. Allow them time to develop their critical thinking and formulate their thoughts in speaking.

As students were adapting to an English course early in the first semester, and not all students had the same English learning background, gathering some information in this regard helped the instructor to be aware of the gap. One of the teacher reflection entries shows how students communicated different learning experiences, which lead to a changed thought:

A student shared that in their high school English class, pronunciation of words was not taught. Now she enjoys learning it as well as multiple meanings of a word. Perhaps the focus was to score high on written tests in high school, and they were trained to read and write, with listening and speaking being overlooked. When they are reluctant to speak, besides not having the vocabulary, it is possible that they are unsure about the pronunciation, despite having learned the word and knowing its meaning. It's natural to think that pronunciation is part of the package when learning new vocabulary, but not all students learned it this way. Without adequate vocabulary and learned pronunciation, an idea cannot be fully and clearly expressed. I will need to be sensitive and discern when students need help with pronunciation while attempting to articulate their ideas.

Pragmatic, as previously mentioned, is under-addressed in EFL textbooks; therefore, instructors' efforts in providing learning opportunities, especially with authentic materials and real-life situations, may promote students' pragmatic awareness which is essential for engaging in intercultural communication. In an informal conversation with an Asian student studying in Europe, the instructor recognized a pragmatic failure, unknown to the person who shared the story:

The experience R shared was a good example of a pragmatic failure. At the restaurant, she would like more water. R told me that she said to the waiter politely, "The glass is empty." However, the waiter looked puzzled and had an expression of "And...?" For R, "The glass is empty" is an indirect request of "Could I have more water, please?" For the waiter, however, it was merely a description of the glass on the table, and he needed a direct statement to know what to do next. In the classroom, where a request was presented in a textbook phone conversation, I shared the story with the students and briefly discussed directness and politeness with them. Too bad we did not have enough time to go deeper on the issue today. I'll need to try to set

aside some time for more discussion on pragmatics. I would like to hear about students' experiences of intercultural communication.

To raise students' pragmatic awareness, the instructor and the TAs worked as a team and set aside time to incorporate pragmatics in classroom teaching, with authentic materials and relevant discussion questions. Students were unexpectedly enthusiastic about the topic. The instructor and the TAs agreed that it was a positive learning experience for the students. An entry of the teacher reflections highlights students' interests in learning about it:

Almost every student raised their hands and shared today! This has never happened before! It was good teamwork, with well-prepared materials, including videos along with discussion questions. Students had a lot to share. It was their own personal experiences, and they all seemed to be interested in hearing other people's stories and sharing their thoughts during the group discussion. Student R shared a first-failed-but-then-successful attempt of a request happening at an airport restaurant in Asia. With two non-native speakers of English using English as a Lingua Franca, "take-out food" was not understood by the staff. Having to rush to the gate, the frustrated traveler said, "I want to eat on the plane" which the staff understood immediately. It may not be regarded as pragmatically appropriate, but it worked.

Another story was told by one of the TAs. TA N, being a non-native speaker of Mandarin, was confused when an Uber driver became angry when he asked, "Where are you now?" in Mandarin. An unexpected intonation or missing a word/particle that is perceived as required to be polite by the individual might have caused misinterpretation or misunderstanding of his naive question.

When one shared a not-so-successful attempt of intercultural communication, it seemed to remind another person of his/her own experience. Somehow it was less intimidating to talk about it after a few stories were told. Numerous personal experiences shared, questions raised, situations discussed today. Students seemed to find the topic and questions easy to relate to. It was time well spent, and extremely encouraging to see students enjoying the session. What a learning process for me and the TAs, too! This course can be a bridge between our local students/TAs and international TAs where learning to use a foreign language in various contexts happens in a truly authentic way. Their genuine interests in each other's cultures, as I observed in class as well as the after-class chat they engaged in, may be just the beginning of further exploration and acquisition of a foreign language, including acquisition of pragmatics.

Reflective practice in this pilot study plays a pivotal role in ongoing enhancement of the course, taking into consideration the challenges faced by students. The instructor constantly and continuously reflects on how to cultivate students' oral proficiencies while at the same time, focuses on incorporating pragmatics in the course, both of which being highly relevant to students' intercultural interactions as a global citizen. The instructor's regular reflections instigate adaptations, additions, or changes in the way we conduct the EFL course thereby fostering heightened awareness of pragmatics among students and facilitating their adeptness in intercultural communication.

Conclusions

This study attempts to investigate how pragmatics can be incorporated in the teaching and learning of one English course for first-year university students in order to foster their confidence in communicating in English, without hesitation or fear of making mistakes. As Parajull (2022) highlights, through explicit teaching, English learners have the opportunity to heighten their awareness and acquisition of linguistic expressions and pragmatic features, which helps to reduce students' fear of making inappropriate responses when engaging in conversation. As pragmatics involves beyond the teaching of literal meaning of words and grammatical know-how, which moves away from the incessant test-taking routines that is predominant in pre-tertiary education in Taiwan, one of the aims of this course was to enhance students' pragmatic competence, in its attempt to mitigate students' hesitation which prevents their attempts at conversing in English.

As noted in the findings, sometimes exchanges in class with students would be a clear example of pragmatics, but the instructor did not have time to elaborate or delve in the topic further with students due to limitations of class time. However, making time to re-address these examples later is not only important as the instructor designs and thinks about what to teach in their subsequent classes, but also helps them to think about how to teach certain pragmatic examples for students to better make-sense of the new learning, in a way that connects with their prior knowledge and real-life experiences. This is when reflective practice comes in as an important tool which helps the instructor to adapt and improvise on future actions from what is practiced (Golombek & Johnson, 2021).

Moreover, as the goal of teaching pragmatics is not about striving for or conforming to any particular language norms that is blindly regarded as superior, or native, but to guide students to become more well-versed in their intercultural understandings and pragmatic competence, the course also aims to decrease students' hesitation or lack of confidence at conversing in English. As noted in the findings, with the mindful incorporation of authentic pragmatics materials during group work, students did not only share their thoughts in class, but also engaged in spontaneous communication without hesitation. This aligns with Thomas' (2019) reasoning that views language learners as active discoverers rather than as passive receivers of knowledge.

As demonstrated, teacher reflections prompted us to tackle identified challenges, and open avenues for course adjustments during the study, all aimed at cultivating the competence necessary for effective intercultural communication among students. For future practice, teacher reflections could strategically focus on the most challenging areas that students encountered. In addition, involving students in self-reflective exercises regarding their personal acquisition journey could yield valuable insights for the instructor to effectively address any potential gaps.

Last but not least, as Ferrer and Lin (2021) argue, the over-representation of Taiwan's bilingual policy in raising its domestic students' language competitiveness in the world arena often overlooks the major purpose of language learning, that is to heighten learners' awareness and desire in using the target language for meaningful communication with as few pragmatic errors as possible. As noted in the findings, whether in English, Mandarin or any languages, the importance of pragmatic awareness, as well as the difference use of intonation and/or word usage, particularly in intercultural communication, does wonders to help to resolve misunderstandings or miscomprehension when making requests or inquiries, either

directly or indirectly. Such an example clearly shows how the promotion of language and pragmatics competencies does not only raise Taiwanese students' marketability on the world stage, but also promotes Taiwan's inclusiveness on the world stage whereby foreigners and locals are able to adaptively and meaningfully converse with each other in total ease.

Acknowledgements

The authors would like to express our gratitude to the Teaching and Learning Development Center, National Central University, Taiwan, for providing special grants for course improvement (grant numbers 111A1417-23 & 112A1417-8). We also extend sincere appreciation to the students and Teaching Assistants for their invaluable contributions to this study.

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*A Metacognitive Process of Collaborative Engagement With Peers in
Project-Based Language Learning*

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

In an English as a foreign language (EFL) environment, many students only get to learn or use English in the classroom. To give those students more authentic experiences in language use, some university courses are adopting hands-on learning approaches such as project-based language learning (PBL). One of the biggest benefits of PBL is the role of social interaction as students work together in a situated activity to construct shared understanding through sharing, using, and debating ideas with peers. While this learning approach can enhance students' language learning through joint collaborative efforts, it can cause a variety of challenges in the process as they try to engage with their peers through their L2. This paper reports on the metacognitive process of Japanese university students of intermediate to advanced proficiency in English in their attempts to engage in collaborative dialogue with their peers during a group project about current international affairs. The interview data collected from the students after the project were analyzed using the Modified Grounded Theory Approach (M-GTA). The results suggest that students constantly struggled to say something convincing and pleasing to peers so as not to disturb the peaceful atmosphere within the group. It was also found that while students were faced with various internal obstacles arising from multiple emotions, they tried hard to maintain good relationships with their peers. They sometimes spoke in Japanese when doing so would facilitate their collaborative dialogue.

Keywords: Metacognition, Project-Based Language Learning (Pbl), Collaborative Dialogue, Peer Interaction, Cooperative Learning

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Introduction

There have been substantial changes in recent years in Japanese English education from the traditional teacher-centered grammar-focused approach to a more student-centered approach to foster students' practical communication skills in English. Because of that, some university courses have adopted more hands-on approaches such as task-based-language teaching (TBLT) and project-based language learning (PBLT).

In TBLT, students engage in interactive activities with peers using focused grammatical forms (Doughty & Long, 2003). Through this process, students are expected to gain linguistic knowledge and abilities to use such knowledge in a meaningful context because they can focus their attention on various kinds of language use (Mackey & Polio, 2009). However, some researchers argue that the centrality of a task-based approach may make language learning too functional and by implication limit the range of language used by students (Ellis, 2003). In addition, Task-based teaching approaches may resemble the p-p-p approach in that they may be teaching specific grammatical forms in the formalized context (Tomlinson, 2015).

In PBLT, on the other hand, students usually work on a project that compels them to integrate different language skills as they try to work through several activities (Desiatova, 2008). The origin of PBLT goes back to American Philosopher John Dewey (1938), who says that education and learning are social and interactive processes. According to Dewey, learning occurs when students themselves proactively try to find meaning in the context through autonomous inquiries (1938). Hiroishi (2006) expands on this idea by saying that PBLT provides students the opportunity to engage in collaborative dialogue through which they can exceed their current abilities to accomplish a result that otherwise would not have been possible. This is because when students are engaged in collaborative dialogue, one or more speakers are expected to gain a new or deeper understanding of a certain topic through their interactions (Swain & Watanabe, 2013).

However, PBLT usually requires students to work on multiple tasks on a given topic using their target language and at the same time, collaborate with their peers to accomplish their goals. On top of that, when students work together in a group, many individual factors such as their preexisting knowledge of their topic, personal interests and beliefs, English proficiency, and even their personalities, can affect the way they interact with their peers within a group. Consequently, some groups may encounter more difficulties engaging in collaborative dialogue than others. Thus, it is worthwhile to examine how some groups successfully work toward collaboration while others fail in their collaborative efforts.

In my previous research (Gomez, 2021), I delved into the question of how students failed to engage in collaborative dialogue during a group project in a content-based English language classroom at a Japanese university. The research findings indicated that students failed to engage in collaborative dialogue mainly because they felt it difficult to simultaneously manage the contents and the process of the project using their L2 (target language), and as a result, students' motivation for collaborative engagement was negatively affected (p. 31). However, in the process of analyzing the data through M-GTA, I noticed that the data also reflected students' collaborative engagement. Therefore, this study aims to expand on my previous interpretation of the research (Gomez, 2021) focusing on the metacognitive process of how Japanese university students engage in collaborative dialogue during a group project.

Theoretical Background

PBLL is believed to foster deep learning because students use the target language to acquire linguistic knowledge and other language skills while learning the subject content (Beckett, 1999). One of the main benefits of PBLL is that project work provides language learners with opportunities to recycle their pre-existing language knowledge and skills in a relatively natural context rather than in an orchestrated setting (Haines, 1989). When language learners take on complex cognitive processing using the target language to formulate knowledge and thoughts, they are engaged in languaging (Swain, et al., 2013). Language learners are expected to enhance their current knowledge and further acquire new knowledge through collaborative efforts for languaging with peers, which is called collaborative dialogue (Swain & Watanabe, 2013).

Previous research suggests that collaborative dialogue helps language learners gain fluency in the target language because more negotiations occur when learners feel more comfortable using the language with their peers (Sato & Lyster, 2007). Through collaborative dialogue, learners can also develop their linguistic knowledge as they work together to co-construct the meaning behind the linguistic rules (Swain, 2000). This is because they are often compelled to use the target language in their communication with their peers (Swain & Suzuki, 2008). While many language education professionals have conducted research on collaborative dialogue in foreign and second language contexts, many of them mainly focused on individual task-based activities such as grammar or vocabulary learning (Swain, 2009) or essay writing (Watanabe & Swain, 2008). In contrast to these skill-focused contexts where students are usually given the task by the teacher, PBLL often forces students to come up with the tasks themselves and take charge of the group process to accomplish their goals. This inevitably compels the students to deal with more challenges in the process of their learning.

Gomez (2021) investigated how Japanese university students dealt with these challenges during their group project by focusing on their metacognitive process that led to their failure in collaborative dialogue. The results indicated that one major factor that led to a failure to engage in collaborative dialogue was that students were torn between the target language and the contents of the project topic, and as a result, they ended up feeling demotivated to engage in collaborative dialogue with their peers (p.39). However, the results also indicated that students tried to make collaborative efforts, struggling to figure out how to accommodate themselves in a given situation (p.41). Expanding on these findings, this study will focus on the metacognitive process of how Japanese university students of intermediate to advanced proficiency engage in collaborative dialogue with their peers in a content-based group project in an English language course. The revelations in this study will give language educators further insights into EFL learners' metacognition related to collaborative dialogue during a group project.

Method

1. Target Population and Course Background

This study involves 12 students from a private university in Tokyo who were in an elective English course on current issues. The course, taught by the author, was aimed at fostering students' four skills at the advanced level of English proficiency by comprehensively using the four skills in English.

The 14-week course was offered in 2018 and each lesson lasted for 90 minutes. In the first week, students got to know each other through an ice-breaking activity. From Week 2 to Week 9, students engaged in group and class discussions after watching or reading authentic materials that addressed a variety of social issues related to culture, society, economy, politics, international relations, and science and technology. Every other week, students were instructed to lead a group discussion in turn on an assigned topic based on the discussion questions they prepared as homework. Groups were randomly formed every time to get themselves acquainted with different classmates. From Week 10 to Week 13, students worked on a project in groups of four. On Week 14, each group presented the results of their project for about 15 minutes. English was used as the main language of instruction throughout the course and students were instructed to use English to engage in all discussions, including the project.

The course involved 16 enrolled students between the second and the fourth year in university with mixed majors. Among them, 12 students agreed to participate in the study. The level of English proficiency of the participants was intermediate to advanced levels, ranging from 710 to 965 in the TOEIC reading and listening test conducted by Education Testing Service Global (ETS). A person with a score of around 730 is believed to be capable of handling any situation in English though there may be individual differences (ETS, 2012). The participants' language proficiency background is described below (Table 1).

Students	Sex	Year in School	TOEIC Score	Overseas Experience (Country) / Duration	Major of Study at University
S1	M	2 nd	730	None	Social Studies
S2	M	3 rd	850	U.S.A. / 4 months	Intercultural Communication
S3	M	3 rd	710	England, New Zealand / 6 months respectively	Intercultural Communication
S4	M	2 nd	850	The Philippines / 2 months	Global Business
S5	M	2 nd	785	Australia / 2 weeks	Business
S6	M	2 nd	755	Canada / 2 weeks	Politics
S7	F	2 nd	925	U.S.A. / 2 years	Global Business
S8	F	4 th	965	Jordan, Bhutan / 3 years in total	Math
S9	F	2 nd	740	U.S.A., UK, Russia / 1 month respectively	Modern Culture
S10	F	2 nd	810	U.S.A. / 3 weeks	English Literature
S11	F	2 nd	935	U.S.A. / 1 year, Canada / 2 weeks	Intercultural Communication
S12	F	3 rd	730	Canada / 1 month	English Literature

Table 1. Profiles of the Participants (Gomez, 2021)

2. Description of the Project

The project was designed using Mergendoller's High-Quality PBL Framework (HQPBL) (2018), which comprised six elements essential for a high-quality project. The framework

includes 1) intellectual challenge and accomplishment, 2) authenticity, 3) public product, 4) project management, 5) collaboration, and 6) reflection (Mergendoller, 2018).

The project titled “How Can We Make a Difference in the World?” was aimed at giving the students the initiative to synthesize the information and knowledge practiced and acquired in the earlier weeks. During the four-week project, students collaboratively worked to 1) suggest a current issue on the international level, 2) research the background of the chosen issue both from the Japanese and the global perspectives, and 3) present their opinion as a group on how to deal with the issue to change the current situation for the better.

In the first week of the project, students worked on the project planning in groups of four. Those who shared similar interests were put together. No other elements such as language proficiency, major of study, sex, etc. were considered in the group formation. Students then spent three weeks working on their project in and out of the classroom. After the four-week-long project, each group gave a presentation to report their results. In the first week of the project, the teacher told the students to use the target language of English in their communication with their peers during the classroom discussions. Teacher intervention was limited to occasions when the teacher noticed that the students were struggling with the task itself, had questions about their topic of choice, and were speaking in Japanese for a long time in their discussion.

3. Data Collection

The data used for this paper are interview narratives with 12 students. The participants agreed to participate in this study after they were given an explanation of their rights and the purpose of this study. The interviews were conducted by the author in Japanese, the native language of both the author and the participants, to prevent misunderstanding. The semi-structured interviews were conducted three to four months after the termination of the course. Self-reflective journal entries about the project written by the participants were shared with them during the interviews to help refresh their memories. Each interview was conducted for about 60 minutes in a private area on the university campus.

The main purpose of the study is to elucidate students’ awareness of their interactions with their peers and how such perceptions affected the ways they behaved during the project. The interviewer used the following guiding questions to elicit the participants’ narratives: 1) How do you think you contributed to the group project? Did you try to do anything specifically to make yourself useful to the group? 2) Did other members contribute to the group project? Please describe how each member contributed. 3) Were there any moments when you felt uncomfortable during the project? If so, what made you feel that way? Did you do anything about it? 4) Did you ever feel concerned about anything during the project? If so, did you verbalize your concerns to your peers? If not, how did you deal with the concerns? Since the interviews were conducted in an exploratory manner, further questions were asked to elicit more detailed narratives from the participants. After the interviews, the participants were given a small amount of money for their cooperation. All the interviews were recorded and later transcribed for analysis.

4. Instruments

The interview data were analyzed qualitatively using the Modified Grounded Theory Approach (M-GTA), which was developed by Kinoshita (2003, 2007) adopting and

modifying the original Grounded Theory Approach (GTA) (Glaser & Strauss, 1967). The analytical tool is ideal for this study because it has three distinct strengths over GTAs. The first strength of M-GTA is that it enables the researcher to describe a process of human interactions and conceptualize a model to illustrate a process in a similar context. The second strength is that it allows the researcher to interpret the interview data as it happens. This is different from the other GTAs (Glaser, 1992; Strauss & Corbin, 1998), in which the data are fragmented during the analysis. Kinoshita says it is difficult to merely use logic when interpreting the meaning of the fragmented data (2007). Furthermore, the analytical theme and the researcher's perspective are at the center of the focus when analyzing the data in M-GTA, thus this tool allows the researcher to explicate the process more faithfully to reality (Kinoshita, 2007). The last strength of M-GTA is that it advocates the utilization of the results to better serve the human service sectors for more analysis. Thus, educators in Japan would be able to utilize the conceptual model developed from this study when they incorporate PBL into their foreign language classrooms.

The M-GTA analysis (Kinoshita, 2003, 2007) takes the following procedure:

- 1) The researcher starts the analysis by determining the analytical theme and the analytically focused person. The analytically focused person represents a similar group of participants.
- 2) Then, concepts are generated using analytical worksheets. A separate worksheet is used to write the concept name, the definition for the concept, variations extracted from the interview data, and theoretical memos. While interpreting the data, the researcher writes down random thoughts as theoretical memos.
- 3) The concepts are then factored into categories that consolidate the ideas representing the concepts.
- 4) The data are constantly compared on multiple levels of variations, concepts, and categories until the ideas are saturated.
- 5) A conceptual model is shown as a figure to indicate the overall result of the analysis.

Results and Discussion

In this study, the analysis resulted in 50 concepts (appear in <>) and 14 categories (appear in []). Each category is comprised of concepts that define the category they belong to. The analytical theme was set as a metacognitive process of engagement in a collaborative dialogue by Japanese university students during a group project. The analytically focused people were Japanese university students of intermediate to higher levels of proficiency working on a group project in an EFL classroom. The model in Appendix 1. shows a process that can be observed in any given setting where a group of Japanese university students of a similar language proficiency level work together in a content-based group project. The categories will now be described to show how the researcher interpreted the participants' metacognitive thoughts under the analytical theme.

1. Striving to Maintain a Good Atmosphere Within the Group

1.1 Won't Object but I'm Not Convinced

When students are not yet quite sure who their peers are, they <can't be frank with peers because they don't know how to relate to them>. Students also feel reluctant to speak of their opinions when their peers seem to have a lot more knowledge about the subject they are working on because they feel they are not capable enough of discussing the subject. Some

even feel it's <hard to object to peers' opinions due to gaps in content knowledge>. It may appear that the discussion may be going well without any problems when nobody objects to anybody. Students do [not contest but they are not necessarily convinced] by their peers' opinions.

1.2 Compromise May Be Necessary Sometimes

While students have some kinds of inner conflicts of their own, many of them try to relate to their peers collaboratively. In a group project, students start with a driving question, make decisions after a series of discussions with peers, formulate tasks to be completed, set up and manage a project schedule, and work together to complete the tasks. Throughout the process, students encounter multiple occasions when they must exchange opinions with their peers. There are times when students realize that their peers' opinions are very different from their own. When faced with these situations, students tell themselves <it's OK to have a different opinion> because they want to maintain good relationships with their peers and continue working together. But at the same time, they have a feeling of resignation knowing that they have not fully deepened the discussion yet but <can't do more because time is limited>. Hence, they convince themselves that they [need to compromise sometimes].

1.3 Will Just Go With the Flow

There is a strong sense of willingness to maintain good relationships with their peers among the students. One good example can be seen when students <adjust their level and speed accordingly to fit their peers' level and speed>. Unlike an individual project, a group project requires students to work collaboratively. That means helping each other, respecting differences, and getting the best out of each member to create a result that would not have been possible alone. The Japanese students sensibly feel the differences in their abilities and individual characteristics, and adjust the way they behave within the group. They also <get influenced by peers' actions and words> in the process of group work, and learn to adjust their behaviors to fit evolving situations within the group. In addition, students are unconsciously aware that being too distinct from others would disrupt the harmony within the group. Thus, they susceptibly observe peers' abilities, vibes, motivation level, etc., and <make efforts just as much as peers>. They [will just go with the flow] to maintain a good atmosphere within the group so that they can work collaboratively with their peers.

1.4 How Can I Convince Everyone and Make Them Happy?

No group can be completely homogenous even if the teacher intends to formulate groups to make it so. Students sensibly observe different qualities in their peers. They feel that some peers are more proficient than others in certain areas and sometimes <feel inferior to peers> or <feel bad because they are not as capable as their peers>. Contrarily, when students feel that they are more proficient than others, they try not to show off their skills or make their abilities noticeable to peers because they just <don't want to be dominating so keep a low profile>. Students are also very sensitive to how their words and deeds can affect the group atmosphere. Even when they disagree with their peers' opinions, they <won't object to peers' opinions so as not to spoil the atmosphere>. To maintain a good atmosphere, they <have to say something to convince everyone>. Hence, students are constantly asking themselves [how can I convince everyone and make them happy?]

2. Feeling of Psychological Distance

2.1 Get a Bit Annoyed by Peers' Actions and Words

When peers' words and deeds were different from what students expected, they [get a bit annoyed by what they do]. It is sometimes irritating for students to see that peers <won't object to others' opinions so as not to spoil the atmosphere> (1.4). When this happens, students <hope that peers keep trying until they get convinced>. At other times, students regret that they had systematically divided responsibilities among each member. They <wish they didn't divide roles so much> because that led to less communication within the group. Furthermore, a group's collaborative work can be greatly affected by the motivation level of each member. Students feel that <everyone must commit to quality work>. They also feel that the group's motivation level can significantly go down if even a single member of the group does not want to collaborate because <negative vibes have more impact> than positive vibes.

2.2 Don't Want to Take an Initiative

There are multiple times when decisions must be made in group projects. The Japanese students who tend to avoid taking actions that result in standing out within a group [don't want to take an initiative]. Therefore, when important decisions must be made, they <leave the decision up to capable peers>.

2.3 Wish There Was a More Friendly Atmosphere

When choosing the language of communication within the group, students [just go with the flow] (1.3). They respond in English when peers speak to them in English but switch to Japanese when spoken in Japanese. Thus, students <switch language if that's what peers want>. Even if they want to speak English, <they can't suggest that they speak in English>. As a result, they <can't speak English once someone speaks Japanese>. This is especially distinct in groups where students do not feel emotionally close to one another. Hence, students [wish there was a more friendly atmosphere] so that everyone can speak more frankly.

3. Using L1 to Fill Gaps

3.1 Difficult to Discuss Because My English Isn't Good Enough

While it depends on the topic of the project, projects that deal with social issues require students to understand and use a certain level of academic English when communicating with peers. Even those whose English proficiency levels are intermediate to advanced, students sometimes feel that they [can't discuss because their English isn't good enough]. They also feel that it is <difficult to speak English because of the level gap> among the group members. Thinking about the real-world current issues in their foreign language can be cognitively demanding and students feel that they <can't keep up with their peers' speed of thinking>. This would cause them to <give up speaking English along the way> and <use Japanese to better understand each other>.

3.2 Awkward to Speak English With Japanese Peers

Students sometimes give up English use because of cognitive reasons. However, they also switch their language due to socio-psychological reasons. Since all the students speak the same L1 in an EFL environment such as Japan, they feel [awkward speaking English with Japanese peers]. While students work on the project about authentic real-world topics, this is still an orchestrated situation, which is not, in fact, an authentic setting. Students may feel uncomfortable having to speak a foreign language of English with their Japanese peers in this rather unrealistic context. The other reason is that students feel a little embarrassed speaking English with their Japanese peers. Students intuitively sense that Japanese and English are very different both linguistically and culturally. Therefore, when speaking English, students feel that they <become a different person when they speak English>. Thus, they use Japanese to hide their feeling of awkwardness and embarrassment.

3.3 Do We Need to Use English Only?

For foreign language learners, working on a project can be very demanding and they could face linguistic, sociocultural, and psychological challenges. Students feel it's <hard if only English is spoken>. While language use is an important focus in PBL, gaining knowledge in the target subject is also an essential part of their learning goal in PBL. Thus, it is understandable if students have a question, <is learning English the main goal?> If learning English is not the sole purpose of the project, students wonder [do we need to use English only?] and start thinking that <Japanese can be used depending on the purpose>.

3.4 Speak Japanese so You Can Trust Me

Since English is not their native language, miscommunication can occur depending on the proficiency of the speakers and the complexities of the content of the communication. For that reason, students feel that they <can't tell what their peers really feel when English is spoken> and assume that <Japanese is better for communicating true feelings>. Students also <speaking Japanese to express politeness>, which they find hard to do in English, in order to build a closer relationship with peers. Moreover, students sometimes <speaking Japanese to camouflage their English abilities>. This is a way to reach out to students who appear to have a lower English proficiency level. Proficient speakers feel that speaking English can seem threatening to less proficient speakers, thus it is a way for them to communicate to them that they [speak Japanese so you can trust me]. In this manner, students try to fill not only linguistic gaps but also psychological gaps with their peers to engage in collaborative dialogue.

4. Positive Attitude Can Help

Want to Speak English

Students sometimes use Japanese to reach out and engage with their peers. But at the same time, they [want to speak English] and work collaboratively with their peers using English. While there are times when students [just go with the flow] (1.3), they also feel that they <won't go with the flow because they want to speak English>. It is difficult to speak English when everyone starts speaking Japanese especially if <they can't suggest that everyone speak in English> (2.3). However, students say they <will speak English if someone forces them>.

Thus, outside assistance may be needed when students cannot resolve challenges like this by themselves.

5. Reaching Out to Collaborate

5.1 If Only Someone Helps

Despite the difficulties they face, students are struggling to find ways to keep up their motivation to engage in collaborative dialogue with their peers. Ironically, their attempts to maintain a good atmosphere within the group is working as an obstacle to their communication. One good example of that is their use of Japanese despite their desire to use English when communicating with each other. However, [if only someone helps], students would be able to overcome such difficulties. When they need to make important decisions during the discussions, <a neutral third party can help prevent confrontations> so that they can maintain a good atmosphere while engaging in a collaborative dialogue with peers. Furthermore, students also believe that things would become easier sometimes if peers come to their support. Those who <feel inferior to peers> (1.4) <can speak if helped by a capable peer> and <can keep on trying if being recognized> by their peers. When students <feel bad because they are not as capable as their peers> (1.4), they wish their peers would help. When peers try to reach out and give support, they <feel thankful for trying to give their support>.

5.2 Try to Reach Out and Collaborate

Students manage to engage in collaborative dialogue when they [try to reach out and collaborate]. Collaborative dialogue often occurs when students <work proactively to play their part> and <discuss to decide on responsibilities> so that they all can relate to each other collaboratively. Students sometimes <take up a facilitating role> so that the discussion can go smoothly. They even <get together outside the classroom to work collaboratively>. In essence, the willingness to collaborate and conscientious efforts to <reach out to others> are crucial factors for collaborative dialogue to occur.

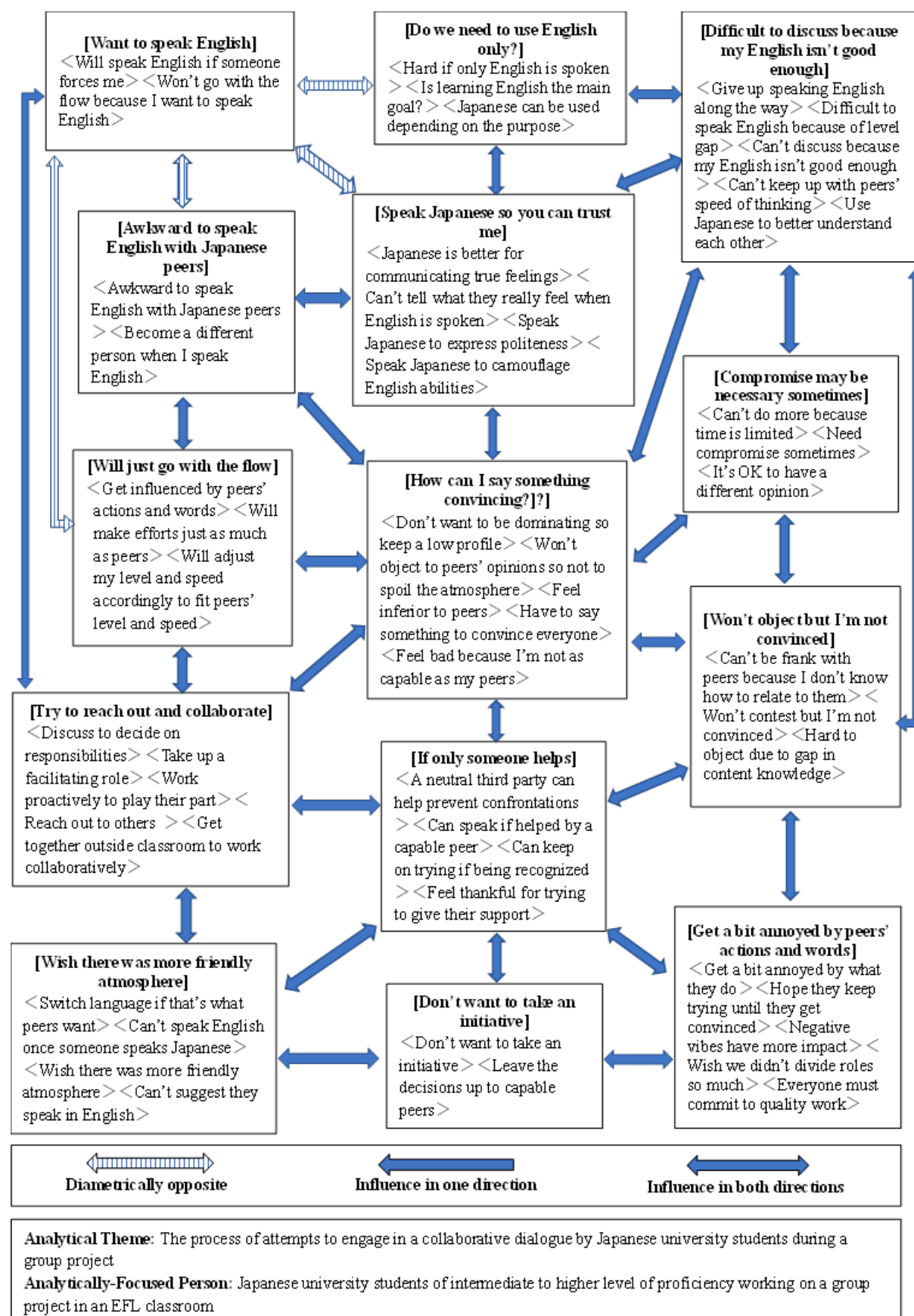
Conclusion

In conclusion, the data reveal that students constantly struggle to say something convincing and pleasing to peers so as not to disturb the peaceful atmosphere within the group. Students are faced with various internal obstacles arising from multiple emotions such as the feeling of uncertainty about their relationship with each other, the emotional distance they feel towards their peers due to differences in age and the faculty they belong to, and feeling of inadequacy due to gaps in English proficiency and content knowledge. Nevertheless, they try hard to maintain good relationships with their peers to engage in collaborative dialogue with their peers. It was also revealed that students try to proactively reach out to peers in and outside the classroom to collaborate to fill the gaps in language proficiency and content knowledge. In addition, students feel uncomfortable speaking in English with their Japanese peers, and speak in Japanese when they decide that doing so would facilitate their collaborative dialogue. What this study adds to the previous study (Gomez, 2021) is that while students feel multiple emotional obstacles preventing them from collaboratively engaging with their peers, their desire to maintain a good relationship with each other compels them to say something convincing and pleasing to reach out to their peers. Such efforts work to help a collaborative dialogue take place.

The findings of this study have some pedagogical implications as well. Students feel that the collaborative and supportive attitude of capable peers as well as the assistance from a neutral third party would help them overcome some of their emotional barriers to engage in collaborative dialogue with their peers.

The current findings as well as those in Gomez (2021) can provide useful insights to foreign language teachers when they incorporate projects in their classrooms. Further studies are needed to find out if more cognitive activities occur when students engage in collaborative dialogue using their L1 rather than their L2. It is also worthwhile to examine if collaborative dialogue would help students' better performance as a group.

Appendix A



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*The Utility of DASS-21 as a Research Method for Second Language Acquisition Studies
for Vulnerable Learners*

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This mixed-methodology pilot study aimed to examine the relationship between mental distress and language acquisition in vulnerable students, specifically those of immigrant and queer backgrounds. The study included participants (N=4) with a mean age of 29 years old (± 4.7 years) who were learning Icelandic as a Second Language. To assess the prevalence of stress, anxiety, and depression and their impact on language acquisition, the Depression, Anxiety, and Stress Scale (DASS-21) and semi-structured interviews were utilized. Two competing theories with mediation models were tested. Model A explored whether language acquisition mediates the relationship between stressors experienced by immigrant or queer students and mental distress in a language class. Model B examined whether mental distress mediates the relationship between stressors related to participants' backgrounds and language acquisition. The results revealed a significantly high prevalence of mental distress among both groups of vulnerable students, irrespective of their proficiency level. The findings support Model B, indicating that mental distress mediates the relationship between stressors from students' backgrounds and language acquisition. The data were analyzed using mediation analysis (Chi-square test, Sobel's first-order test, percentile bootstrap) and were further supported by the semi-structured interviews. This pilot study provides a foundational dataset for future comprehensive investigations and offers potential solutions to address the challenges faced by vulnerable students. The abstract is presented independently from the article and avoids references and non-standard abbreviations.

Keywords: Second Language Acquisition, Inclusive Education, DASS-21, Mental Health

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1. Introduction

Amidst the significant changes brought about by the shift to blended and online learning after the pandemic, a notable impact on language learners, especially those from vulnerable backgrounds, has emerged. These students have faced setbacks in their learning progress and emotional responses such as alarm, resistance, and exhaustion. This transformation has led to either positive stress (eustress) or negative stress (dystress) for students (Selye, 1956). The altered learning environment, along with increased distractions and challenges, affects how new knowledge and language acquisition are received (Affective Filters by Krashen, 1982).

During this transition, students prone to depressive symptoms and striving in a demanding environment face potential influences from both genetic and environmental stressors, potentially triggering depressive disorders similar to the Diathesis Stress Model (Ingram and Luxton, 2005). The increased academic workload, coupled with the absence of traditional in-person interactions, creates substantial stress, which is even more pronounced for vulnerable students with existing challenges. Recognizing their mental distress and identifying stressors are crucial for adapting the curriculum and ensuring inclusive post-pandemic language classes. This leads us to ask: How have queer and immigrant students in Iceland been impacted by the pandemic? What does this mean for their journey in acquiring a second language? Answering these questions requires exploring the effectiveness of the Depression Anxiety Stress Scale (DASS-21) in assessing the well-being of vulnerable student groups. This pilot study aims to test the applicability of DASS-21 in language acquisition research for these students and determine whether it can describe language acquisition within this demographic.

By going beyond conventional analysis, we gain a deeper understanding of inequalities and social factors, leading to more nuanced solutions (Gillborn, 2015; Crenshaw, 1989). Through exploring the interaction between language, identity, and sociocultural factors, we uncover the complex layers affecting language learning dynamics (Bronson and Watson-Gegoe, 2008). Consequently, we identify the strengths and limitations of current inclusive pedagogical approaches in Iceland. This study focuses on adult learners at the Language School, who are learning languages for academic, professional, or personal reasons. This pilot study is significant in two ways: it helps choose an appropriate model for the main study by shedding light on the connection between language acquisition and stress, and it assesses the use of the Depression Anxiety Stress Scale (DASS-21) on a broader scale to understand how race, language, and gender identities intersect in students' self-development. Beyond highlighting challenges faced by these groups during the pandemic, the study explores the complex negotiation of transnational, transcultural spaces, and intersectionality among queer and immigrant students in Iceland.

2. Methodology

2.1. Participants and Procedure

To gain a comprehensive understanding of the challenges faced by queer and immigrant students, a mixed-method research approach was employed. This approach combines quantitative and qualitative methods to generate a practical framework for investigation (Tashakori and Teddlie, 2008). The mixed-method pilot study aimed to enhance comprehension of complex issues in second language acquisition among vulnerable students through integrated approaches, surpassing the insights of each method alone (Molina-Azorin,

2016; Creswell & Plano Clark, 2007). Participants were selected purposefully from Tungumalskóli (Language School), including both queer and immigrant students. This selection facilitated a focused exploration of the central phenomenon (Creswell, 2014). To ensure impartiality in data analysis, a second rater was employed. Although the initial sample size was calculated as 4, additional students were invited to counter non-response or participation withdrawals.

2.2 Measures

The Depression Anxiety Stress Scale (DASS-21) was chosen for this pilot study due to its public domain status, electronic applicability, high reliability, and versatility across fields without the need for professional assistance (Le et al., 2017). The bilingual English and Icelandic survey scale was translated by Dr. Pétur Tyrfingsson from Iceland's Landspítali University Hospital. Ethical clearance for this pilot study was obtained from the University of Iceland Ethics Committee (issue SHV2022-033).

Depression Anxiety Stress Scale-21 (DASS-21)

The DASS-21 is a widely used 21-item self-report inventory, comprising three subscales: anxiety, depression, and stress (Lovibond & Lovibond, 1995). Participants rate each item on a 4-point Likert scale. A simplified version of this scale, reflecting the need for mixed-methodology research in educational research (Truscott et al., 2009), was employed to pinpoint sources of mental distress in the Icelandic second language context. The stress, anxiety, and depression subscales demonstrated acceptable internal consistency (stress=0.857, anxiety=0.840, depression=0.931).

Semi-structured Interview

To explore research questions in depth, a semi-structured interview format was used. Participants discussed topics such as sources of mental distress, impacts on daily life and learning, coping strategies, and suggestions for additional support (Appendix 4). Sensitive topics like stressors, prior trauma, conflicts, and experiences in the language class were also addressed. Individual interviews were conducted to minimize group dynamics and facilitate exhaustive exploration. Interview data were transcribed, coded, and analyzed using SPSS Text Analytics by two independent coders, with differences resolved through consensus. Themes were identified, indexed, and categorized manually to highlight factors related to depression, anxiety, and stress among participants.

2.3 Statistical Analyses

Descriptive statistics, intercorrelations, and logistic regression were performed using SPSS 28 to investigate depression, anxiety, and stress among queer and immigrant students. One-way analysis of variance (ANOVA) compared mean differences in these variables. Mediation analysis, including Chi-square and Sobel's first-order tests, helped identify the most suitable model. Non-parametric bootstrapping, a data-driven simulation technique, was used for estimating standard errors and confidence intervals in a larger population (N=5000) (Bishara & Hittner, 2015; Carpenter and Bithell, 2000).

3. Results

Participant Demographics

Out of the initial 10 approached participants, 4 (40%) completed the survey and consented to interviews. Two participants engaged in the survey but declined interviews, leading to their exclusion. All participants (100%) chose to complete the survey and participate in online interviews. The participants' mean age was 29 years (± 4.7 years).

Participant Characteristics

Participants comprised various genders, with 25% male, 25% female, and 50% identifying as queer. In terms of age distribution, 50% were between 20-30 years old, and the remaining 50% were between 30-40 years old. All participants were immigrants, with 75% having attained tertiary education or above, and 25% holding an advanced diploma. Regarding language proficiency, 25% were beginners, 50% were at an intermediate level, and 25% were advanced. Exposure to stressors or traumatic events was evident, with 25% seeking counseling and 50% being prescribed medication (Table 2).

Prevalence of Mental Distress

Participants' self-reported stress, anxiety, and depression symptoms in the language classroom are presented in Figure 3 and Table 3. Applying established severity thresholds, results indicated that 75% of participants experienced mental distress. One case (25%) each of moderate, severe, and extremely severe stress was reported. For anxiety, one case (25%) indicated severe levels, while three cases (75%) reported extremely severe anxiety. In terms of depression, one case (25%) demonstrated mild symptoms, while three cases (75%) exhibited extremely severe depression.

Challenges in Current Language Classes

Participants identified challenges related to language tasks and the transition to blended or online learning during the pandemic. Listening and speaking tasks were particularly difficult due to unfamiliar phonetic elements and the pace of speech. Pronunciation struggles were highlighted, especially with challenging Icelandic letters. Participants mentioned demotivation and difficulties adapting to online classes, which led some to drop out. Off-task behavior was more common online. Additionally, a lack of connection with the teacher and challenges with class materials were noted.

Source of Mental Distress Among Vulnerable Groups

Queer students exhibited higher mental distress scores than immigrant students. Queer participants reported severe stress, extremely severe anxiety, and extremely severe depression. Immigrant participants had severe stress, anxiety, and depression. However, overall distress severity ratings indicated that both groups faced considerable mental distress.

Language Proficiency and Mental Distress

Language proficiency appeared to influence mental distress. Beginner-level participants preferred interactive, game-based lessons, while intermediate and advanced learners sought

independent exploration of materials. Participants noted teachers' lack of awareness and adaptedness to students' needs. Confidence issues also emerged as a significant challenge.

Association Between External Stressors and Mental Distress

A clear association was found between external stressors or traumas and mental distress, particularly depression, followed by anxiety and stress. Participants expressed the mutual influence of living stressors and classroom mental distress.

Path Model Analyses

Two mediation analyses were conducted to test models involving external stressors, language acquisition, and mental distress. Model B demonstrated a well-fitting pattern, suggesting external stressors mediated the relationship between language acquisition and mental distress. This connection between external stressors and mental distress was highlighted in the interviews, with participants attributing stressors both to their mental distress in the classroom and their learning progress.

In summary, the study revealed that vulnerable students, including queer and immigrant participants, experienced substantial mental distress in the language classroom. Challenges were identified in various areas, including language tasks, online learning, and teacher awareness. External stressors were found to mediate the relationship between language acquisition and mental distress.

4. Discussion

The results of the pilot study revealed a substantial prevalence of stress, anxiety, and depression among vulnerable student groups, with rates exceeding 75%. This prevalence of mental distress was consistent with previous research on queer students and students of immigrant backgrounds, irrespective of their language proficiency (Caravita et al., 2020; Campos, 2017; United Nations, 2016; Nguyen & Yang, 2015). The data indicated that students encountered mental distress both within and outside the classroom due to external stressors linked to their identities and the language learning process. Furthermore, learning Icelandic as a second or foreign language posed inherent challenges owing to its grammatical complexity (Thorardottir & Juliusdottir, 2013). For beginners, the intricacies of grammar could be daunting and adversely affect motivation, potentially leading to increased language anxiety and activation of Affective Filters (Krashen, 1982), regardless of students' background or socioeconomic status.

The integration of quantitative and qualitative data suggests that the psychometrics of DASS-21 can be effectively employed in language acquisition research to explore the mental distress experienced by queer and immigrant students. These findings contribute valuable insights to the mental health literature concerning vulnerable groups, facilitating comparisons with the broader population. The DASS-21 outcomes hint at a relationship between language acquisition and specific mental health assessment metrics, such as depression, anxiety, and stress. Moreover, these relationships were instrumental in establishing an appropriate mediation model for further analysis.

Mediation analysis brought to light the robust relationship in Model B between external stressors faced by vulnerable students and their language acquisition struggles. Learners

encountered challenges not only in mastering the language but also in acclimatizing to the classroom environment due to lack of teacher awareness, course inclusivity, and motivation-related factors. Queer or immigrant students often found themselves lagging behind or characterized as off-task, particularly when demotivated by course content or language barriers. The disconnect experienced in the language classroom with respect to cultural and gender identities hindered their investment and engagement in learning. A lack of a supportive environment, influenced by an absence of 'withitness' or training, was evident from the semi-structured interviews. While Model B holds promise for the main study, Model A, with language acquisition as a mediator, also contributes to classroom mental distress, as indicated by qualitative findings. This suggests that external stressors and language learning might act in both endogenous and exogenous ways, warranting further exploration of suitable language acquisition models for vulnerable groups.

Considering the diverse participant ages, a discussion surrounding the "critical period" (Hartshorne et al., 2018) becomes relevant. Factors like age at first exposure to a foreign language, years of experience, affinity between the target and native languages, and individual age could influence proficiency in Icelandic. Notably, proficiency among learners in this dataset was randomly distributed and did not align with the suggested critical period age of 17.4 years. This divergence could be attributed to late-emerging neural maturation, potentially affecting the critical period's duration. External influences, such as socioeconomic status, and the phenomenon of 'Language Interference' - whereby familiarity or unfamiliarity with target language structure influences acquisition pace - also played roles. Participants' careers or fields of study involving frequent reading and writing may have contributed to higher language abstraction, organization, comprehension, and expressiveness.

Fostering an inclusive classroom environment is crucial, with teachers expected to be sensitive to students' needs and aware of classroom dynamics. The development of stereotype threats, culminating in 'self-fulfilling prophecies,' can arise when students from marginalized backgrounds are stereotyped. These threats were observed in various contexts (Bedyńska et al., 2020; Spencer et al., 2016), affecting language learning as well. For instance, certain nationalities in an Icelandic class might be unfairly labeled as unable to meet assignment deadlines or correctly articulate specific letters. Similarly, pressure on queer students to read aloud can lead to stress and hinder progress. Stereotype threat, highlighted in this pilot study's interviews, establishes a mediating path linking identity, belonging, feelings, and well-being with lowered language achievement.

To ensure inclusivity, teachers must be attentive not only to language choice but also to the materials employed. The pilot study revealed instances where students felt excluded due to pronoun usage or a lack of diverse examples in the course. Recognizing the discourse of linguistic diversity and dialectical sensitivity is crucial for inclusion. Training language teachers to address linguistic biases promotes a positive atmosphere and aids in language skill acquisition (Pérez-Leroux & Glass, 2000). While curricula and blueprints emphasize diversity, challenges in implementation hinder their effective use. Failure to accommodate diverse identities can impede second or foreign language acquisition by fostering cultural conflicts during the establishment of Learner's Identity (Moore, 2016; Snider, 2004), ultimately erecting barriers to the learning process.

The transition to online and blended learning has amplified the likelihood of language learners dropping out, necessitating revisions to teaching approaches and materials. Interactive Groups (IGs) offer a potential solution by promoting inclusivity in diverse

language classrooms (Zubiri-Esnaola et al., 2020). By fostering a conducive atmosphere for dialogic interactions, IGs enhance learning expectations and facilitate teacher-student rapport, encouraging discourse and understanding.

Enhanced understanding of students facilitates the integration of contemporary and relevant themes and materials into curricula and classroom practices. However, the age, religious beliefs, resource awareness, and implementation comfort levels of teachers pose challenges to this integration (Page, 2014), highlighting the need for further research and professional development. As educators, it is imperative to challenge our values, beliefs, and assumptions, contributing to a comprehensive perspective of reality and assisting students in navigating their world (Checkland, 2005). Language teachers should be prepared to confront the complexities of the language classroom, interrogating their position within the societal context for a holistic perspective.

Despite its valuable insights, the current pilot study has limitations. The quantitative phase could benefit from replacing the Sobel test with PROCESS for improved statistical power and relevance. Additionally, the small dataset resulted in low power and accuracy of bootstrap statistics. As a non-follow-up study, the pilot only presents mental distress among participants during a specific period. Qualitative data solely reflect participants' perspectives, omitting teacher opinions. Furthermore, the study was conducted in a single language school, potentially limiting its applicability to other educational contexts. Further research is essential to address these limitations comprehensively.

5. Conclusion

As we look towards future research endeavors aimed at enhancing, contextualizing, or refining existing scales for use among vulnerable student groups, the significance of the DASS-21 cannot be underestimated. The scale's simplicity and user-friendliness, coupled with its capacity to delve into intricate phenomena among vulnerable student populations through qualitative analysis, make it a valuable tool. The recorded high prevalence of stress, anxiety, and depression among these language students serves as a compelling testament to the efficacy, reliability, and precision of the DASS-21, aligning with established research standards and advancing the field.

While acknowledging the limitation of a relatively small quantitative dataset, which naturally translates to diminished statistical power and accuracy, it nonetheless lays a foundational groundwork for subsequent main studies or more comprehensive investigations in the future. The integration of qualitative insights into the survey outcomes has undoubtedly enriched the quantitative findings. This integration has unveiled that mental distress transcends the boundaries of language lessons, emanating from participants' identities and backgrounds. Establishing rapport and connection with participants has uniquely positioned me to identify the divide between language instruction and the lived realities of these participants—a gap that educators must conscientiously bridge.

In conclusion, as we peer into the horizon of ongoing exploration and progress in this domain, the insights gleaned from this pilot study underscore the enduring relevance of the DASS-21 and highlight the critical need for holistic approaches that recognize and address the multifaceted factors contributing to mental distress among vulnerable student groups. This study serves as a steppingstone, urging the educational community to advocate for

inclusivity, promote understanding, and foster environments conducive to the holistic well-being and academic success of all students, regardless of their backgrounds and identities.

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Concreteness and Imageability Differentially Predict Judgments of Manual and Visual Similarity

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

How we understand language is fundamentally shaped by our interactions with the world around us, according to modern theories of cognitive embodiment and predictive inference in perception. Sensorimotor experiences associated with specific words are reflected in those words' levels of concreteness and imageability, psycholinguistic constructs that are meant to capture the sensorimotor tangibility of word referents. Here, we investigate the relationship between word concreteness, imageability, and judgments of manual and visual similarity. Rather than examining features of individual words, we examined responses to word pairs consisting of German object nouns. Participants rated both the manual and visual similarity of each object word pair's referents. The ratings were correlated with intra-pair concreteness and imageability distances, based on norms previously acquired using a supervised learning algorithm (Köper & Schulte im Walde, 2016). Smaller concreteness distances between words in each pair correlated exclusively with higher manual similarity ratings, and smaller imageability distances correlated only with higher visual similarity ratings. This dissociation provides new evidence that concreteness and imageability can be thought of as distinct – albeit somewhat related – features associated with different modalities. Whereas concreteness distance was more closely linked with manual object interactions, imageability distance was found to be more strongly associated with visual similarity. These findings may be of use to researchers designing stimulus sets for studies involving word pairs, such as linguistic priming or translation studies.

Keywords: Sensorimotor Semantics, Language Comprehension, Concreteness, Imageability

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Introduction

Language provides a bridge between abstract thought and tangible reality. Hearing the word *apple*, for instance, may evoke its sweet taste, the crunchiness felt when biting into it, or even cultural contexts such as giving an apple to a schoolteacher. Such diverse associations highlight the complex interplay between language and our sensory experiences (Glenberg & Kaschak, 2002). Words are not merely symbolic placeholders; they carry a wealth of meaning derived from our interactions with the world (Clark, 1973; Lakoff & Johnson, 1980). The dynamic relationship between language and experience forms the core of what is often referred to as embodied cognition, which proposes that cognitive processes are fundamentally grounded in tangible experiences (Barsalou, 2020). This relationship is also fundamental to current theories of brain function such as the Bayesian brain hypothesis, which emphasizes the role of prior experience in generating predictions about incoming sensory information (Friston, 2012; Hipólito & Kirchhoff, 2023). A quintessential challenge for language learners, both native and non-native, is grasping the nuanced layers of meaning and associations that words carry, particularly concerning their concreteness and imageability (Baddeley et al., 1988; Paivio, 1971).

The concepts of concreteness and imageability have long held prominence in psycholinguistic research, given their implications for word recognition, memory, and language acquisition (Altarriba et al., 1999; Kroll & Merves, 1986). Concreteness in language refers to the extent to which words evoke tangible sensory and motor experiences (Barsalou, 1999; Glenberg & Kaschak, 2002). Words with high concreteness, such as *bottle*, evoke distinct sensorimotor experiences. Imageability, on the other hand, refers to the ease with which a word can evoke a clear mental image (Paivio, 1986; Schwanenflugel et al., 1988). Words with high imageability, such as *sunset*, typically elicit vivid visual imagery. When language learners encounter new words, their ability to understand and retain them is influenced by concreteness and imageability (Ellis & Beaton, 1993; Sadoski & Paivio, 2001). Highly concrete words, which are easily related to sensory experiences, are typically easier to remember and understand (de Groot & Keijzer, 2000). Similarly, words that evoke clear mental images can be more memorable because of the vividness of the imagery they invoke (Hayakawa et al., 2019). These findings parallel studies on language learning showing that multimodal forms of learning, including the viewing of relevant pictures and self-enactment of gestures, can benefit the retention of novel vocabulary (Mathias & von Kriegstein, 2023).

Although the concepts of concreteness and imageability are closely related, they differ in terms of their association with actions and the motor system. Concreteness often involves a direct or implicit link to actions, particularly in the context of object words. For example, the word *hammer* is concrete and can bring to mind not only the image of the tool but also the associated action of hammering. Manual interactions with objects can strongly influence their perceived concreteness (Engelen et al., 2011; Tillotson et al., 2008). In addition, the perception of action-related words can activate motor regions of the brain, evidencing the intertwining of language and motor systems (Pulvermüller et al., 2005). Imageability, however, appears to be more closely tied to the visual system. Even abstract words, such as *freedom*, can be highly imageable despite lacking a clear association with specific actions. Visual attributes of objects have been linked with their imageability (Cortese & Fugett, 2004), and high imageability words can trigger heightened activity in the visual cortex (D'Argembeau & Van der Linden, 2004).

This previous research leads to a yet untested prediction: Pairs of object words that are closely related in terms of concreteness might also be judged as more similar in terms of their action associations, because the things they refer to are likely to involve similar degrees of manual interaction. Moreover, pairs of object words that are more similar in terms of imageability may be perceived as having a higher degree of visual similarity. These predictions stem from the ideas that our comprehension of words is shaped by the motor and visual experiences linked to them (Barsalou, 2008), and that both manual interactions and visual attributes may influence how we understand and categorize objects (Borghi, 2005). Our study aimed to investigate the relationship between concreteness and manual similarity, as well as imageability and visual similarity. Participants rated object word pairs in terms of both manual and visual similarity. The ratings were then associated with variations in concreteness and imageability among the object pairs. We hypothesized that smaller distances in concreteness among object pairs would yield higher manual similarity ratings. Conversely, smaller distances in imageability among object pairs were expected to yield higher visual similarity ratings. Furthermore, we expected distances in concreteness to be more strongly associated with manual than visual similarity ratings and distances in imageability to be more strongly associated with visual than manual similarity ratings.

Method

Participants & Stimuli. The study included $N = 17$ native German speakers (9 female, 8 male, M age = 26 years, $SD = 4.46$, range: 20-34 years). Participants rated 115 German object word pairs in terms of visual similarity and manual similarity. The ratings were performed as part of a norming procedure for stimuli to be used in a future priming experiment, the results of which are not described here. Norms for the features of concreteness and imageability were derived from a corpus based on a supervised learning algorithm (Köper & Schulte im Walde, 2016). For 22 of the word pairs, one or both words were not part of the corpus of norms and those word pairs were therefore excluded from all analyses. This led to a total of 93 word pairs (e.g., *Essstäbchen* (*chopsticks*) – *Bleistift* (*pencil*)) consisting of 146 unique words being included in the study (while all word pairs were unique combinations of words, some words were used in multiple word pairs). All words were German object nouns. The 186 words (including duplicates) had a mean concreteness rating of 7.05 ($SD = 0.77$) and a mean imageability rating of 6.6 ($SD = 0.8$). Both ratings are given on a scale from 0 to 10, with higher ratings indicating higher concreteness and imageability, respectively (Köper & Schulte im Walde, 2016). Distance scores for concreteness and imageability were calculated as the absolute of the difference between the first and second words of each word pair.

Design & Procedure. In a visual similarity task, participants rated the German word pairs on a scale of 1 to 10 (from “not similar at all” to “very similar”) in terms of visual similarity and, in a manual similarity task, they rated the same word pairs in terms of manual similarity. The order of the two tasks was counterbalanced across participants. The word pairs were shown in a randomized order in both tasks. The median, range, and interquartile range (IQR) of distance scores for concreteness and imageability, as well as of visual and manual similarity ratings are reported in **Table 1**. Both concreteness and imageability distance scores showed non-normal, right-skewed distributions, indicating relatively smaller distances for most word pairs. A Wilcoxon rank-sum test showed a significant difference between the mean manual ($Mdn = 5$, IQR = 6, range: 1 – 10) and visual ($Mdn = 3$, IQR = 4, range: 1 – 10) similarity ratings of word pairs ($W = 5888$, $p < .001$). This is not surprising, as the primary aim of the norming study was to find word pairs with greater manual similarity as compared to visual similarity for the future priming experiment. No significant difference was shown between

the concreteness ($Mdn = 0.79$, $IQR = 0.88$, range: $0.02 - 3.42$) and imageability ($Mdn = 0.63$, $IQR = 0.78$, range: $0 - 3.1$) distance scores ($W = 4756.5$, $p = .24$).

	<i>Manual similarity</i>	<i>Visual similarity</i>	<i>Concreteness distance</i>	<i>Imageability distance</i>
Median	5	3	0.79	0.63
Interquartile Range (IQR)	6	4	0.88	0.78
Range	1 – 10	1 – 10	0.02 – 3.42	0 – 3.1

Table 1. Median, interquartile range, and range for manual and visual similarity ratings, as well as concreteness and imageability distances.

Data Analysis. First, to test whether manual similarity was related to distances in concreteness and whether visual similarity was related to distances in imageability, we correlated the between-subject averages of the four dependent measures (manual similarity, visual similarity, concreteness distance, and imageability distance) with one another. Kendall’s Tau-c was chosen as the correlation coefficient, as the data to be correlated differed in scale. Next, to see if these correlations differed significantly from one another, we calculated Kendall’s Tau-c correlations individually for each participant and generated a linear mixed effects model of these correlations in R version 4.2.2 (R Core Team, 2022) using the ‘lme4’ (Bates et al., 2015) package. The full model included fixed effects of feature (concreteness distance, imageability distance) and task (manual ratings, visual ratings) as well as their interaction. The model’s random effects structure was determined using backwards model selection (Barr et al., 2013), starting with a random intercept by participant and random slopes by participant for the independent factors of feature and task. We removed random effects terms one by one until the model no longer showed a singular fit. This resulted in the removal of the random slope by participant for the factor of feature. The final model therefore included a random intercept by participant and a random slope by participant for the independent factor of task. Significance testing was performed using Satterthwaite’s method implemented with an alpha level of $\alpha = .05$ (Kuznetsova et al., 2017). Post-hoc Tukey honestly significant difference (HSD) tests were used to conduct pairwise comparisons (Lenth et al., 2019).

Results

Our first hypothesis was that object word pairs that were more related in terms of concreteness would be rated as more manually similar. Confirming this hypothesis, a significant correlation between the concreteness distance and manual similarity measures was found ($\tau_c = -.19$, $p = .007$) across participants. Note that the negative character of this correlation indicates that manual similarity ratings were higher when distances in concreteness were smaller. We also predicted that object word pairs that were more related in terms of imageability would be rated as more visually similar. This prediction was also confirmed, as the imageability distance and visual similarity measures were also significantly negatively correlated ($\tau_c = -.19$, $p = .006$) across participants. Notably, no significant differences were found across participants between the manual similarity and imageability distance measures ($\tau_c = -.12$, $p = .08$), as well as between the visual similarity and concreteness distance measures ($\tau_c = -.09$, $p = .21$). These correlations are summarized in **Table 2**.

	<i>Manual similarity</i>	<i>Visual similarity</i>
Concreteness distance	-.19**	-.09
Imageability distance	-.12	-.19**

Table 2. Group-level Kendall's Tau-c correlations between manual and visual similarity ratings of object word pairs and concreteness and imageability distances for each word pair. There was a dissociation between concreteness and imageability distance in their relation to ratings of manual and visual similarity. ** $p < .01$

Our last hypothesis was that distances in concreteness would be more strongly associated with manual than with visual similarity ratings, and that distances in imageability would be more strongly associated with visual than with manual similarity ratings. To assess this dissociation quantitatively, we calculated Kendall's Tau-c for each participant. Violin- and boxplots comparing the distribution of correlations across participants are shown in **Figure 1**. We then fitted a linear mixed effects model to these correlations with fixed effects for feature, task, and their interaction term, as well as a random intercept by participant and a random slope by participant for task. Critically, the model showed a significant interaction term between feature and task ($\beta = -0.15$, $t = -7.68$, $p < .001$, 95% CI [-0.19 -0.11]). Post-hoc pairwise comparisons were conducted using Tukey's HSD test. The post-hoc comparisons revealed that concreteness distances were correlated significantly more strongly with manual similarity ($M = -0.15$, 95% CI [-0.18 -0.13]) than with visual similarity ($M = -0.07$, 95% CI [-0.10 -0.05], $p < .001$). Conversely, imageability distances were correlated significantly more strongly with visual similarity ($M = -0.17$, 95% CI [-0.20 -0.15]) than with manual similarity ($M = -0.11$, 95% CI [-0.13 -0.08], $p < .001$). The mixed model also showed significant main effects of feature ($\beta = 0.05$, $t = 3.58$, $p = .001$, 95% CI [0.02 0.08]) and task ($\beta = 0.08$, $t = 5.49$, $p < .001$, 95% CI [0.05 0.11]). These main effects indicate that, overall, correlations were more negative for concreteness distance scores than for imageability distance scores, and that correlations were more negative for manual than for visual similarity ratings. The full model results and pairwise comparison results are summarized in **Table 3** and **Table 4**, respectively.

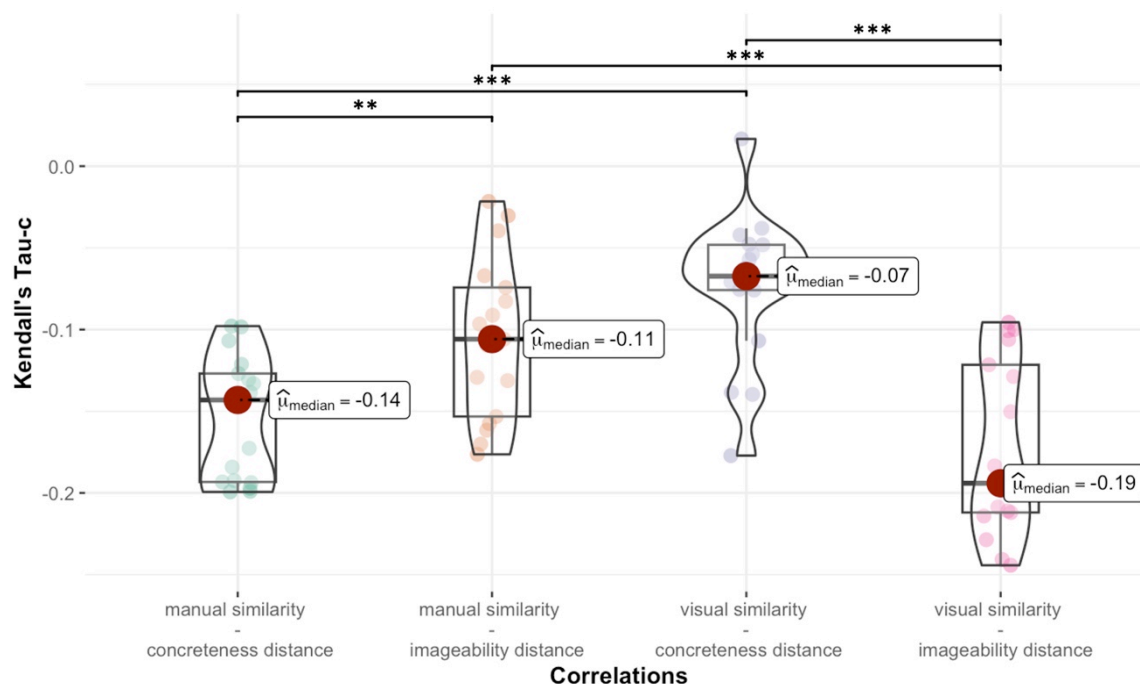


Figure 1. Combined violin- and boxplots of participant-level Kendall’s Tau-c correlations between similarity ratings (manual, visual) and feature distances (concreteness, imageability). Concreteness distance correlated significantly more strongly with manual than visual similarity, and imageability distance was correlated significantly more strongly with visual than manual similarity. Note that a more negative Tau-c value indicates a stronger correlation between measures. $**p < .01$, $***p < .001$

<i>Fixed effects</i>						<i>Random effects</i>			
	Estimate	SE	t	p	95% CI			Variance	SD
Intercept	-.15	.01	-15.10	<.001	-.18, -.13	Participant	Intercept	.000	.02
Feature	.05	.01	3.58	.001**	.02, .08		Task	.001	.02
Task	.08	.01	5.49	<.001***	.05, .11				
Feature × Task	-.15	.02	-7.68	<.001***	-.19, -.11				

Table 3. Linear mixed effects model testing the effects of word pair feature (concreteness distance vs. imageability distance) and task (manual similarity vs. visual similarity) on the correlations between each of the four measures. $**p < .01$, $***p < .001$.

<i>Contrast</i>	Estimate	<i>SE</i>	<i>t ratio</i>	<i>p</i>	95% CI	
concreteness–manual - imageability–manual	-.05	.01	-3.48	.007**	-.09	-.01
concreteness–manual - concreteness–visual	-.08	.02	-5.32	<.001***	-.12	-.04
concreteness–manual - imageability–visual	.02	.02	1.20	.63	-.02	.06
imageability–manual - concreteness–visual	-.03	.02	-2.11	.17	-.07	.01
imageability–manual - imageability–visual	.07	.02	4.42	<.001***	.03	.11
concreteness–visual - imageability–visual	.10	.01	7.06	<.001***	.06	.14

Table 4. Post-hoc Tukey’s honestly significant difference (HSD) pairwise comparisons detailing the significant interaction between word features (concreteness, imageability) and task (manual, visual). ** $p < .01$, *** $p < .001$

Discussion

This study aimed to characterize the relationship between sensorimotor aspects of word meanings and judgments of sensorimotor similarity. Specifically, we tested whether distances in concreteness and imageability features of object word pairs – rather than the features themselves – would be associated with ratings of manual and visual similarity. Indeed, concreteness distance of word pairs was found to be associated with manual similarity ratings, and imageability distance was associated with visual similarity ratings. Further, we observed a dissociation in the relationship between concreteness and imageability features and visual and motor modalities: Concreteness distance was found to be more associated with manual than visual similarity ratings and, conversely, imageability distance correlated more with visual than manual similarity ratings. These findings suggest that concreteness and imageability features can predict the perception of similarity between word referents. They also provide new evidence that concreteness and imageability reflect two differing psycholinguistic constructs, each related primarily to a different sensorimotor modality.

Concreteness and imageability have been found to predict the recognition and memorability of individual words (Ellis & Beaton, 1993; Li et al., 2020; Sadoski & Paivio, 2001; Soares et al., 2017). Our results extend these findings by demonstrating that concreteness and imageability also predict the extent to which two words are judged as similar or different with respect to their manual and visual associations. The dissociation between concreteness and imageability observed here is consistent with prior research showing that concreteness and imageability features engage distinct processing pathways. Whereas highly concrete words tend to elicit the simulation of sensory and motor experiences (Barsalou, 1999; Glenberg & Kaschak, 2002), words with high imageability evoke vivid visual imagery (Paivio, 1986; Schwanenflugel et al., 1988). This is in line with functional magnetic resonance imaging (fMRI) findings demonstrating that while both abstract and concrete nouns activate fronto-parietal areas of the brain involved in action processes, concrete words do so more than abstract words (Del Maschio et al., 2022). Similarly, high imageability words can trigger heightened activity in the visual cortex (D’Argembeau & Van der Linden, 2004; Garbarini et al., 2020). These and the current findings are also consistent with theories emphasizing a key role of internal generative models in perception such as the multisensory predictive coding framework (MPCF; Mathias & von Kriegstein, 2023; Mayer et al., 2015) and the Bayesian brain hypothesis (Aitchison & Lengyel, 2017).

Another novel aspect of the current results is that the mere distance in concreteness and imageability between words (rather than the actual manual and visual properties of the words' referents, i.e., what actions each object affords and what each object looks like) predict ratings of manual and visual similarity, respectively. We speculate that, when both words of a word pair are of similar concreteness, they may activate the motor cortex to a similar degree. Analogously, two words of similar imageability may activate the visual cortex to similar degrees. It remains unknown however, how these similar levels of activation could translate into higher ratings of manual and visual similarity, given that one would expect the underlying patterns of activation to differ considerably between words referring to vastly different objects, even if those are similarly concrete and/or imageable. Future studies may shine a light on this question by employing multivariate analyses of the pattern of similarities between multiple word pairs and by looking at brain responses directly via neuroimaging methods.

This study had the primary aim of finding word pairs with greater manual than visual similarity to be used as stimuli in a subsequent priming experiment. For that reason, only object nouns were used as stimuli in the rating tasks, meaning that low concrete and imageable words were underrepresented in the current stimulus set. Future studies could improve on the stimulus selection by selecting word pairs more systematically to reflect broader spectra of concreteness and imageability, as well as manual and visual similarity. Likewise, they could arrange word pairs so that feature distances are distributed even more equally across high and low distance scores.

Conclusion

Using distance scores derived from automatically generated norms for features of concreteness and imageability (Köper & Schulte im Walde, 2016) and ratings for manual and visual similarity, the current study showed that word pair concreteness distance is associated with manual similarity ratings, and imageability distance is associated with visual similarity ratings. This finding is relevant to our understanding of the concepts of concreteness and imageability themselves. It may also be useful for researchers designing stimulus sets for studies involving word pairs, such as linguistic priming or translation studies.

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Exploring the Integration of Sociocultural Theory and Self-Determination Theory in Blended Learning: Implications for Language Education

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

Blended learning, which combines traditional classroom teaching with online learning, is a popular educational trend. This study explores the integration of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) in blended learning environments to enhance language learners' motivation, autonomy, and learning outcomes. This article provides an overview of blended learning in second/foreign language contexts, followed by a discussion of the key concepts and principles of SCT and SDT. The challenges and opportunities of integrating these theories in blended learning environments are examined, and potential research directions are suggested. The study concludes that integrating SCT and SDT in blended learning environments can significantly enhance language learners' motivation, autonomy, and learning outcomes. This study provides a theoretical framework for educators to design and implement effective blended learning environments for language education. The findings of this study inform policy makers and educational leaders of the potential benefits of integrating SCT and SDT in blended learning environments for language education. Teachers and educational psychologists can use the recommendations of this study to design effective blended learning environments that promote learner motivation, autonomy and learning outcomes in language education.

Keywords: Blended Learning, Sociocultural Theory, Self-Determination Theory, Language Education, Learning Outcomes

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Introduction

Blended learning, which combines traditional classroom instruction and online learning, has become a well-liked educational trend in recent years (Edward et al., 2018; Ma & Lee, 2021; Imran et al., 2023). Its adaptability and flexibility have been widely recognized and adopted in a variety of educational contexts (Medina, 2018; Castro, 2019; Peimani & Kamalipour, 2022). This study aims to investigate how Sociocultural Theory (SCT) and Self-Determination Theory (SDT), can be integrated in blended learning environments. The study specifically focuses on investigating how this integration can improve language learners' motivation, autonomy, and learning outcomes.

In the field of language education, motivation, autonomy, and learning outcomes are crucial (Dörnyei & Muir, 2019; Mehdiyev, 2020; Yu et al., 2021). The success of language learning is increased when students are motivated and self-sufficient (Cirocki, 2019; Phuong & Vo, 2019; Marantika, 2021). In order to explore the integration of SCT and SDT, blended learning offers opportunities for learners to exercise autonomy, self-regulation, and independent learning (Sabah, 2020; Teng & Zeng, 2022; Cheng et al., 2023).

It is crucial to give a general overview of blended learning in second/foreign language contexts to set the scene and lay the groundwork for this study. The application, advantages, and potential difficulties will all be covered in this overview. Additionally, pertinent literature will be cited to support the need for further investigation of the integration of SCT and SDT in blended learning environments.

Self-Determination Theory (SDT) and Sociocultural Theory (SCT) are two significant theoretical frameworks that provide important insights into instructional strategies in language education. SDT focuses on people's intrinsic motivation and psychological needs, whereas SCT emphasizes the importance of social and cultural interactions in learning (Vygotsky, 1978). The concepts of SCT and SDT have enormous potential for guiding and enhancing instructional strategies in blended learning environments (Alamri et al., 2020; Alenezi, 2023; Bizami et al., 2023).

To take advantage of the synergistic advantages of these two theories, it is rational to investigate the integration of SCT and SDT in the context of blended learning. Language educators can create a rich and supportive learning environment that improves learners' motivation, autonomy, and learning outcomes by integrating the social and cultural aspects of learning with the promotion of intrinsic motivation and self-direction (Reeve et al., 2018; Ryan & Deci, 2020; Reeve & Cheon, 2021).

The purpose of this study is to review the opportunities and problems related to integrating SCT and SDT in blended learning environments. To effectively implement and make use of these theories to support language learners' development, educators need to be able to recognize these opportunities and challenges. The study also aims to suggest potential research avenues to further our comprehension of this integrated approach to language education.

The importance of this study lies in its potential to offer educators a theoretical framework for creating and implementing successful blended learning environments for language education. A holistic approach that considers both the sociocultural components of learning and the psychological needs of learners may be provided by the integration of SCT and SDT.

The results of this study will also inform policymakers and educational leaders about the potential advantages of incorporating SCT and SDT in blended learning environments for language education.

The researcher will delve more deeply into the opportunities and challenges related to integrating SCT and SDT in blended learning environments in the ensuing sections of this scoping study. The topic will also be thoroughly understood through the exploration of additional potential research avenues. The study will conclude with a summary of the major findings and a discussion of the implications for educators, decision-makers, and educational psychologists who want to create effective blended learning environments that support learner motivation, autonomy, and learning outcomes in language education.

Methods

Using a protocol developed by Arksey and O'Malley (2005), this scoping review was carried out. The protocol comprises five phases: (i) identification of research questions, (ii) identification of relevant articles, (iii) selection of relevant studies, (iv) data collection and charting, and (v) collating, summarizing, and reporting the results.

(i) Identification of research questions

The researcher created specific research questions to address the scoping review's goals after reading through the abstracts and pulling out pertinent themes and concepts.

RQ1: What is the current state of research on blended learning in second/foreign language contexts?

RQ2: How is Sociocultural Theory (SCT) integrated into blended learning environments for language education?

RQ3: How is Self-Determination Theory (SDT) integrated into blended learning environments for language education?

RQ4: What are the challenges and opportunities associated with integrating SCT and SDT in blended learning environments?

RQ5: What are the potential effects of integrating SCT and SDT on language learners' motivation, autonomy, and learning outcomes in blended learning environments?

(ii) Identification of relevant articles

Using relevant databases and sources, the researcher conducted a thorough search. The development of search strategies included the inclusion of pertinent keywords and phrases like "blended learning," "Sociocultural Theory," "Self-Determination Theory," "language education," "motivation," "autonomy," and "learning outcomes." Search techniques were used to find pertinent articles in academic databases, journals of higher learning, and conference proceedings.

(iii) Selection of relevant studies

The researcher performed two levels of screening: title and abstract screening, followed by full-text screening. Each article's title and abstract were evaluated for relevance to the research question during the title and abstract screening. Articles that were obviously irrelevant were eliminated. The remaining articles were then examined in their entirety to determine whether or not they met the inclusion criteria. Applying predetermined inclusion criteria, such as focusing on blended learning in language education, discussing the incorporation of SCT and/or SDT, and analyzing the impact on motivation, autonomy, and

learning outcomes. The articles were manually transferred to Excel from the three databases. After weeding out duplicates, the researcher carefully evaluated the remaining articles using inclusion and exclusion criteria. Titles and abstracts were used to evaluate the criteria's robustness in identifying articles pertinent to blended learning.

Criteria	Inclusion Criteria	Exclusion Criteria
Criteria for title and abstract selection	1: Application of blended learning in language education. 2: Sociocultural Theory (SCT) with blended learning in language education. 3: Self-Determination Theory (SDT) with blended learning in language education.	1. Primary and secondary students' populations 2. Primary and secondary education context
Criteria for full article selection	1: Discuss the current state of research on blended learning in the second/foreign language context. 2: Discuss how Sociocultural Theory (SCT) can be integrated into blended learning environments in language education. 3: Discuss how Self-Determination Theory (SDT) can be integrated into the blended learning environments in language education. 4: Discuss the challenges and opportunities of integrating SCT and SDT in blended learning environments. 5: Discuss the potential impact of integrating SCT and SDT on language learners' motivation, autonomy and learning outcomes in blended learning environments.	1. Review articles, published theses, books, research report, editorial and letters will be excluded from the searching process.

Figure 1: Selection Criteria

(iv) Data collection and charting:

Data extraction forms or charts were used to collect the necessary information from the included studies. Study characteristics (e.g., study design, sample size), key concepts and principles of SCT and SDT, challenges and opportunities identified, and reported impact on motivation, autonomy, and learning outcomes were all collected by the researcher. The extracted data were systematically organized for further examination and synthesis.

(v) Collating, summarizing, and reporting the results:

To present an overview of the results, the researcher compiled and summarized the extracted data. To find common themes, patterns, and trends among the included studies, thematic analyses were used. The researcher summarizes the findings in light of the established research themes and questions. The researcher presented a statement in the scoping review report that contains an introduction (background and objectives), methodology (search strategy and selection criteria), results (summary of findings), discussion (interpretation of results, limitations, and implications), and conclusions (key findings and directions for future research).

Author (year)	Location	Study design/method	Subjects	Intervention	Outcome
Han, Y., Luan, N. L., & Zhao, S. (2022)	China	a mixed-method approach with a quantitative questionnaire complemented by semi-structured interviews	282 Chinese undergraduate students	BL and FL groups Face to face groups	1. The technology-mediated learning environment facilitates students' needs for SDT. 2. FL learning did not significantly increase student satisfaction with BL learning. 3. Besides SDT factors, students also had psychological needs to ease tension.
...

Figure 2: Literature Summary Sample

Results and Discussion

Literature Search and Screening Process

Academic journals, databases, and conference proceedings were searched for SCT and SDT integration in blended learning for second/foreign language learners. The keywords were "blended learning," "Sociocultural Theory," "Self-Determination Theory," "language education," and "learning outcomes." A thorough search yielded 1983 articles. Multiple databases and resources removed unoriginal articles. This scoping study used two-stage screening to select relevant articles after a thorough literature review. A thorough title review eliminated non-research articles. 314 articles advanced after 1326 were eliminated. Second-phase abstract and full-text screening determined article inclusion. The articles discussed foreign language blended learning. These articles also examined SCT and SDT in blended language education. Read about how these methods affect motivation, autonomy, and academic performance. The scoping study included 26 articles after careful screening.

Research Characteristics

These articles include empirical, literature, theoretical, and case studies. This study uses 2018–present articles to suggest current literature. Thus, publishing articles in reputable academic journals and conference proceedings provided diverse perspectives. The articles covered blended learning in second/foreign language education across languages, educational levels, and locations.

Results of Thematic Analysis

Several research-relevant themes and sub-themes emerged from the selected articles. The above findings help us understand blended learning, SCT, SDT, and language education. An overview of the main and sub-themes follows.

Current State of Research on Blended Learning in Second/Foreign Language Contexts

The literature explored the effectiveness of various blended learning approaches in language education. Studies investigated the impact of blended learning on language learning outcomes, student engagement, and learner satisfaction (Ismail, 2018; Rajabalee & Santally, 2021; Ustun et al., 2021; Prifti, 2022). Sub-themes within this category may include measures of effectiveness (language proficiency assessments, learner feedback) and comparative analyses of blended learning with other instructional models (Dziuban et al., 2018; Yu & Du, 2019; Moradimokhles & Hwang; 2022). The literature review revealed a considerable body of research focusing on the effectiveness of blended learning in language education. The findings suggest that blended learning can positively impact language learning outcomes, student engagement, and learner satisfaction. For future research, it is important to explore the specific measures of effectiveness employed in different studies and conduct comparative analyses to gain a deeper understanding of the outcomes associated with blended learning.

The reviewed articles discussed different models and instructional strategies employed in blended learning contexts. Examples of sub-themes within this category may include the flipped classroom model, hybrid learning models, and specific instructional strategies (project-based learning, peer collaboration) (Tong & Wei, 2020; Chua & Islam, 2021; Alamri et al., 2021; Dai et al., 2021). The reviewed articles discussed various models and

instructional strategies utilized in blended learning environments. The findings indicate the prevalence of approaches such as the flipped classroom model, hybrid learning models, and specific instructional strategies like project-based learning and peer collaboration. Further investigation is needed to explore the effectiveness of these models and strategies in different language-learning contexts.

The role of technology in blended learning was a prominent focus in the literature. Articles explored the use of digital tools, online platforms, and learning management systems to support blended learning experiences (Holmes & Prieto-Rodriguez, 2018; Taufiqurrochman et al., 2020; Bradley, 2021; Castro, 2019). Sub-themes may include discussions on the integration of specific technologies (video conferencing, virtual learning environments) and their impact on language learning outcomes (Almusharraf & Khahro, 2020; Al-Samarraie, 2019; Correia et al., 2020; Baber, 2020). The role of technology in blended learning emerged as a prominent focus in the literature. The findings emphasize the use of digital tools, online platforms, and learning management systems to support blended learning experiences. It is essential for future research to examine the integration of specific technologies and their impact on language learning outcomes. Additionally, investigating issues related to technology accessibility and digital literacy among learners and educators will be crucial.

Integration of Sociocultural Theory (Sct) Into Blended Learning Environments

The literature discussed how blended learning environments can facilitate sociocultural interaction among language learners. This sub-theme explored the importance of collaboration, peer interaction, and authentic language use in promoting language learners' motivation, autonomy, and learning outcomes (Kukulska-Hulme & Viberg, 2018; Zhou & Wei, 2018; Al Fadda, 2019; Su & Zou, 2022; Hung & Nguyen, 2022). The literature highlighted the importance of sociocultural interaction within blended learning environments. The findings indicate that blended learning can facilitate collaboration, peer interaction, and authentic language use, which are essential for promoting language learners' motivation, autonomy, and learning outcomes. Future research should further explore instructional approaches that maximize sociocultural interaction and examine their impact on language learning processes and outcomes.

Articles highlighted the role of collaboration in blended learning, emphasizing the benefits of social interaction and collaborative learning tasks. Sub-themes within this category may include discussions on the implementation of group projects, online discussions, and cooperative learning strategies (Wieser & Seeler, 2018; Kimmelman & Lang, 2019; Albiladi & Alshareef, 2019; Erbil, 2020; Cheng, 2020). The integration of collaborative learning in blended environments emerged as a sub-theme of particular significance. The findings suggest that collaborative learning tasks, such as group projects and online discussions, can foster social interaction and enhance language learning experiences. Further investigation is needed to explore the most effective ways to implement and facilitate collaborative learning in blended environments to optimize language learners' motivation, autonomy, and learning outcomes.

Integration of Self-Determination Theory (SDT) Into Blended Learning Environments

The literature explored how blended learning environments can support learners' autonomy and foster self-regulated learning. This sub-theme examined instructional strategies that promote learner choice, learner agency, and self-paced learning (Halverson & Graham, 2019;

Alonso-Mencía et al., 2020; Karakaya & Bozkurt, 2022). The literature underscored the importance of autonomy support within blended learning environments. The findings indicate that blended learning can provide opportunities for learners to exercise autonomy, make choices, and engage in self-regulated learning. Future research should investigate instructional strategies that effectively promote learner autonomy, learner agency, and self-paced learning within blended learning contexts.

The reviewed articles discussed the role of intrinsic motivation and learner engagement within blended learning contexts. Sub-themes may include discussions on promoting learners' sense of competence, relatedness, and autonomy, and how these factors influence motivation and engagement in language learning (Halverson & Graham, 2019; Zainuddin et al., 2020; Castro-Rodríguez et al., 2021; Wei, 2022). The findings suggest that fostering intrinsic motivation and learner engagement is crucial within blended learning environments. The reviewed articles highlight the significance of supporting learners' sense of competence, relatedness, and autonomy, as these factors influence motivation and engagement in language learning. Further research should explore effective approaches to enhance intrinsic motivation and learner engagement within blended learning contexts.

Challenges and Opportunities of Integrating SCT and SDT in Blended Learning Environments

Integrating SCT and SDT in blended learning environments presents instructional design challenges, according to the literature. Themes in this category may include balancing online and face-to-face components, designing effective learning activities, and ensuring sociocultural interaction (Sahri & Helmi, 2019; Wang et al., 2022; Douglas et al., 2018). These include balancing online and face-to-face components, designing effective learning activities, and ensuring sociocultural interaction. These challenges require innovative instructional design models that integrate SCT and SDT principles. Future research should address these issues.

Articles discussed the challenges associated with integrating technology within blended learning environments. Sub-themes within this category may include technical barriers, access to technology, and the need for digital literacy among learners and educators (Castro, 2019; Turnbull et al., 2021; Shohel et al., 2022; Mhlanga, 2021). The findings highlight the challenges associated with integrating technology within blended learning environments. Technical barriers, access to technology, and the need for digital literacy among learners and educators were identified as significant challenges. Future research should explore strategies to overcome these challenges and maximize the potential of technology integration in blended learning contexts.

The literature highlighted the opportunities provided by integrating SCT and SDT in blended learning environments. Sub-themes within this category may include creating learner-centred environments, facilitating personalization of learning, and leveraging digital tools to enhance language learning experiences (Bradley, 2021; Chan Paul Leong, 2022; Marwaha et al., 2019). The literature identified several opportunities provided by integrating SCT and SDT in blended learning environments. These opportunities include creating learner-centred environments, facilitating personalization of learning, and leveraging digital tools to enhance language learning experiences. Future research should investigate how these opportunities can be effectively harnessed to optimize language learners' motivation, autonomy, and learning outcomes.

Potential Effects of Integrating SCT and SDT on Language Learners' Motivation, Autonomy, and Learning Outcomes

According to the articles under review, the integration of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within blended learning environments has the potential to yield favourable outcomes in terms of language learners' motivation and engagement. The sub-themes encompassed by this category may consist of heightened intrinsic motivation, elevated self-efficacy, and a perception of possessing control over the learning process (Fong, 2022; Kanellopoulou & Giannakoulou, 2020; Zheng, 2021; Al-Hoorie et al., 2022). The results indicate that the incorporation of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within blended learning settings has the potential to enhance the motivation and engagement levels of individuals learning a language. The results are linked to heightened internal motivation, elevated belief in one's abilities, and a feeling of possessing control over the educational journey. Further investigation is warranted to examine the precise mechanisms by which the integration of self-control theory (SCT) and Self-Determination Theory (SDT) impacts motivation and engagement.

The existing body of literature suggests that the integration of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within the context of blended learning has the potential to facilitate the cultivation of learner autonomy and self-regulation. The sub-themes encompassed in this study consist of the promotion of learners' self-directed learning, the cultivation of self-reflection and goal setting, and the provision of choices in learning activities (Yang et al., 2018; Christ et al., 2022). The literature reviews suggest that the incorporation of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within blended learning settings has the potential to facilitate the cultivation of learner autonomy and self-regulation. This discovery is consistent with the focus on providing autonomy support and promoting learner agency in the context of blended learning. Further investigation is warranted to explore the mechanisms and pedagogical approaches that facilitate the development of autonomy and self-regulation within blended learning environments.

The results indicated that the incorporation of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within blended learning settings can result in favorable educational achievements. The sub-themes encompassed by this category may consist of enhancements in linguistic competence, heightened learner contentment, and the cultivation of skills relevant to the 21st century (Bradley, 2021; Santos et al., 2019; Al-Nuaimi & Al-Emran, 2021). The results indicate that the incorporation of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within blended learning settings can result in favorable educational achievements in the field of language education. Possible outcomes of this process could encompass enhancements in linguistic proficiency, heightened levels of learner contentment, and the cultivation of skills relevant to the demands of the 21st century. Future research should aim to conduct a more comprehensive investigation into the specific effects and long-term implications of integrating Self-Regulated Strategy Development (SRSD) and Self-Determination Theory (SDT) on language learning outcomes.

The results of this thematic analysis provide a comprehensive overview of the primary themes and sub-themes that have been derived from the chosen articles. This study focuses on the present status of research concerning blended learning in language education. Specifically, it examines the incorporation of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) within blended learning environments, and the potential

impact of these theories on motivation, autonomy, and learning outcomes. The synthesized findings make a valuable contribution to the existing theoretical framework for educators and offer valuable insights for future research and practical applications in the field of language education.

The selected articles provide a valuable analysis of the themes related to blended learning, Sociocultural Theory (SCT), Self-Determination Theory (SDT), and their integration into the field of language education. The themes and sub-themes that have been identified shed light on the present state of research, the obstacles, and possibilities, as well as the potential impacts of incorporating Sociocultural Theory (SCT) and Self-Determination Theory (SDT) into blended learning settings. The findings establish a basis for future research and present practical implications for the development of successful blended learning strategies in the field of language education.

Conclusion

In blended language education settings, Sociocultural Theory (SCT) and Self-Determination Theory (SDT) were examined in this scoping review. A thorough literature review yielded several significant findings.

There is growing evidence that blended learning improves language learning outcomes, student engagement, and learner satisfaction in second/foreign language contexts.

Integrating Sociocultural Theory (SCT) into blended learning settings can promote sociocultural interaction, collaboration, and genuine language use, which boosts language learners' motivation, autonomy, and academic performance.

Blended learning with Self-Determination Theory (SDT) improves autonomy, intrinsic motivation, and engagement. Self-support and learner-centred approaches can improve language learning outcomes.

Integrating Sociocultural Theory (SCT) and Social Development Theory (SDT) in blended learning environments is complicated by instructional design, technology integration, and educator training. This integration's potential benefits and opportunities outweigh these challenges.

Blended learning settings can boost language learners' motivation, autonomy, and learning outcomes by combining Sociocultural Theory (SCT) and Self-Determination Theory (SDT). Increased engagement, intrinsic motivation, and personal investment in learning can improve language proficiency and enable the acquisition of essential language competencies.

Limitations of the Study

This scoping review study provided valuable insights, but its limitations must be acknowledged:

The research study focused on a specific set of questions and keywords, which may have excluded relevant articles that offered additional perspectives (Okoli & Schabram, 2015).

The research's linguistic context may have predisposed it to certain publication categories. This may reduce the incorporation of a variety of viewpoints on blended learning, Sociocultural Theory (SCT), and Self-Determination Theory (SDT) in language education, limiting inclusivity.

The scoping review's conclusions are based on the articles analyzed, so they may not cover all language education contexts and populations. Language learners, educational environments, and culture affect outcomes.

The scoping review did not assess article quality or rigor. Although a wide range of studies was included, their methodological rigor and potential biases were not assessed.

Recommendations for Future Research

Based on this scoping review's findings and limitations, several research recommendations can be made.

Diverse blended learning models and strategies should be tested in different language learning environments. Comparative and longitudinal studies can help explain blended learning's long-term effects.

Further research is needed to determine how Sociocultural Theory (SCT) and Self-Determination Theory (SDT) principles work in blended learning settings. This study investigates how collaborative learning, autonomy support, and learner-centered approaches affect language learners' motivation, autonomy, and learning outcomes.

Future studies investigating the incorporation of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) in blended learning settings should consider a wide range of cultural and linguistic settings to improve applicability. This study examines how culture affects language education motivation, autonomy, and learning outcomes.

Integrating qualitative and quantitative methods can help understand the effects of Sociocultural Theory (SCT) and Self-Determination Theory (SDT) in blended learning environments. Data triangulation and multiple measures can improve research credibility.

Future research should use quality assessment tools to assess study robustness. This method will ensure a stronger and more reliable literature integration. In its entirety, this scoping review study enhances the theoretical framework and understanding of blended learning, Sociocultural Theory (SCT), Self-Determination Theory (SDT), and their combination in language education. Examining current scholarly research adds to the body of research. It also illuminates the pros, cons, and opportunities of integrating Sociocultural Theory (SCT) and Self-Determination Theory (SDT) into blended learning. This study has important implications for educators, policymakers, and researchers who want to create and implement effective blended learning strategies in language education.

Acknowledgements

This scoping review could not have been completed without the guidance of my supervisors, and I would like to thank Dr Huzaina Abdul Halim and Dr Mohd Rashid Mohd Saad, for their expertise and guidance throughout the writing process.

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Factors Influence Saudi Females' Attitudes Towards the Use of E-learning for Continuing Education

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This research aimed to investigate the relationship between self-determination and Saudi females' attitudes towards the use of e-learning for continuing education, as well as the moderating effect of perceived ease of use and usefulness of e-learning on the self-determination and attitudes relationship, and the mediating role of subjective norms in the relationship between self-determination and Saudi females' attitudes towards e-learning. The study used a quantitative research design, with data collected via an online survey. The Saudi women in the sample are engaged in continuing education programs. This paper adopted the self-determination theory along with technology acceptance model to create the conceptual framework, and the conceptual framework was tested using structural equation modeling (SEM). The findings of the study have both practical and theoretical implications for encouraging Saudi females to continue their education, through e-learning platforms. Finding of the research emphasis the important of self-determination to motivate learner to engaged in the e-learning in general and in the continues learning in particular.

Keywords: Self-Determination, E-learning, Technology Acceptance and Continues Education

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1. Introduction

Technology plays a crucial role in e-learning, and you could explore the ways in which technology can enhance the learning experience for individuals engaged in continuing education (Shahzad, Khan et al. 2023). In Saudi Arabia, e-learning has emerged as a viable option for continuing education, particularly for females who face some challenges when it comes to attending traditional classroom-based courses (Al-Mamary, Siddiqui et al. 2023). It is particularly important in today's rapidly evolving job market, where continuous learning is required to remain competitive. It is particularly important in today's rapidly evolving job market, where continuous learning is required to remain competitive (Gerasymova, Maksymchuk et al. 2019). E-learning has been recognized as an effective mode of delivery for continuing education programs (Kannadhasan, Shanmuganatham et al. 2020). It has the potential to overcome some of the barriers faced by traditional classroom-based continuing education programs, such as limited access to resources, inflexible schedules, and geographic constraints (Al Rawashdeh, Mohammed et al. 2021). E-learning provides learners with the ability to learn at their own pace, in their own time, and in a location that suits them (Sokyraska, Buha et al. 2023; Alam and Mohanty 2023; Angib, Asinde et al. 2022). The concept of e-learning has diversified in educational literature. E-learning refers to the process of learning and receiving information through the use of electronic devices and multimedia technologies. It involves communication between learners and teachers through various communication channels. The process of education takes place according to the learner's conditions, preparedness, and abilities, with the primary responsibility for learning resting on the learner (Al Hadid 2022). E-learning, refers to the use of technology to deliver educational and facilitate learning experiences (Pramita, Sukmawati et al. 2021). e-learning has become a popular method of delivering continuing education through the last years due to internet fast deployment. eLearning allow learners to access education and training materials from any location and at any time (Al Rawashdeh, Mohammed et al. 2021). This research aimed to explore the factors that influence Saudi females' attitudes towards the use of e-learning for continuing education. understanding the factors that influence Saudi females' attitudes towards e-learning is important to improving their access to education. Although there are well establish literature in the powerful use of eLearning in education (Ratnawati and Idris 2020; Zhao, He et al. 2020; Karataş and Tuncer 2020). Still there are need for researches to determine to identify the factors that contribute to learner attitudes towards and intention to adopt this learning method. Studies have been conducted to investigate the effectiveness of e-learning for continuing education. The research question was: What is the relationship between self-determination and attitudes towards the use of eLearning for continuing education among Saudi females, and how are these relationships moderated by perceived ease of use and usefulness of e-learning platforms, and mediated by social norm. Based on the research question, the goals of this study are: (1) to examine the relationship between self-determination and attitudes towards the use of eLearning for continuing education among Saudi females. (2) to explore the moderating role of perceived ease of use and usefulness of e-learning platforms on the relationship between self-determination and attitudes towards the use of eLearning for continuing education. (3) to investigate the mediating role of social norms in the relationship between self-determination and attitudes towards the use of eLearning for continuing education. (4) to provide practical and theoretical implications for improving the effectiveness of continuing education programs, particularly for Saudi females.

2. Literature Review

The concept of e-learning has diversified in educational literature. E-learning refers to the process of learning and receiving information through the use of electronic devices and multimedia technologies. It involves communication between learners and teachers through various communication channels. The process of education takes place according to the learner's conditions, preparedness, and abilities, with the primary responsibility for learning resting on the learner (Al Hadid 2022). E-learning, refers to the use of technology to deliver educational and facilitate learning experiences (Pramita, Sukmawati et al. 2021). Jethro, Grace et al., (2012) defined it as the provision of electronic educational content through multimedia and computer networks to learners in a way that enables them to actively interact with this content, as well as with the teacher and their peers. E-learning refers to learning that takes place through electronic media, such as the internet, audio, and video. e-learning refers to a form of education or training that is delivered using electronic technologies such as computers, mobile devices, or the internet (Kim, Hong et al. 2019). Several studies have explored the effectiveness of e-learning compared to traditional classroom education sittings (Rovai, Ponton et al. 2007; Pramita, Sukmawati et al. 2021). e-learning has become a popular method of delivering continuing education through the last years due to internet fast deployment. eLearning allow learners to access education and training materials from any location and at any time (Al Rawashdeh, Mohammed et al. 2021). eLearning can be instructor-led or self-paced (Rustamov 2020). it is considered as tool for distance education or remote learning, it is also helpful for the-job training and professional development (Karataş and Tuncer 2020). Studies have investigated the impact of e-learning on learning outcomes. (Ratnawati and Idris 2020), found that e-learning systems were effective in improving students' knowledge and skills. Also, a meta-analysis by (Zhao, He et al. 2020) found that students who participated in online learning performed better than those who received traditional learning. Although there are well establish literature in the powerful use of eLearning in education (Ratnawati and Idris 2020; Zhao, He et al. 2020; Karataş and Tuncer 2020), still there are need for researches to identify the factors that contribute to learner attitudes towards and intention to adopt this learning method. Studies have been conducted to investigate the effectiveness of e-learning for continuing education. For example, (Peterkin 2022), examined the effectiveness of computer-based training (CBT) for job-related skills training and found that CBT was more effective than traditional classroom training. Also, Chaves, Lorca-Marín et al. (2020) compared the effectiveness of e-learning with the traditional training for professionals in healthcare and found that e-training was as effective as traditional training in knowledge acquisition. Moreover, Schmid, Borokhovski et al. (2023) conducted a meta-analysis of online learning, blended learning, the flipped classroom and classroom instruction for pre-service and in-service teachers the found the blended/flipped approaches are significantly superior to classroom-based instruction.

Continuing education refers to the process of acquiring new knowledge and skills throughout one's life after the completion of formal education (Jarvis 1995). It is a form of education or training that individuals pursue after completing their initial education, typically to update or enhance their knowledge and skills in their chosen profession or field (Eraut, 2004). Continuing education can take many forms, including attending workshops, conferences, online courses, or other educational programs designed to provide ongoing learning opportunities (Jarvis 1995; Klein and Ware 2003). The goal of continuing education is to enable individuals to keep up with the latest advancements and best practices in their field, as well as to improve their job performance and career prospects (Knowles, Holton III et al., 2020). It is essential for professionals to maintain their competencies and stay up-to-date with

the latest advancements in their field (Hamilton 1992). Continuing education has positive outcomes for professionals, organizations, and society. According to Kuznia and Ellis (2014) the participation in online continuing education programs led to an increase in employees' productivity and efficiency. In addition, Demiral (2017) found that participation in training programs led to an increase in job satisfaction and motivation among employees. The effectiveness of continuing education programs depends on various factors, including the program's design, delivery, and content. Therefore, it is crucial to consider these factors when designing and implementing continuing education programs (Collin, Van der Heijden et al. 2012). CE is important in today's rapidly evolving work environment, as it allows individuals to update their skills and knowledge to remain competitive in their fields (Shah, Sterrett et al. 2001). In spite of the importance of CE, there are some barriers that prevent individuals from pursuing it. One of the major barriers is scarcity of time (Penz, D'Arcy et al. 2007). Many individuals have busy life style and find it difficult to take time out for CE. In their study in rural and remote registered nurses in Canada Penz, D'Arcy et al., (2007) found that the isolation of rural nurses, time and financial constraints are the major barriers to participation in continuing education activities. This is particularly true for individuals from low-income families. Also, Kazakova and Shastina (2019) found that language and cultural barriers were significant challenges for international students pursuing higher education in the United States. Moreover, lack of motivation and self-discipline are additional barriers to CE (Costello, Kafchinski et al. 2011). Studies have shown that E-learning is an effective means of delivering continuing education to people (Yu, Chen et al. 2007, Rolstadås 2013). e-learning considered as an effective means of delivering CE as it allows people to learn at their own pace and on their own schedule (Blezu and Popa 2008).

The effectiveness of e-learning is influenced by several factors. Blezu and Popa (2008), found that clear learning objectives and goals, active engagement and interaction, frequent and meaningful feedback, opportunities for collaboration and social interaction, and well-designed and organized course content are important factors associated with overall outcomes of e-learning. Maatuk, Elberkawi et al., (2022) mentioned additional factors, such as motivation and prior knowledge, and instructor factors, such as pedagogical strategies and technical expertise. The design and implementation of e-learning courses can also impact the effectiveness of this instructional approach (Brown and Voltz 2005). Koumi (2006) stated that courses incorporated multimedia, for example: videos and interactive simulations that allowed for flexible pacing and sequencing of learning are more activities. Moreover, the clear and frequent communication between instructors and students in e-learning environments are raised as important factor that influence the effectiveness of e-learning. Engagement is a crucial factor for effective learning, as it reflects learners' motivation and interest in the learning process (Bhuasiri, Xaymoungkhoun et al. 2012). Gikandi, Morrow et al., (2011) emphasized the importance of fostering a supportive learning community, promoting learner autonomy, and providing timely feedback to enhance engagement. Learners' attitudes towards the eLearning are important in determining learners' decision in adopting it. Studies have investigated the factors that influence learners' attitudes towards e-learning. For example, Venkatesh, Rao et al., (2020) found that learners' attitudes towards technologies were positively associated with their expectations of it. According to Rhema and Miliszewska (2014), students had positive attitudes towards e-learning, but that attitude varied depending on factors such as age, gender, and prior experience with technology. Several factors may influence students' attitudes towards e-learning (Bertea 2009). According to Martínez-Argüelles, Castán et al., (2009) students' attitudes towards e-learning were positively associated with the quality of e-learning materials and resources. Therefore, we can suggest that:

H1: There is significant positive relationship between females' attitudes towards the use of eLearning for continues education and their intention to enrolled in eLearning course.

H2: There is significant positive relationship between females' self-determination and their attitudes towards the use of eLearning for continues education.

H2a: There is significant positive relationship between females' perception of their autonomy in using eLearning and their attitudes towards the use of eLearning for continues education.

H2b: There is significant positive relationship between females' perceived competence to use eLearning and their attitudes towards the use of eLearning for continues education.

H2c: There is significant positive relationship between females' perceived relatedness in eLearning and their attitudes towards the use of eLearning for continues education.

H8: There are significant positive moderating role of perceived ease of use, perceived usefulness in the relationship between self-determination and students' attitudes the use of eLearning for continues education.

H8a: There are significant positive moderating role of perceived ease of use in the relationship between perceived autonomy and students' attitudes the use of eLearning for continues education.

H8b: There are significant positive moderating role of perceived ease of use in the relationship between perceived competence and students' attitudes the use of eLearning for continues education.

H8c: There are significant positive moderating role of perceived ease of use in the relationship between perceived relatedness and students' attitudes the use of eLearning for continues education.

H8d: There are significant positive moderating role of perceived usefulness in the relationship between perceived autonomy and students' attitudes the use of eLearning for continues education.

H8e: There are significant positive moderating role of perceived usefulness in the relationship between perceived competence and students' attitudes the use of eLearning for continues education.

H8f: There are significant positive moderating role of perceived ease of use in the relationship between perceived relatedness and students' attitudes the use of eLearning for continues education.

H9: There are significant positive mediating role of subjective norms in the relationship between self-determination and attitudes towards the use of eLearning for continuing education.

H9a: There are significant positive mediating role of subjective norms in the relationship between perceived autonomy and attitudes towards the use of eLearning for continuing education.

H9b: There are significant positive mediating role of subjective norms in the relationship between perceived competence and attitudes towards the use of eLearning for continuing education.

H9c: There are significant positive mediating role of subjective norms in the relationship between perceived relatedness and attitudes towards the use of eLearning for continuing education.

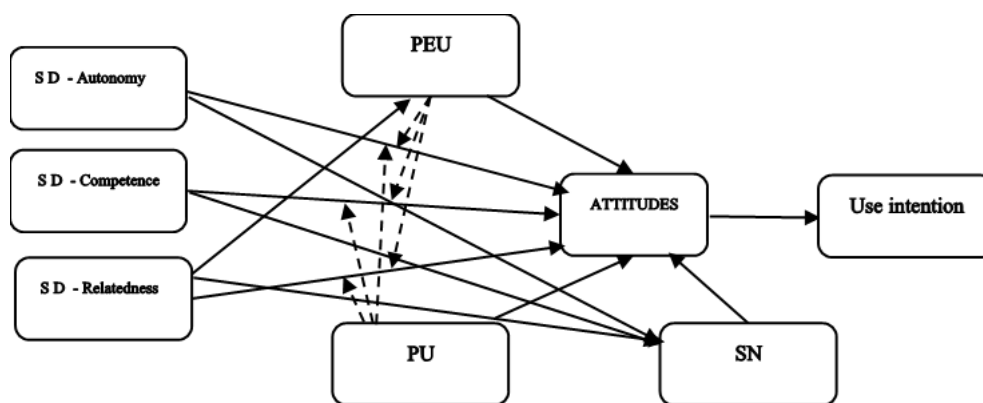


Figure 1: research model.

3. Data Collection and Analysis

Field investigations were conducted to examine the research hypotheses. The study looked at the link between three motivational factors and the attitudes towards the use of eLearning. The data used to test the research model were obtained from Saudi females' residence in Saudi Arabia. An Arabic version of the questionnaire was designed to be placed as Web-based survey on google forms. Web-based surveys have been used in previous studies (Harp and Mayer 1997; Negash, Ryan et al. 2003). The link to the online survey was distributed in WhatsApp groups that are interested in eLearning platforms. The number of members in the WhatsApp groups are limited in number what effects the total number of participants in the survey. Data collection took one month. Start in first of march 2023 and ended in first of April 2023. A total of 210 responses were received. Since 8 questionnaires were incomplete, a total of 202 usable surveys were used. Data in Table. 1, provides insights into the age, income and education distributions of the surveyed population.

Table 1. Descriptive statistics of participants

Controls	Range	Frequency	%
age	Under 18 years	1	.5
	18-24 years	51	25.4
	25-34 years	36	17.9
	35-44 years	45	22.4
	45-54 years	42	20.9
	55-64 years	19	9.5
Education	65 years or older	7	3.5
	Less than high school	3	1.5
	High school diploma	32	15.9
	Bachelor's degree	110	54.7
	Master's or Ph.D. degree	41	20.4
Income	Less than 1000 SAR	47	23.4
	1000 to 4999 SAR	40	19.9
	5000 to 9999 SAR	29	14.4
	10000 to 19999 SAR	65	32.3
	20000 to 29999 SAR	11	5.5
	30000 to 39999 SAR	2	1.0
	More than 40000 SAR	7	3.5

The measures used in this research were mainly adapted from relevant prior studies. All items were measured using a five-point Likert-type scale with anchors from “Strongly disagree” to “Strongly agree”. The measurement of self-determination was adopted from (Zhang, 2023). Which included “autonomy,” four items. “competence” four items. “Relatedness.” four items. The measurements for perceived usefulness (3 items), and perceived ease of use (3 items) adopted from (Davis, Bagozzi et al., 1989). Items measuring Attitudes (3 items) adopted from (Oliver, 1980 and Spreng and Chiou, 2002). Items measuring use intention (3 items) were adapted from prior work by (Mathieson, 1991). Subjective norm (3 items) was adapted from prior work by (Ajzen 1985).

The present study used Smart PLS (4.0), a statistical tool to examine the data through partial least square equation modelling (PLS-SEM). This approach has gained much prominence in studies about technology acceptance, eLearning and related fields (Hair, Sarstedt et al. 2012; Tian, Iqbal et al. 2020; Hair, Ringle et al. 2011; Hair, Ringle et al. 2011). Hair, Ringle et al., (2011), suggested using PLS-SEM to predict dependent variables’ effects. This study uses PLS-SEM as a verified reporting approach to conduct robust analysis in the technology acceptance researches. SEM is a second-generation multifaceted data investigation method that examines theoretically developed linear and additive casual relationships (StatSoft 2013). It allows researchers to examine the relationships between constructs. SME is considered as the best approach to measure the direct and indirect paths because it analyses the difficult to examine and unobservable latent constructs. SEM consists of inner and outer model analyses, which examine the relationships between independent and dependent variables and relationships between latent constructs and their observed pointers. PLS focuses on variance analysis, which could be done using Smart PLS (Vinzi, Trinchera et al. 2010). Therefore, this approach is selected for the present study.

4. Results

The current study analyzed the measurement model to assess the reliability, composite reliability (CR) and average variance extracted (AVE) of the constructs. To measure the reliability, we have used Cronbach alpha (CA) and composite reliability. The results for CA and CR are presented in Table 2 for Autonomy (0.918, 0.942), Competence (0.939, 0.956), Relatedness (0.935, 0.953), Perceived Ease of Use (0.938, 0.956), Perceived Usefulness (0.938, 0.961), Attitudes (0.932, 0.956), Subjective norms (0.930, 0.955), and use intention (0.937, 0.960) respectively. According to Hair, Ringle et al., (2011), CA and CR values should be higher than 0.70, and this study found the values to be in an acceptable range. We assessed the Fornell Larcker and heterotrait –monotrait (HTMT) ratio to test the discriminant validity (Fornell and Larcker 1981). The HTMT ratio has recently gained preference over Fornell and Larcker (1981). Fornell and Larcker’s tests in Table 3 exhibit values greater than the correlations among the variables. The HTMT ratio results are lower than the 0.90 thresholds (see Table 4). Additionally, we examined the convergent validity to obtain AVE values (Table 2), and all the values were greater than the 0.50 threshold (for Autonomy, Competence, Relatedness, Perceived Ease of Use, Perceived Usefulness, Attitudes, subjective norms and use intention. the AVE values were 0.803, 0.845, 0.837, 0.880, 0.890, 0.880, 0.877 and 0.888, respectively).

Table 2. Measurement model

Construct	Item Code	Loading	Cronbach's alpha	CR	AVE
Autonomy			0.918	0.919	0.803
	A1	0.896			
	A2	0.910			
	A3	0.915			
	A4	0.862			
Competence			0.939	0.956	0.845
	C1	0.888			
	C2	0.928			
	C3	0.933			
	C4	0.927			
Relatedness			0.935	0.953	0.837
	R1	0.909			
	R2	0.933			
	R3	0.895			
	R4	0.921			
Perceived Ease of Use			0.938	0.956	0.880
	EOU1	0.936			
	EOU2	0.946			
	EOU3	0.949			
Perceived Usefulness			0.938	0.961	0.890
	U1	0.939			
	U2	0.952			
Attitudes			0.932	0.933	0.880
	ST1	0.924			
	ST2	0.952			
Use intention			0.937	0.960	0.888
	INT1	0.952			
	INT2	0.952			
	INT3	0.924			
Subjective norms			0.930	0.955	0.877
	SN1	0.918			
	SN2	0.952			
	SN3	0.941			

Note: Composite reliability (CR); Average variance extracted (AVE).

Table 3. Heterotrait-monotrait ratio (HTMT) - Matrix

	Attitudes	Autonomy	Competence	PEOU	PU	Relatedness	SN	U	PEOU Autonomy ^x	PEOU Competence ^x	PEOU Relatedness ^x	PU Relatedness ^x	PU Competence ^x	PU Autonomy ^x
Attitudes														
Autonomy	0.826													
Competence	0.806	0.822												
PEOU	0.820	0.816	0.822											
PU	0.825	0.823	0.901	0.827										
Relatedness ⁸	0.816	0.816	0.812	0.810	0.845									
SN	0.823	0.820	0.776	0.755	0.831	0.779								
UI	0.819	0.818	0.845	0.775	0.819	0.764	0.827							
PEOU Autonomy ^x	0.374	0.300	0.348	0.477	0.387	0.353	0.299	0.341						
PEOU Competence ^x	0.413	0.319	0.409	0.536	0.432	0.398	0.342	0.360	0.913					
PEOU Relatedness ^x	0.393	0.344	0.422	0.499	0.422	0.334	0.323	0.346	0.827	0.730				
PU Relatedness ^x	0.441	0.385	0.439	0.416	0.499	0.386	0.381	0.382	0.830	0.813	0.810			
PU Competence ^x	0.495	0.452	0.524	0.418	0.542	0.406	0.414	0.459	0.789	0.831	0.826	0.829		
PU Autonomy ^x	0.459	0.418	0.479	0.365	0.495	0.378	0.375	0.411	0.825	0.773	0.786	0.709	0.750	

Note: Use Intention (UI); Perceived Ease of use (PEOU); Perceived Usefulness (PU); Subjective norm (SN).

Table 4. Discriminant validity (latent variable correlation and square root of AVE).
Fornell-Larcker criterion

	Attitudes	Autonomy	Competence	PEOU	PU	Relatedness	SN	UI
Attitudes	0.938							
Autonomy	0.856	0.896						
Competence	0.848	0.856	0.919					
PEOU	0.815	0.759	0.774	0.943				
PU	0.865	0.811	0.845	0.777	0.943			
Relatedness	0.762	0.757	0.809	0.760	0.792	0.915		
SN	0.824	0.758	0.725	0.708	0.777	0.727	0.937	
UI	0.887	0.824	0.793	0.729	0.834	0.716	0.772	0.942

Note: Use Intention (UI); Perceived Ease of use (PEOU); Perceived Usefulness (PU); Subjective norm (SN).

The Smart PLS (4.0) software was used to assess the structured equation model using 5000 bootstraps. According to Henseler, Hubona et al. (2016), the standardized root means square (SRMR) values should be lower than 0.08 (for a sample size greater than 100). Thus, we found a significant model fit for this study (0.043). The values of determination of coefficient (R²) should be > 0.1 (Henseler, J. et al, 2016). This study found that, 0.859% variance occurred in attitudes, explained by (perceived ease of use, perceived usefulness, Autonomy, Competence and Relatedness, subjective norms). and 0.804% variance occurred on use intention explained by attitudes. And 0.666% variance occurred in perceived ease of use explained by Autonomy, Competence and Relatedness and 0.763% variance occurred in perceived usefulness explained by Autonomy, Competence, Relatedness and perceived ease of use.

Table 5. Hypothesis constructs

	Sample (M)	mean	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Direct relationships					
Attitudes -> UI	0.887		0.022	39.864	0.000
Autonomy -> Attitudes	0.224		0.069	3.213	0.001
Autonomy -> SN	0.432		0.101	4.325	0.000
Competence -> Attitudes	0.165		0.099	1.713	0.087
Competence -> SN	0.092		0.117	0.770	0.441
PEOU -> Attitudes	0.236		0.081	3.047	0.002
PU -> Attitudes	0.233		0.088	2.635	0.008
Relatedness -> Attitudes	-0.093		0.074	1.427	0.154
Relatedness -> SN	0.326		0.098	3.305	0.001
SN -> Attitudes	0.251		0.064	3.840	0.000
Indirect effects (moderating)					
PEOU x Autonomy -> Attitudes	0.077		0.123	0.223	0.824
PEOU x Competence -> Attitudes	-0.093		0.113	0.712	0.476
PEOU x Relatedness -> Attitudes	0.069		0.110	1.055	0.291
PU x Relatedness -> Attitudes	0.043		0.100	0.098	0.922
PU x Competence -> Attitudes	0.056		0.123	0.306	0.760
PU x Autonomy -> Attitudes	-0.152		0.120	0.917	0.359
Indirect effect (mediating)					
Relatedness -> SN -> Attitudes	0.081		0.032	2.487	0.013
Autonomy -> SN -> Attitudes	0.108		0.037	2.921	0.004
Competence -> SN -> Attitudes	0.024		0.031	0.714	0.475

Note: Use Intention (UI); Perceived Ease of use (PEOU); Perceived Usefulness (PU); Subjective norm (SN); $p < 0.05$

Conclusion

As presented in table 5, results indicated a significant relationship between attitudes and UI. The T statistic (39.864) and the p-value of 0.000 suggested that attitudes have a strong impact on UI. The significant relationship between attitudes and UI implies attitudes have a profound effect on females' use of eLearning. In regards with the relationship between PEOU and attitudes, the analysis suggests that there is a significant relationship between PEOU and attitudes. The T value of (3.047) and the p-value of 0.002 indicate that PEOU has a strong significant impact on attitudes. This significant relationship implies that when individuals perceive a system or technology as easy to use, it positively influences their attitudes towards it. PEOU can enhance user satisfaction, engagement, and adoption of a particular system or technology. This finding emphasizes the importance of designing user-friendly interfaces and intuitive systems to foster positive attitudes and user experiences (Venkatesh, Rao et al. 2020). In regards with the relationship between PU and attitudes, the analysis suggests that there is a significant relationship between PU and attitudes. This significant relationship implies that when individuals perceive a system or technology as useful, it positively influences their attitudes towards it. PU is an important factor in determining user acceptance and satisfaction with a particular system or technology (Davis, Bagozzi et al. 1989). This finding highlights the significance of designing and promoting systems that are PU in order to foster positive attitudes and user engagement. The analysis also suggested a significant relationship between SN and attitudes. The relatively T value of (3.840) and the p-value of

0.000 indicate a significant positive relationship between the two variables, and that SN has a strong impact on attitudes. SN can shape individuals' perceptions, opinions, and behaviors. Positive experiences, interactions, and content of other people who means a lot to the learner, can contribute to more favorable attitudes towards eLearning. Moreover, the finding also indicates that there is a significant relationship between autonomy and attitudes. The T value of (3.213) and the p-value of 0.001 indicate that autonomy has a significant impact on attitudes. This significant relationship between autonomy and attitudes implies that having a sense of autonomy positively influences attitudes. This finding highlights the importance of providing learners with a degree of control, independence, and decision-making power in education. When people feel a sense of autonomy in eLearning, it can contribute to more positive attitudes, engagement, and satisfaction. In regards with the relationship between competence and attitudes towards eLearning, results suggests that there is no significant relationship between competence and attitudes. The T value of (1.713) indicates no statistically significant relationship. In addition, based on analyzed data, the results suggests that there is no significant relationship between relatedness and attitudes. The T value of (1.427) and the p-value of 0.154 indicated that there is no significant relationship between the two variables. In addition, the analysis suggests that there is a significant relationship between autonomy and subjective norms. The high T value of (4.325) and the p-value of 0.000 indicate a significant relationship and that autonomy has a strong impact on SN. Moreover, the analysis suggests that there is no significant relationship between competence and SN. The T value of (0.770) and the p-value of 0.441 suggested that the relationship between SN and competence is low. The lack of a significant relationship between competence and SN implies that individuals' perceptions of their own competence may not strongly influence their acceptance of social networking opinion. In addition, the analysis suggests that there is a significant relationship between relatedness and SN. The relatively high T value of (3.305) and the low p-value of 0.001 indicate a significant relationship. This significant relationship implies that individuals who perceive a sense of relatedness, connection, and social support in their online interactions are more likely to accept social groups advices. Moreover, the analysis suggests that there is a significant relationship between autonomy and attitudes. The high T statistic of 3.213 and the low p-value of 0.001 indicate a significant relationship between the variables. This suggests that autonomy has a strong impact on attitudes. However, the analysis does not find a significant interaction effect between perceived ease of use (PEOU) and autonomy on attitudes. The T statistic of 0.223 and the p-value of 0.824 indicate that the evidence is not strong enough to establish a significant interaction effect between these variables. This suggests that the relationship between PEOU and autonomy does not significantly influence attitudes. In regard with the moderating role of PEOU on the relationship between competence and attitudes, the analysis suggests that there is no significant interaction effect between PEOU and the relationship between competence and attitudes. The T statistic of 0.712 and the p-value of 0.476 suggest that the evidence is not strong enough to establish a significant interaction effect between these variables. This implies that the relationship between PEOU and competence does not significantly impact attitudes. In addition, the analysis suggests no significant interaction effect between PEOU and relatedness – attitudes relationship. The T statistic of 1.055 and the p-value of 0.291 suggest that the evidence is not strong enough to establish a significant interaction effect between these variables. This implies that the relationship between PEOU and relatedness does not significantly impact attitudes. Moreover, the analysis suggests that no significant interaction effect between PU and relatedness – attitudes relationship. The T statistic of 0.098 and the p-value of 0.922 suggest that the evidence is not strong enough to establish a significant interaction effect between these variables. This implies that the relationship between PU and relatedness does not significantly impact attitudes. In regards

with the moderating influence of PU in the relationship between relatedness and attitudes, the analysis suggests that there is no significant interaction effect between PU and competence – attitudes relationship. The T statistic of 0.306 and the p-value of 0.760 suggest that the evidence is not strong enough to establish a significant interaction effect between these variables. This implies that the relationship between PU and competence does not significantly impact attitudes. Moreover, the analysis indicated that there is no significant interaction effect between PU and autonomy on attitudes. The T statistic of 0.917 and the p-value of 0.359 suggest that the evidence is not strong enough to establish a significant interaction effect between these variables. This implies that the relationship between PU and autonomy does not significantly impact attitudes. In regards with the mediating influence of subjective norm on the relationship between relatedness and attitudes, results indicated that learners who perceive a higher level of relatedness in their eLearning experiences also tend to be influenced by others opinion and this affects their attitudes towards eLearning positively. The T value of 2.487 and the p-value of 0.013 suggest a significant positive mediating effect of SN on the relationship between relatedness, and attitudes. Moreover, the potential mediating effect of SN on the relationship between autonomy and attitudes. Results indicated that the p-value of 0.004 which indicate a significant positive mediating effect of subjective norm on the relationship between autonomy and attitudes. In regards with the mediating effect of SN on the relationship between competence and attitudes. The T value of 0.714 and the p-value of 0.475 suggest that there is not enough evidence to establish a significant relationship between competence, SN, and attitudes.

Implications

The findings of this research can be valuable for policymakers in the integration of e-learning in Saudi Arabia's education system. They can also inform curriculum developers and educators in designing e-learning courses that are tailored to the needs and preferences of Saudi female learners. Understanding the factors that influence their attitudes towards e-learning can help in creating engaging and interactive features, and ensuring flexibility to accommodate the unique circumstances and responsibilities of Saudi female learners. The research also highlights the importance of focusing on making e-learning experience ease and enhance the competence of the learner as these will influence their attitudes. The study emphasizes the significance of PEOU and PU of e-learning. educational institutions can use the research findings to identify gaps in technology infrastructure and take measures to bridge these gaps. This may involve ensuring reliable internet connectivity, providing necessary hardware and software resources, and addressing any technological barriers that negatively influence Saudi females' PEOU of e-learning. The research sheds light on the influence of social and cultural factors on Saudi females' attitudes towards e-learning. The findings contribute to the existing body of knowledge by emphasizing the importance of understanding subjective norms in females eLearning adoption decision. This understanding can help educators in designing culturally sensitive educational interventions and addressing potential barriers that may arise due to social and cultural factors. The study identifies self-efficacy and motivation as key factors influencing Saudi females' attitudes towards e-learning. This highlights the significance of fostering self-confidence and motivation among learners to engage in online education effectively. Researchers and educators can explore interventions and strategies that enhance learners' self-efficacy beliefs and motivation in the e-learning context. Understanding the role of these psychological factors can contribute to the development of effective e-learning interventions and support systems. Moreover, the research provides insights into factors that influence Saudi females' acceptance of technology in the educational context. By examining variables such as PU and PEOU. The findings can

inform future research on technology acceptance and adoption in the Saudi Arabian context and guide the development of theoretical frameworks and models that explain learners' attitudes towards e-learning technologies. In summary, the practical and theoretical implications of this research contribute to the advancement of e-learning practices and policies in Saudi Arabia, promoting inclusivity, and providing valuable insights for educators, policymakers, and researchers in improving the quality and accessibility of continuing education for Saudi females.

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***Current Trends in ESP Research in China:
A Bibliometric Analysis of Chinese Journal of ESP***

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

In recent years, academia and education departments in China have highly valued English for Specific Purposes (ESP). This paper reviewed all articles published in the *Chinese Journal of ESP* from 2013 to 2022 and selected 309 out of 362 articles as samples to generate knowledge maps using CiteSpace. Based on the bibliometric analysis, this paper aims to identify and discuss topical themes, research frontiers, and trends of ESP research in China over the past decade. The results reveal several noteworthy trends in the field of ESP, including 1) Academic English has received wide and constant attention from Chinese ESP researchers over the past decade, and research on analyzing college English from the perspective of ESP increases; 2) The distribution of ESP research across different disciplines is imbalanced. The most frequently studied areas are Business English, Medical English, and Legal English, with only a few articles on other disciplines; 3) In terms of research methods, needs analysis occupies a dominant position, but there is a growing trend in using genre analysis, empirical study, and comparative study in ESP research.

Keywords: ESP, Chinese Journal of ESP, Bibliometric Study, Visualization Analysis

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1. Introduction

Originating from the 1960s, English for specific purposes (ESP) keeps attracting attention from the academic field. It refers to “the teaching and learning of English as a second or foreign language where the learners’ goal is to use English in a particular domain” (Paltridge & Starfield, 2013). And as a broad area consisting of English for business, science and technology, law, engineering, etc., it gradually becomes one of the most prominent areas of English teaching in universities worldwide. What began as a grass-roots solution to the need for vocationally-relevant English language education has now evolved into a much broader field of research and application (Kirkgöz & Dikilitaş, 2018).

Due to the globalization of both the economy and tertiary education, there has been a growing demand for successful English education within higher education in many countries, especially non-English speaking countries. In China, students start their English language education at the primary school level and continue learning English at every level of their education. Under this context, China has reached a level where almost every university student has obtained at least one general English certificate. Therefore, for Chinese students in the 21st century, English not only acts as one of the main subjects they must learn but is also a necessary skill to compete in the job market. This has brought a change and shift in the teaching objectives of college English education and made ESP more important for university students, especially those of non-English speaking countries.

In China, ESP has developed for decades since it first emerged in the 1970s. From the simple introduction of English for Science and Technology by Yang et.al (1978) at the initial stage to the current various fields and themes, ESP research in China has experienced constant and deep changes. The new version of the *Guidance of College English Teaching* issued by the Chinese Ministry of Education in 2020 explicitly includes General English (GE), ESP, and Inter-cultural Communication in curriculum design and teaching system. Since then, many colleges and universities have gradually increased the portion of ESP teaching, and some major publishers have also published various ESP teaching materials (Huang, 2022). This phenomenon reflects the practical need for universities to offer ESP courses for college students to learn professional English.

It can be observed that ESP now is not only an important part of Chinese college English education but will also be a future development orientation of it. Therefore, it is necessary to go through past research on ESP to identify its development trends and frontiers. And conducting a comprehensive and systematic review of the *Chinese Journal of ESP* would provide a new perspective for ESP practitioners.

Combining the above-mentioned changing themes with the research concerns, this paper will try to present a visualization analysis of ESP in the Chinese context. Theoretically, this study clarifies the current status and trends of Chinese ESP research in the past ten years. It will help researchers in the field of ESP to track research hotspots. Practically, this study is to some extent helpful to explore the future research direction of ESP and the reform direction of college English.

Based on the above discussion, this paper explores articles published in the *Chinese Journal of ESP* from 2013 to 2022 to trace developing trends in the ESP field. Three research questions will be addressed in this paper specifically:

- 1) What are the frequently explored themes of ESP research in China from 2013 to 2022?
- 2) What are the research frontiers of ESP research in China during this period?
- 3) What are the trends of ESP research in China during this period?

The rest parts of this paper are organized as follows: Part 2 introduces some previous bibliometric analysis or visualization analysis in the ESP field. Part 3 gives an illustration regarding the research method and data sources in this research. Part 4 describes the research results in detail by presenting some figures, and discusses the results. Part 5 is the conclusion of this study and offers some suggestions for future research.

2. Literature Review

ESP can be seen as an umbrella term, which covers a range of diverse teaching contexts (Lesiak, 2015) and suits different kinds of courses based on learners' different needs. It is generally used to refer to the teaching of English for a utilitarian purpose (Mackay and Mountford, 1978). ESP has been informed by over 50 years of research and practice and is perhaps the most influential of all language teaching approaches in academic settings and the workplace (Anthony, 2018).

During its long and eventful history, ESP is defined by many scholars (Munby, 1978; Strevens, 1988; Robinson, 1991; Dudley-Evans & St. John, 1998). It is one of the most established teaching approaches in English Language Teaching (ELT), and also an eclectic approach that takes the most useful, successful, and valid ideas from other theories and practices, combining them into a consistent whole (Anthony, 2018).

Throughout the major literature databases, there are countless studies on ESP in a variety of areas. This proves that ESP is a popular research direction and field worldwide. A small portion of this published literature is visual and bibliometric analyses of ESP.

Using visualization analysis, Zheng & Wu (2019) reviewed the literature on ESP education in 11 CSSCI foreign language journals from 2007 to 2017. Their research presents the status quo and hot issues of Chinese ESP education and points out shortcomings in learning support services, characteristic development research methods, evaluation systems, and contents. Similarly, to obtain the research hotspots and development trends of studies on ESP in China, Hu (2019), using CiteSpace, analyzed articles about ESP. His research found that the domestic studies on ESP experienced slow development in controversy, rapid development in practice, and deep development with modern educational technology.

Another visualization analysis of ESP in China was conducted by Ma et. al in 2019. They analyzed the hot themes of Chinese ESP research from 1989 to 2018 and drew a scientific knowledge map of ESP research. Cui & Li (2019) visually analyzed ESP in the Chinese context on a much larger scale. They collected 1,708 articles published between 1959 and 2016 to examine the general trend, hot research topics, and characteristics of international ESP research. Later, in 2021, using bibliometric techniques, Hyland & Jiang tracked changes in ESP research through an analysis of all 3,500 papers on the Social Science Citation Index (SSCI) since 1990. This research dealt with ESP topics to show its emergence from the periphery of applied linguistics to a serious force on the world stage.

Also in the Chinese context, Xue, Saffari & Motevalli (2022) reviewed the literature on ESP research in 15 CSSCI foreign language journals in the CNKI database. This research is relatively new compared to the other research mentioned above, as it analyzed ESP-related articles from 2001-2020. Moreover, their research critically analyzed the research limitations and recommendations of the ESP study (Xue, Saffari & Motevall, 2022). Also new but with a smaller time slice compared to Xue et. al (2022), and Li & Li (2022) offered a document analysis study on the developments of ESP research in China from 2011 to 2020. They reported the hot research topics and main research realms of ESP studies as well as the characteristics of ESP research methods.

Swales, Xu & Yang (2023), chose 705 articles published between 1980 and 2019 to trace the development of the journal in terms of the most frequently explored topics. The significant difference between their research and the others was that they focused on one journal – *The ESP Journal (ESPJ)*, which was renamed English for Specific Purposes when it was taken over by Elsevier in 1986. Their paper presented a bibliometric analysis of the most highly cited *ESPJ* articles, and the references of *ESPJ* articles, plus the changes in contributors about countries/regions (Yang, Xu & Swales, 2023).

Though plenty of research related to the ESP field has been conducted since its inception, few of them are conducted from the perspective of bibliometrics and visualization. The above-discussed previous visualization research reviewed ESP developments, ESP research status, and ESP teaching trends in China. These reviews provide us with insights into the hot topics, status, and trends of the ESP field. However, though their data are all retrieved from multiple journals, few of them include the *Chinese Journal of ESP* in their research. As the only journal named after ESP in China, it marks a new stage of ESP research in China and provides a platform for hundreds of thousands of English teachers to present their ideas (Wang, 2010). Thus, using CiteSpace, this paper will present a bibliometric analysis of ESP research trends, hot topics, and research frontiers in the Chinese context.

3. Methodology

3.1 Approach

A general research framework is proposed based on CiteSpace 6.2.R4 in this research. CiteSpace identified research frontiers and emerging trends in the field of ESP by analyzing the trend of articles published in the *Chinese Journal of ESP*, exploring the keyword clusters and timeline, and capturing keywords with strong citation bursts over time.

The bibliometric study is widely applied to scientific research as a statistical analysis method. Emerging in the early 1900s, it has been used as a quantitative method to describe and evaluate the current situation of science and technologies and predict developing trends (Zhang et. al, 2019), and applied to various kinds of disciplines. For example, it is used in library and information sciences to describe patterns of publication within a given field or body of literature and has helped to explore research networks (González-Alcaide, Jinseo, Huamaní, Gascón & Rincón, 2012), authorial collaboration (Davaranpanah & Aslekia, 2008), and publication gender inequalities (Sebo, Maisonneuve & Fournier, 2020).

3.2 Data Collection

The data collection process included three steps: searching the database and manually checking the data. This paper chose CNKI as the database and the *Chinese Journal of ESP* as the research subjective.

First, select “Advanced Search”, set the keywords as “*Chinese Journal of ESP*”, and confined the search to “Data Source”. Second, set the time range to 2013 to 2022. To obtain a more accurate result from the database, this paper did not limit the search to “research articles” when searching from the database. A total of 362 raw items were found, including all document types, i.e., research articles, commentaries and written summaries of meetings, and book reviews.

Then, the source data was manually checked with the printed versions of the *Chinese Journal of ESP* by the author to make sure of validity. After manually checking all the items and excluding all the commentaries and written summaries of meetings, reviews of books and book chapters, etc., 309 research articles were finally selected as the research data for this study.

4. Results and Discussions

In this part, the findings of this research will be discussed. In the visualization knowledge graphs produced by CiteSpace, there are different kinds of nodes and links. The nodes with high centrality are usually identified as hot spots or turning points in this domain. To get the most frequently studied themes, the parameter “Time Slicing” of the CiteSpace was set to “2013-2022” and the “Years per Slice” was set to “1”. Term Source was “Title”, “Abstract”, “Author Keywords” and “Keywords Plus”, and Node Type was “keyword”.

4.1 Keywords Co-occurrence Analysis

After running the CiteSpace, 12 high-frequency keywords (frequency ≥ 5) (Figure 1) were obtained by extracting noun phrases and merging theme words, and the keyword co-occurrence visualization map was automatically generated (Figure 2).

Frequency	Centrality	Year	Keywords
26	0.27	2014	Academic English
21	0.27	2013	Needs Analysis
14	0.13	2014	Business English
13	0.12	2016	Genre Analysis
13	0.05	2015	College English
12	0.09	2013	Medical English
9	0.06	2013	Legal English
6	0.04	2016	Empirical Study
5	0.03	2015	Teaching Methods
5	0.02	2020	Speculative Ability
5	0.02	2016	Comparative Study
5	0.04	2014	Academic Paper

Figure 1: Top 12 hot research topics of ESP research in China (frequency ≥ 5)

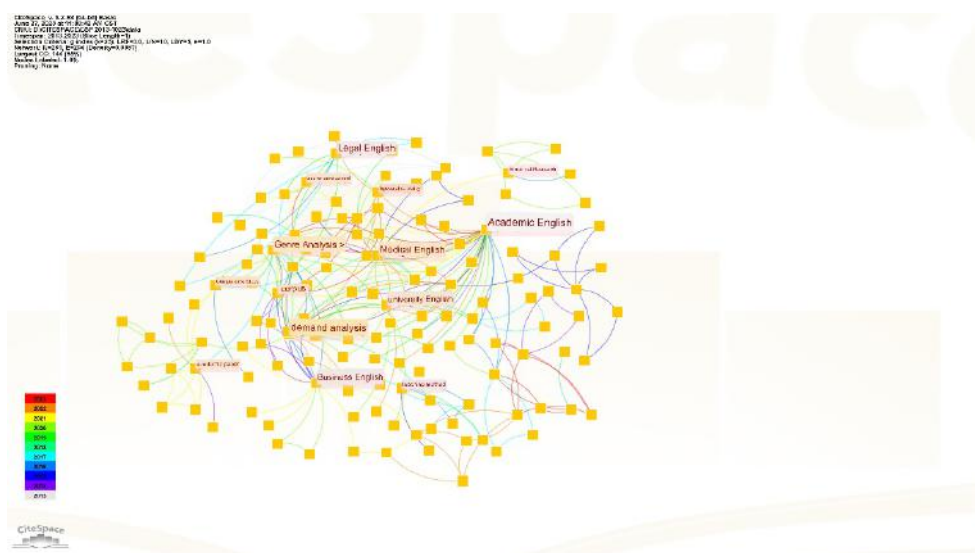


Figure 2: Keywords Co-occurrence map of ESP research in China

Over the past 10 years, domestic ESP research has involved 12 hot topics, with the frequency ranked from high to low as Academic English, Needs Analysis, Business English, Genre Analysis, University English, Medical English, etc. By categorizing and summarizing the hot topic terms, it is found that domestic ESP research presents the following four characteristics:

4.1.1 Academic English Has Received Wide and Constant Attention

Under the influence of higher education internationalization and students' improvements in general English proficiency, academic English has gradually become the research focus of college English teaching in China. This is in response to the existential crisis of college English due to its time-consuming inefficiency. It is now an indispensable part of the college English teaching system and has become an important direction of ESP (Cai, 2012).

Currently, in the Chinese education system, ESP is integrated into college English teaching in the form of General Academic English (GAE), English for Academic Purposes (EAP), and Vocational English (VE) (Ji, 2017). According to previous research about academic English, employers, university English teachers, and college students shared different perceptions of the demand for academic English. Employers expect university graduates to have the ability to take on individual or teamwork, possess professional knowledge, and be equipped with cognitive ability, and written and oral communication skills in English and Chinese (Zhou, Zhao & Dawson, 2021). Professional teachers focus on different aspects. They pay more attention to valuing students' ability in using English for professional learning (Cai & Chen, 2013). However, from students' perspectives, they often express the need to learn grammar or to use English in daily life (Flowerdew & Peacock, 2001). This controversy leads to plenty of discussions regarding the development orientation of academic English.

4.1.2 Research on Analyzing College English From the Perspective of ESP Increases

Scholars in China have also conducted plenty of theoretical discussions and practical studies regarding college English teaching reform. One of the most important points is that ESP should be the reform direction of college English teaching.

Chinese researchers' concerns regarding college English in the ESP context stem from the debate over where college English should be positioned. In recent years, as the internationalization of China is growing deeper and wider, the market is in urgent need of professional foreign language talents who can communicate fluently in specialized fields. However, English at Chinese universities has always been a basic, and general education, which is not able to ensure that students have the English skills that specialized fields may need.

In China, there are not many higher education institutions that offer ESP programs, and for those that offer ESP, the courses only cover several disciplines. In this case, even if a student can reach an advanced level in college English learning, it is still a decontextualized general English (Cai, 2022). For undergraduate students, it is essential to have a strong command of English in order to stay competitive in their field of study. It is the greatest dereliction of duty or failure of public English teaching not to cultivate undergraduate students' academic and work competence in this kind of English (Cai, 2019).

4.1.3 The Distribution of ESP Research Across Different Disciplines Is Imbalanced

Observed from the articles published from 2013 to 2022, scholars have extensively researched discipline construction and professional development, yielding fruitful results. However, these studies primarily concentrate on three areas: business English, legal English, and medical English, with limited involvement in other subjects.

Among these disciplines, Business English (BE) has rapidly developed and grown along with the deep integration of economic globalization and the rise of China's economy, and become the largest branch of ESP (Wang, 2012). Since its establishment approved by the Chinese Ministry of Education in 2007, 414 colleges and universities have offered undergraduate BE majors as of 2021 (Li & Li, 2022). In the past ten years, scholars have conducted a great deal of research on the curriculum construction and course development of Business English. These fruitful results have contributed to BE becoming the most popular and relatively mature branch of ESP research in China.

4.1.4 Needs Analysis Occupies a Dominant Position as a Research Method

Needs analysis is always used as a research method in curriculum design and setting, teaching mode, teaching method or reform, students' specific needs, and so on. Besides, there is a growing trend in using genre analysis, empirical study, and comparative study in ESP research.

Though GE may also require a needs analysis, carrying out a needs analysis throughout the program for ESP is more important, as it is closely related to the needs of society, the development of the country, and the future career development of the students (Huang, 2022). This has led to needs analysis being widely recognized by ESP scholars as an important part of ESP pedagogical theory. Needs analysis of ESP from different perspectives (e.g., teachers, students, and employers) can provide a theoretical basis for the design of ESP materials, curriculum setting, and teaching methods adjustments.

4.2 Keywords Clusters Analysis

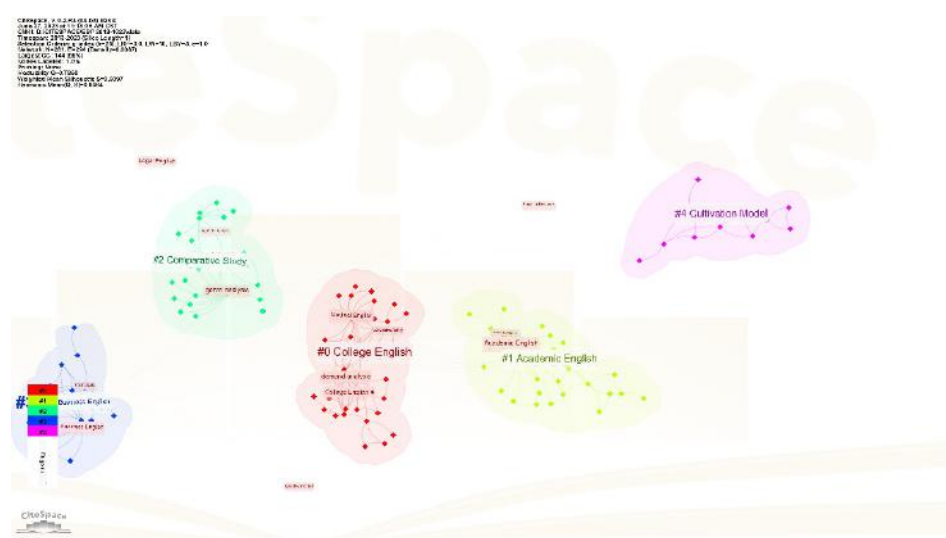


Figure 3: Keyword clustering in ESP research in China

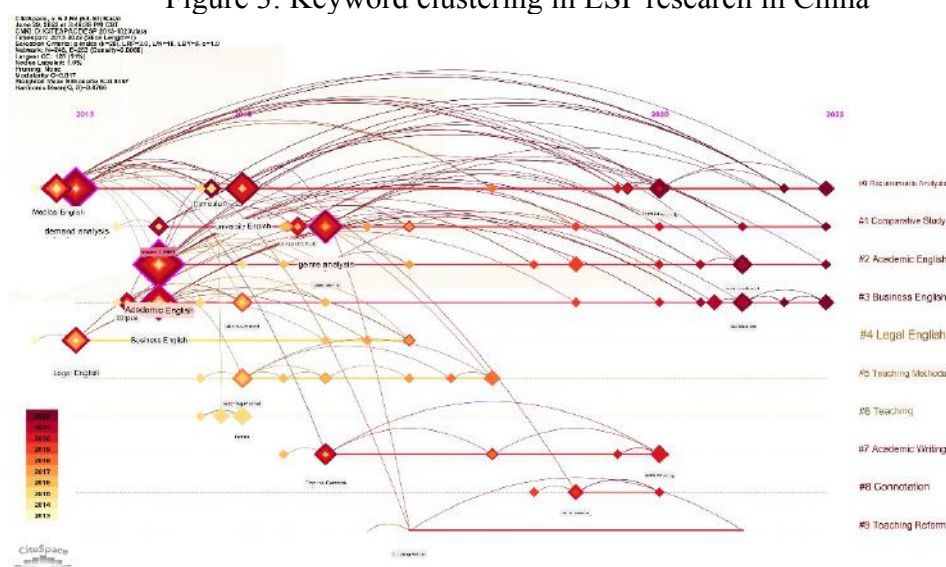


Figure 4: Keyword clustering timeline map of ESP research in China

Five keyword clusters were generated for ESP research in China (Figure 3), consisting of #0 College English, #1 Academic English, #2 Comparative Study, #3 Business English, and #4 Cultivation Mode. From the distribution of the five clusters, it can be observed that there exists no overlap between them. This may indicate that in the future, researchers can conduct research with mixed topics or more complex contents.

Three stages of ESP development in China during the past decade can be observed from the timeline map (Figure 4). The first stage is 2013-2015. During this period, needs analysis and academic English are the two main research topics. And the research attention is mostly paid to discipline studies. The second stage is 2015-2020. It can be observed that the research focus has been transferred to research methods and the genre analysis and empirical study emerged as new research hotspots. The last stage is 2020-2022. In this stage, a new term “New Liberal Arts” emerged.

4.3 Visual Analysis of Research Frontiers From 2013–2022

In CiteSpace, burstness refers to an exponential increase in the frequency of occurrence of a specific keyword, indicating that a potential topic has been, or is, attracting a high level of interest over a specific period. Therefore, analysis of the burstness of keywords is considered to be a pointer to highly active research areas. Based on the citation bursts and timing of keyword emergence, emerging trends in the research field can be explored to some extent.

Top 10 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	2013 - 2022
teaching methods 教学方法	2015	1.63	2015	2018	
countermeasures 对策	2015	1.26	2015	2017	
talents cultivation 人才培养	2015	0.99	2015	2017	
empirical study 实证研究	2016	0.97	2020	2022	
discipline consturction 学科建设	2017	0.86	2017	2019	
legal English 法律英语	2013	1.97	2016	2017	
curriculum construction 课程建设	2019	1.37	2019	2020	
genre analysis 体裁分析	2016	1.07	2019	2020	
teaching content 教学内容	2016	1.05	2016	2017	
academic vocabulary 学术词汇	2016	0.88	2016	2017	

Figure 5: Top 10 keywords with the strongest citation bursts

Based on the keyword burstness map of the ESP research field (Figure 5), the author examined the collected data and found a total of 10 keywords over the past decade. The higher the keyword strength shows, the more pronounced cutting-edge trends are.

Since 2013, ESP research in China can be concluded into the four following trends:

4.3.1 Legal English Has Always Been the Focus of Researchers

Research on legal English started in 2013, became very popular in 2016, continued into 2017, and lasted until 2022. This means that legal English is always the research focus of the ESP research between 2013 and 2022.

As China continues to deepen its open-up policies, its adaptation to the internationalized world and economic globalization has encountered many legal problems. From joining the

World Trade Organization (WTO) in 2000 to the implementation of the “One Belt, One Road” policy in recent years, how to reasonably and accurately exercise the right to speak on international affairs in foreign exchanges has always been the main concern of the Chinese government and scholars. Therefore, people who are familiar with the rules and regulations of the international law system and have a strong ability in legal English practice have become very popular. All these promote the development of Legal English in China.

4.3.2 Empirical Study Is the Latest Research Trend

Empirical study first emerged in 2016. But in 2020, it suddenly became the research frontier of ESP research in China. This may be caused by the publication of the *College English Teaching Guide* (2020 Edition), which clearly states that the main content of college English teaching can be divided into general English and ESP. This corroborates Li & Li's (2022) research, in which she mentioned that from 2016 to 2020, non-empirical research related to ESP declined by 25%, reflecting the scientific nature of ESP research methodology in the country. This also indicates a lack of mixed-methods research in the field of ESP, and Chinese researchers should do more to fill this gap.

4.3.3 Research on Teaching Methods Lasts a Long Time

Teaching methods in ESP became a research frontier in 2015 and lasted for three years. This not only indicates that research on teaching methods has occupied an important position in the field of ESP for a long time but also reflects that teaching methods might be a complex subject for researchers.

In recent years, ESP teaching has been carried out mainly by university English teachers or teachers of specialized courses (Ma & Liao, 2017). ESP courses may not be taught appropriately in the Chinese higher education system due to deficiencies and limitations of the teachers themselves. For instance, some English teachers may prefer to use the basic English teaching method when teaching ESP courses, as their professional knowledge in specific disciplines is insufficient. This makes the teaching focuses on teaching vocabulary and grammar rather than explaining professional knowledge to students. Additionally, some teachers of specific courses may teach ESP as translation courses. And due to the lacking of language teaching experience, these teachers of professional courses always pay insufficient attention to the basic language skills of the students, which results in students' insufficient in applying English comprehensively (Ma & Liao, 2017).

4.3.4 Keywords Whose Strength Exceeds 1.0 Belong to the Current Research Hotspots

Since 2015, research topics such as legal English (1.97), teaching methods (1.63), curriculum constructions (1.37), countermeasures (1.26), genre analysis (1.07), and teaching content (1.05) can be seen as the latest research frontiers in the ESP field. This suggests that more efforts can be put into these aspects in future research.

Under the influence of sociocultural perspectives on the study of language learning, genre theory, and genre pedagogy have become one of the major developments in academic English writing research in recent years (Bhatia, 2014). Keywords like “teaching methods”, “curriculum constructions”, “countermeasures”, and “teaching content” to some extent, can reflect that ESP in China is experiencing a revolution. Deepening the reform of ESP teaching is an inevitable direction of development. This helps to solve the disconnection between

theoretical knowledge and social practice, narrow the gap between the students' abilities and social demand, and adapt to the current educational innovation.

5. Conclusion

Using CiteSpace, this study examines the current research status and development trends of ESP in the Chinese context. By analyzing the high-frequency keywords of retrieved articles published in the *Chinese Journal of ESP*, the research hotspots and cutting-edge topics in this field are tracked.

After analyzing the current hotspots and topics, several observations can be made. First of all, there is inadequate attention given to learners, resulting in limited studies on learners' motivation and attitudes toward learning. Second, the emphasis placed on disciplines outside of legal English and medical English is not enough. Third, research methods employed are mostly singularly qualitative or quantitative, and mixed research approaches are rare.

However, there exist some limitations regarding the width and depth of research, as this study only provides an overview of research conducted in the past decade (2013-2022) and focuses solely on articles published in the *Chinese Journal of ESP*. Other than that, because this study focuses only on domestic ESP research and does not compare it with international studies, it may fail to reflect the current trends and characteristics of cutting-edge ESP research in the international academic context.

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Intercultural Communication as One of the Key Issues of Second Language Acquisition in the 21st Century

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

Universities aim to prepare students to become global citizens that are successful members of competitive labor markets. Intercultural awareness is one of the key skills of the 21st century. Communication between cultures is a great challenge in language teaching. The culture of the target language is an inevitable part of successful foreign language competency. The present study entitled *Intercultural communication as one of the key issues of second language acquisition in the 21st century* aims to determine to what extent are students of higher education able to recognize means of expression in two languages from different language families. The object of the investigation was the interpretation of ten culturally loaded phrases commonly used in business meetings. The study results collected from more than three hundred participants show the inability to fully recognize the sociolinguistic aspects of the given communication extracts. The effectiveness of the communication process depends on the feedback received, by which the sender verifies the understanding and effect of his message and monitors the reaction of the receiver. The interlocutors understood the linguistic aspect of communication. On the other hand, they did not fully recognize the cultural load of the phrases. Empirical data confirm the importance of intercultural awareness. It also emphasizes the sociocultural importance of intercultural communication in the modern world.

Keywords: Culture, Intercultural Awareness, Intercultural Communication, Second Language Acquisition, Skills of the 21st Century

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Introduction

Since the inception of human civilization, interactions among individuals have extended beyond the confines of specific ethnic enclaves to encompass a broader spectrum of ethnicities and nations. The phenomenon of intercultural communication has garnered significant attention in light of the ever-expanding process of global integration, the establishment and potential enlargement of the European Union, and the heightened prominence of migratory movements. The reception and interpretation of information stem from distinct perceptual lenses through which communicative expressions are viewed within varying cultural contexts. The educational resources available in this domain tend to be sporadic in nature and frequently focus on a limited array of subjects.

For students pursuing higher education, cultivating intercultural awareness within a foreign language assumes particular significance, as it equips them with essential skills for their professional endeavors post-graduation. Consequently, this partial investigation seeks to assess the extent to which students are proficient in identifying linguistic nuances across two distinct languages.

Skills of the 21st Century

The scope of proficiencies imperative for fostering effective student learning and proficient pedagogical practices transcends the confines of mere literacy and numeracy. Referred to as essential competencies and skills of the 21st century, these foundational aptitudes encompass a nexus of knowledge, skills, and dispositions contextualized within their respective environments. Within this framework, competences are construed as an amalgamation of cognitive, practical, and affective attributes pertinent to the given setting. Notably, key competences delineate those proficiencies universally essential for individual self-actualization and advancement, as well as active civic engagement, societal inclusivity, and meaningful vocational participation.

According to *The Reference Framework of the European Parliament* (2006), key competences encompass proficiencies that hold universal significance, requisite for the holistic realization of personal growth and fulfilment, the facilitation of engaged and responsible citizenship, the promotion of societal inclusivity, and the enhancement of prospects in the realm of gainful employment.

The Reference Framework (2006, p. 4) sets out eight key competences for the life-long learning:

- 1) Communication in the mother tongue,
- 2) Communication in foreign languages,
- 3) Mathematical competence and basic competences in science and technology,
- 4) Digital competence,
- 5) Learning to learn,
- 6) Social and civic competences,
- 7) Sense of initiative and entrepreneurship,
- 8) Cultural awareness and expression.

Each of the key competences holds equal significance, as they collectively contribute to the attainment of a prosperous existence within a knowledge-driven society. We are going to focus on the last competence from the list above.

Culture

The notion of culture is intricate and multi-faceted, deriving its form from an intricate interplay of diverse determinants and influences. Commencing with an archetype of historical origin, one that accentuates the temporal aspect, culture assumes the role of "a historically conveyed configuration of significances embedded within symbols, or a framework of inherited notions conveyed through symbolic manifestations, through which a human disseminates, upholds, and apprehends their cognizance and dispositions towards existence" (Geertz, 1973, p. 89 In Samovar et al., 2009, p. 10). UNESCO defines culture as: "the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, that encompasses, not only art and literature but lifestyle, ways of living together, value systems, traditions and beliefs" (UNESCO, 2009). Halls (1976), in a reflective discourse on the nexus between culture and human subsistence, postulates: "Culture serves as the intermediary of man: No facet of human existence remains untouched or unaltered by culture" (Halls, 1976, p. 16).

Intercultural Communication

Communication assumes a pivotal role within social interactions, serving as a conduit for the manifestation of an individual's cultural identity. This mode of expression enables individuals to convey their values, convictions, and cognitive frameworks. Through this communicative exchange, individuals collectively shape significance and foster comprehension. As implied by the prefix "inter," the domain of intercultural communication pertains to interactions involving participants from diverse cultural backgrounds.

Intercultural communication, as characterized by Byram (1997, p. 8), transpires between two individuals conversing in distinct languages, under the circumstances where:

- both originate from different countries, with one being a native speaker of the language used for communication, or
- both hail from separate countries and employ a language as a lingua franca, or
- both belong to a single country, but communicate using dissimilar languages, with one being a native speaker.

Given the necessity for divergent choices of verbal and nonverbal linguistic tools in intercultural communication, such interplay can prove demanding. Challenges in communication between individuals of disparate cultures may arise from a lack of awareness concerning each other's cultures or the complete absence of certain elements within one of the cultures (Cakir, 2006, p. 1). Nonetheless, this form of communication possesses the potential to offer opportunities for enriching exchanges of ideas, perspectives, and experiences.

Culture in Foreign Language Learning

The advent of cultural consciousness within the domain of foreign language pedagogy was inaugurated during the 1970s and 1980s, concurrent with Dell Hymes' formulation of the term "communicative competence". This marked a progressive stride in language pedagogy, although the realm of intercultural communication had yet to emerge within this phase. Brown (2000, p. 86) aligns in acknowledging that the novel approach to foreign language education deviated from the conventional paradigm of language acquisition, which centered

on rote memorization of vocabulary governed by grammatical structures, and the pursuit of linguistic analogues in the target language.

Bennet (1997, p. 16) aptly likened the outcome of this approach to a 'fluent tool,' an individual capable of articulating and generating discourse in a foreign tongue, yet lacking a grasp of the social and philosophical underpinnings inherent in the speech. To circumvent this, a realization dawns that language, though an instrument of communication, concurrently functions as a tool of perception and cogitation. The contours of prosperous English language communication, as depicted by Gondová (2011, p. 49), extend beyond mere grammatical correctness and comprehensibility in context. The adept speaker must adroitly navigate communicative predicaments, demonstrating acumen in wielding both verbal and non-verbal modes of expression.

In the epoch of the 'global age,' the paradigm of communication has undergone a profound metamorphosis, evolving from the mere transmission of facts and ideas to the endeavor of being heard figuratively, encapsulating the entitlement to voice individual opinions and stances (Kramsch, 2014, p. 407). Dilemmas in cross-cultural communication between divergent cultural cohorts may emanate from a dearth of acquaintance with each other's cultural milieu or the conspicuous absence of specific constituents within one cultural sphere (Cakir, 2006, p. 1). This accentuates the contemporary emphasis on learning English as extending beyond mere grammar and lexicon acquisition. Communicative competence engenders not only proficiency in what to convey to whom but also discernment in the nuanced articulation tailored to distinct contexts.

Intercultural Awareness in Foreign Language Learning

Intercultural awareness refers to the ability to recognize, appreciate, and respect cultural differences. It involves developing knowledge about various cultural practices, beliefs, values, and communication styles. This awareness enables individuals to navigate cultural encounters and engage in meaningful intercultural interactions. In the context of foreign language learning, intercultural awareness goes beyond mere linguistic competence and encompasses a deeper understanding of the target language's culture.

Chen and Starosta (2000, pp. 45 – 80) discuss the importance of intercultural awareness for foreign language learning. They can be summarized as follows:

1. **Effective Communication:** Intercultural awareness enhances effective communication by promoting sensitivity and adaptability. Language learners who possess intercultural awareness can interpret and respond to cultural cues appropriately, leading to smoother and more successful interactions.
2. **Cultural Understanding:** Learning a foreign language without understanding its cultural context can result in misinterpretations and misunderstandings. Intercultural awareness enables learners to grasp the underlying cultural nuances, enabling a more accurate interpretation of language use.
3. **Empathy and Open-mindedness:** Intercultural awareness fosters empathy and open-mindedness towards diverse perspectives. It encourages language learners to appreciate different cultural viewpoints and challenges stereotypes, thereby promoting cultural sensitivity and tolerance.
4. **Building Relationships:** By demonstrating intercultural awareness, language learners can establish stronger connections with native speakers of the target language.

Understanding cultural norms and customs allows for meaningful and respectful engagement, thereby nurturing authentic relationships.

5. **Enhancing Language Proficiency:** Intercultural awareness complements language proficiency by providing context and depth to language use. It facilitates the development of a culturally appropriate and nuanced communication style, improving overall language proficiency.

Hight-Context and Low-Context Cultures Communication

Intercultural communication is influenced by divergent communication paradigms inherent to varying cultural contexts. Achieving efficacious intercultural communication necessitates a comprehensive grasp of these disparities and their underlying origins. One of the ways to attain such comprehensive understanding is through the conceptual framework of *high-context* and *low-context* cultures, a construct first mentioned by American anthropologist Edward T. Hall in his work *The Silent Language* from 1959. Hall categorized cultures into these distinct typologies based on their prevailing modes of communication. In the discourse of *high-context cultures*, the conveyance of information transpires implicitly, imbued with implicit cues and contextual subtext. Conversely, *low-context* cultures prioritize explicit articulation of information (Hall, 1976, p. 91). The *high-context* and *low-context* cultural framework equips individuals with an analytical tool to decipher the intricate tapestry of cultural communication patterns. Comprehending these cultural communication dynamics fosters enhanced intercultural competency and facilitates meaningful engagement across cultural boundaries. In embracing Hall's typology, individuals and entities are better poised to navigate the intricacies of global interactions, enriching their cross-cultural interactions with nuanced awareness and adept adaptability.

Hall's model of high-context and low-context cultures is further elaborated to a great extent by Erin Meyer, an American author on business intercultural communication. In her book *The Culture Map* (2016, p. 39), she defines the difference in communication between *high-context* culture and *low-context* cultures as the following:

- a) *high-context* cultures: Effective communication is sophisticated, nuanced and multidimensional. Messages transcend mere verbal utterances, encompassing implicit undertones. Communication frequently hinges on inferred meanings rather than overt articulation.
- b) *low-context* cultures: Effective communication is characterized by precision, simplicity, and transparency. Messages are conveyed and comprehended at their surface level, embracing clarity. The repetition of information is valued when it contributes to the lucidity of communication.

The countries with *high-context* cultures include e.g. Japan, Korea, Indonesia, Saudi Arabia, Mexico, France, Argentina, Russia etc. Long shared history is a typical feature of high-context countries. Apart from that, the vast majority of the population shares the same ethnic origin, language and religion. Japan is considered as the country with the *highest-context* of all the above-mentioned. On the other hand, countries such as the US, Netherlands, Denmark, UK, Germany or Poland belong to the countries with low-context culture. The US is the country with the lowest-context culture. A country characterized by an influx of immigrants from different countries around the world has the greatest ethnical, linguistic, and cultural diversity (Meyer, 2016, pp. 38 – 40).

On contrary of what is stated in the previous lines, there is one exception in countries and their *high-context* and *low-context* cultures. That is the way of expressing disagreement or criticism. Some countries can be placed in the opposite communication style. The USA, UK and Canada belong to the *high-context* countries and Russia is the *low-context* country in terms of providing negative feedback (Meyer, 2016, p. 67).

Ripmeester (2011) created the Anglo-Dutch Translation Guide based on the theory of communication in *high-context* and *low-context* cultures. 28 phrases have been chosen to point out the differences between what is said and what is meant in different cultures. To illustrate, here are three examples:

What the British say	What the British mean	What the Dutch understand
<i>With all due respect....</i>	<i>I think you are wrong.</i>	<i>He is listening to me.</i>
<i>I was a bit disappointed that...</i>	<i>I am very upset and angry that....</i>	<i>It does not really matter.</i>
<i>I am sure it's my fault.</i>	<i>It's not my fault.</i>	<i>It's his fault.</i>

Table 1: Anglo-Dutch differences
Source: Ripmeester, 2011

As can be seen in the table above, the communication style across cultures may vary.

Methodology and Data Analysis

The aim of the research part is to determine to what extent are students able to interpret chosen culturally loaded phrases. The research sample consists of 300 students at a technical university, the University of Zilina. Respondents were given a written test/ survey via the on-line platform - socrative.com. The tests were administered in 1 sitting. The time was not restricted. The students' answers are further analysed on the scale from agreement to disagreement. Responses are authentic, neither grammatically, nor formally corrected. Students are referred to as numbers, names are not mentioned.

Respondents were asked to decode the meaning of 3 phrases taken from *Nanette Ripmeester Anglo-Dutch Translation Guide* (2011). The phrases were applied as a part of utterances. The students were informed about a hypothetical place of these three utterances – the United Kingdom. To make the survey more uniform and precise, the phrases were put into the context of a workplace.

The following phrases were elaborated on:

- A. *'It is rather short'* - used to express an opposite opinion.
- B. *'I see where you are coming from'* - to understand the reason why a person has a particular opinion, although they do not have the same opinion.
- C. *"Well, in my opinion"* – a solution-focused argument, that softens the disagreement.

It can be observed that in all cases it is an indirect disagreement. Students were not given any options. They were asked to write the meaning in their own words. The method of qualitative research was used. After conducting the research, the answers were classified into 4 groups:

- a) agreement,
- b) disagreement,
- c) do not know,

- d) no answer/ no relevant answer.

The first survey question was as follows:

Situation A:

The team leader Benjamin orders one of the subordinate employees, John, to write a report on financial indicators during the last month. After reading it, Benjamin states: "IT'S RATHER SHORT" (neutral tone, no gestures). What does Benjamin mean?

The results are the following:

- a) agreement – 83 students → 30 %
- b) disagreement – 167 students → 60 %
- c) do not know – 6 students → 2 %
- d) no answer/ no relevant answer – 22 students → 8 %

Situation B:

John participated in a team meeting to discuss financial indicators during the last month. John takes part in the discussion but his colleague, Mark, interrupts him and says: "I SEE WHERE YOU'RE COMING FROM..."(neutral tone, no gestures). What does Mark mean?

The results are the following:

- a) agreement – 39 students → 12 %
- b) disagreement – 145 students → 48 %
- c) do not know – 114 students → 38 %
- d) no answer/ no relevant answer – 6 students → 2 %

Situation C:

John is participating in a team meeting to discuss financial indicators during the last month. John proposes his idea, and his colleague Peter says: "WELL, IN MY OPINION..." (neutral tone, no gestures). What does Peter mean?

The results are the following:

- a) agreement – 132 students → 44 %
- b) disagreement – 135 students → 45 %
- c) do not know – 10 students → 3 %
- d) no answer/ no relevant answer – 23 students → 8 %

Conclusion

It can be assumed that European companies will be increasingly asked to deal with problems of cultural diversity, such as tensions and issues as a result of the lack of knowledge about differences; efforts to express them in order to emphasise their own identity; the perpetuation of negative attitudes; stereotypes concerning others/people. Language is a natural cultural phenomenon. Foreign language learning must reflect on the above-mentioned possible interferences. The importance is barely attributed to the way of expressing agreement or disagreement in the English language. Undoubtedly, appropriate approaching, decoding and communicating in these situations, may be considered a part of the intercultural awareness of a person. The present study uses data obtained from the survey conducted on students of a technical university in Slovakia, the University of Zilina. The object of the investigation was

the interpretation of three culturally loaded phrases. The students were asked to decode three culturally loaded phrases given in possible workplace situations. The research results show the inability of participants to fully recognise the sociolinguistic aspects of the given communications extracts. The highest percentage of correct answers was 60 % (in situation A). The other two situations were fully understood by 45 % (situation C) and 48 % (situation B). The empirical data confirms the need for culture in foreign language education. The research sample for this article was rather limited. However, the phrases may be extensively elaborated on for further research, either for qualitative analysis or as a basis for audiovisual dialogues.

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Why Do Secondary School Pupils in Wales Choose to Study a Modern Foreign Language?

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This paper reports on research examining why pupils choose to study a Modern Foreign Language at examination level in Wales. The Modern Foreign Language (MFL) is the third language, at least, for pupils in secondary schools in Wales. Pupils who attend Welsh-medium schools are fluent in both Welsh and English with pupils who attend English-medium schools having varying competence in Welsh. Many of the latter pupils are learning two Languages Other Than English simultaneously, (the MFL and Welsh), (Dörnyei and Al-Hoorie, 2017, Fukui and Yashmina, 2021)). 860 pupils in 10 secondary schools were given questionnaires to complete and asked to provide their reasons for choosing to study an MFL as one of their GCSE subjects. The reasons provided were mainly to do with extrinsic motivations, (Parrish and Lanvers, 2018). 18% of the pupils in these 10 schools had chosen to study an MFL for their GCSEs, ranging from 2% to 37% in different schools. However, 59% of them felt that an MFL would be useful for their future, despite the dominance of English, (Lanvers and Graham, 2022). The implications of adopting a plurilingual approach and teaching an international language in primary schools, in line with the new Curriculum for Wales, (2022), will be discussed in terms of increasing the number of pupils choosing to study MFLs at examination level. This could have implications for other bilingual contexts where a Language Other Than English is taught as an additional language, (Clayton, 2022).

Keywords: MFL, Motivation, Additional

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Introduction

This paper shares part of the data collected from a larger study examining **Factors influencing take up of Modern Foreign Languages at GCSE**. The data for the project were collected from 860 pupils in Years 8 or 9 from 10 secondary schools in Wales between April and June 2022. This paper will focus on the reasons why these pupils chose to study a Modern Foreign Language (henceforth referred to as MFL) as one of their subject options at GCSE. A brief background to the teaching and learning of MFLs in Wales will be given before referring to current research on motivation to learn additional languages. The language background of the pupils in this study will then be described before highlighting the extrinsic and intrinsic motivations behind these pupils' decision to continue to study an MFL at examination level. Lastly, the implications of adopting a plurilingual approach and teaching an international language in primary schools, in line with the new Curriculum for Wales, (Welsh Government, 2022b), will be discussed in terms of increasing the number of pupils choosing to study MFLs at examination level.

Background to the Teaching and Learning of MFLs in Wales

A Modern Foreign Language is compulsory for pupils in Wales at Key Stage 3, i.e., for pupils in Years 7-9 (11–14-year-olds), (Welsh Government, 2008). It is noted in the 2008 National Curriculum for Modern Foreign Languages:

Throughout Key Stage 3 pupils should be given the opportunity to learn how to use and understand at least one modern foreign language by developing the skills of oracy, reading and writing. (bold added by the author), (Welsh Government, 2008:12)

The new Curriculum for Wales (Welsh Government, 2022b) aims to enable learners to 'communicate effectively using Welsh, English and international languages.' However, pupils do not always study an MFL for three years as pupils in some schools choose whether they wish to continue studying an MFL in year 8. This means that many pupils in these schools finish studying an MFL after only two years of study. Pupils in other schools make their subject choices in Year 9, after three years of MFL study. In the present research, pupils in 2 out of the 10 schools made their GCSE choices in Year 8, with pupils in one of these schools having the highest uptake of all the schools in this study. According to Speck (2021), however, choosing to study languages in year 8 is one of the 9 obstacles facing language teaching in England.

Due to the declining numbers of pupils studying MFLs at GCSE level in Wales, government initiatives have aimed at increasing uptake. The *Global Futures* document, "A plan to improve and promote modern foreign languages in Wales" was published in 2015, (Welsh Government 2015). Its aims were:

1. To increase the number of young people choosing to study modern foreign language subjects at all levels,
2. To improve the teaching and learning of modern foreign languages, with the intention of building towards a 'bilingual plus 1' system where the formal teaching of an MFL will begin at year 5,
3. To maintain and improve on the attainment levels presently being achieved in modern foreign languages subjects. (Welsh Government, 2015:3).

The strategic aims of the updated *Global Futures* document published in 2022 (Welsh Government, 2022c) do not specifically refer to uptake of languages at examination level. However, it is included as a strategic action for the first strategic aim, “Continue to address the challenge regarding take-up of modern foreign languages in secondary schools.” Increasing uptake is referred to as a ‘challenge’ as the evaluation of *Global Futures* (Welsh Government, 2022a) found that it had not been possible to realise the aim of increasing the number of pupils studying languages due to issues like narrow options boxes choices. Indeed, in the present study, the limitations of the option boxes were found to be the biggest factor preventing pupils from taking an MFL for their GCSEs, (Jones, in press).

Government initiatives, seen in the updated *Global Futures* document (Welsh Government, 2022c) and in the new Curriculum for Wales (Welsh Government, 2022b) now “support multilingualism” by recognising that many young people are multilingual and live in a multilingual world. Indeed, the MFL is the third language, at least, for pupils in secondary schools in Wales.

Research on Motivation to Learn Additional Languages

This third language for the pupils in our study is a Language Other Than English, (LOTE). Dörnyei and Al-Hoorie (2017) noted that the theoretical frameworks developed over the previous 25 years were based on learning English as an additional language and they questioned whether such frameworks were valid when considering the learning of LOTEs. They developed their “L2 Motivational Self System” framework, consisting of three elements which affect learners’ motivation:

- ❖ The ideal L2 self, i.e., the kind of L2 user the learner would ideally like to be in the future,
- ❖ The ought-to L2 self, i.e., what learners believe they ‘ought’ to do in order to meet the expectations of others,
- ❖ The L2 learning experience, (e.g., the impact of the L2 teacher, the curriculum, the peer group, and the perception of success).

It is interesting to note that motivations to do with careers, jobs and future opportunities are not referred to explicitly in these three elements despite an ‘instrumental’ motivation for additional language learning having been reported in the literature since Gardner and Lambert’s work in 1959. However, both instrumental and integrative motivations are deemed to be included in the L2 Motivational Self System, (Oakes and Howard, 2022).

Dörnyei and Al-Hoorie (2017) point out that the motivation for learning more than one language at a time has not received much attention from researchers. In addition, they note that when the research has examined the learning of more than one language, Global English is always one of the target languages in question. They do not discuss examples of learners who already speak English, as this “poses its own unique issues that are outside the scope of this paper” (Dörnyei and Al-Hoorie, 2017:457).

The learners in the present study are speakers of English, many of whom are learning two Languages Other Than English within the school setting. Bui (2023) has argued that the motivation to learn an L2 is different from the motivation to learn an L3:

L3 motivation differentiates itself from L2 motivation, as it is likely influenced by several factors.... [In] the educational context, L3 learning is often a personal choice

of interest, while an L2 is usually a compulsory school subject. There is quite likely a qualitative difference between motivations for these two types of languages. (Bui, 2023:4)

This quotation describes the context of the learners in the present paper as the pupils learn Welsh as a compulsory subject but choose whether to continue with their study of an MFL at the end of Key Stage 3. The main aim of this paper is to consider the motivation of pupils to learn the L3 only, (the MFL) and therefore Parrish and Lanvers’ (2018) article offers interesting insights into the motivation of secondary school pupils in England to study MFLs.

Their study investigated both student motivation to study a modern foreign language in English secondary schools, and the decisions made by school-level policymakers regarding the teaching of the subject. They argue that:

the decision [for students] to learn a language is the result of a particularly complex interplay of factors: student achievement and perceived ability, national and school MFL policy, parental and family attitudes and perceived ‘usefulness’, socio-political attitudes to MFL, and personal motivation. (Parrish and Lanvers, 2018:282)

Parrish and Lanvers (2018) presented a table outlining ‘The self-determination continuum’ which includes both Extrinsic and Intrinsic motivations for language learning.

As seen in the Table below, Extrinsic motivation has 3 subsections:

- External (Compliance, seeking external rewards, avoiding external punishments),
- Introjected (Self-control, allocation of internal rewards and punishment),
- Identified (personal importance, conscious valuing of outcome)

Intrinsic motivation included Interest, enjoyment and inherent satisfaction.

self-determination continuum and modified SRQ-A responses.

Amotivation		Extrinsic motivation			Intrinsic motivation
Non-regulation	External	Introjected	Identified	Intrinsic	
Lack of intent, lack of value placed on outcome	Compliance, seeking external rewards, avoiding external punishments	Self-control, allocation of internal rewards and punishment	Personal importance, conscious valuing of outcome	Interest, enjoyment, inherent satisfaction	
	Because that’s what I’m supposed to do	So my teachers will think I’m a good student	Because I want to understand the subject	Because it’s fun	
	Because I will get in trouble if I don’t	Because I’ll feel bad about myself if I don’t do well	Because it’s important to me	Because I enjoy it	
	Because I might get a reward if I do well	Because I will feel proud of myself if I do well			

Table 1 Extrinsic and Intrinsic Motivations (from Parrish and Lanvers, 2018:285)

It was decided that these headings would provide a preliminary framework for a thematic analysis of this study’s findings.

Language Background of the Pupils in This Study

As noted previously, the data for this study were collected from 860 pupils in 10 secondary schools in Wales. The first question on the questionnaire distributed to the pupils asked which language or languages they spoke at home:

“Which language(s) do you speak at home (usually)?”

Of the 151 pupils in the study who had chosen an MFL:

- English only was noted by 111 pupils as the language they spoke at home, (5 of these attended Welsh-medium schools)
- Welsh and English were noted by 14 pupils,
- Welsh only noted by 3,
- Other languages (either noted alongside English or noted as the main language only) – 17. (Other languages included Urdu (2), Mandarin, Tagalog, Polish, Romanian, French, Spanish, Italian, Hungarian, Dutch and German).
- No data were given by 6 pupils.

129 pupils out of a total of 151 pupils who had chosen to study an MFL as a GCSE subject in these 10 schools were learning both Welsh and a Modern Foreign Language, (i.e., two Languages Other Than English) at school. The other 22 pupils were either receiving their education through the medium of Welsh or spoke Welsh at home; they cannot be described as learning Welsh at school as an additional language.

Motivations of Pupils to Study an MFL

A process of thematic analysis was used to identify and analyse patterns in the data, (Byrne, 2022). The responses provided to the question:

“Why did you choose to take a Modern Foreign Language at GCSE?”

by the 151 pupils who had opted to study an MFL were transcribed and the following words were highlighted to correspond to the following codes:

- Enjoyment (enjoyable, enjoyed, love, fun)
- Interest, (interested, intrigued by)
- Being easy, (good/decent at it)
- Useful, (helpful, help me, beneficial, benefit me)
- Career, (jobs, open doors, opportunities, money, future, university)
- Desire to learn languages,
- Travel, (name of countries, move to, abroad)
- Influence of the teacher

These codes were then organised around themes (based on Parrish and Lanvers, 2018 and Dörnyei and Al-Hoorie, 2017):

- Extrinsic motivation, (Useful, Career, Travel,),
- Intrinsic motivation (Enjoyment, Interest, Desire to learn languages, (Parrish and Lanvers, 2018),
- The L2 / L3 learning experience (Being easy, Influence of the teacher, (Dörnyei and Al-Hoorie, 2017).

The number of times these words occurred in the respondents' replies was counted to see which themes were more prevalent. More than one theme was identified in some responses so all were counted. Table 2 shows the number of times the following themes were mentioned by the pupils.

<u>Extrinsic motivation</u>		<u>Intrinsic motivation</u>		<u>L2 / L3 Learning experience</u>	
Career	40	Enjoyment	14	Being easy	14
Useful	35	Interest	25	Influence of the teacher	5
Travel	28	Desire to learn languages	33		

Table 2 Motivations for learning an MFL

Reasons to do with career, job opportunities or their future were noted by 40 of the pupils. Some examples of replies included:

- “Because it would open my options for future jobs etc”
- “could open a lot of doors for me”
- “I want to have a job including modern Foreign Language”
- “Because I want to become a medical professional”
- “opens up more jobs”
- “I felt it would give me more opportunities in life”
- “I want a highly educational job”
- “to get better job opportunities”

It is clear that these young people recognise the importance of being able to speak another language in the job market. It is possible that initiatives such as Routes into Languages (Routes into Languages | Promoting the take-up of languages and student mobility) have influenced the perception of languages being valued in different careers. Routes into Languages Cymru is a project that works in schools across Wales to promote the uptake of languages. They provide resources such as Career Flyers which highlight 23 different careers where speaking a foreign language would be beneficial, (<https://routesintolanguagescymru.co.uk/>).

The Modern Foreign Languages Mentoring Project should also be mentioned here as it has influenced many pupils to continue studying an MFL for their GCSE. This project's two objectives are: “to increase the number of pupils taking one or more modern foreign languages at GCSE and to broaden pupils' horizons by highlighting career and mobility opportunities available to those with modern foreign languages,” (Blake and Gorrara, 2019:31). It appears that initiatives such as these can have an impact on pupils' decision to carry on with languages. It can also be argued that the pupils are aware that speaking French or Spanish might give them a competitive edge in the job market, as suggested by Siridetkoon and Dewaele's study (2018).

Linked to the theme of careers was the theme of being beneficial to the learners, with 35 pupils noting the words, ‘useful,’ ‘beneficial’ or ‘helpful.’ Some examples of their responses include:

- “Because it is a usefull (*sic*) skill”
- “I think it would be helpful”
- “I thought it would be useful for me later in life”

“Because I wanted to learn a useful language”
 “It will be beneficial for my future”

As can be seen in the last example, some pupils linked the theme of being useful to the importance of MFLs in the job market and for their futures. An instrumental motivation seems an important factor why pupils in Wales decide to carry on with the study of a modern foreign language. Indeed, this was seen in the responses to question 5 in the pupil questionnaire with 59% of the pupils replying ‘Yes’ to the question:

“Do you think a Modern Foreign Language will be useful to you in the future?”

This figure of 59%, who thought the language would be useful to them in the future, is much higher than the 18% who chose to continue studying the language. (Some reasons for this are provided in Jones, in press).

In the post-Brexit era, and living in the shadow of English, (Dörnyei and Al-Hoorie, 2017), it is pleasing to note that many young people continue to see the value of learning Languages Other Than English. It is worth remembering that Lanvers and Graham (2022:223) noted that pupils who already speak English are an ‘especially challenging case’ when referring to their motivation to learn additional languages and Clayton, in the Australian context, refers to this as a ‘challenging task,’ (Clayton, 2022:361).

Reasons to do with wanting to travel were given by 28 pupils. This motivation is linked to an ‘External’ Extrinsic Motivation of ‘seeking external rewards’ as noted by Parrish and Lanvers, (2018:285). This reason also relates to an ‘Identified’ Extrinsic motivation to do with ‘Personal importance, conscious valuing of outcome.’ The following reasons were provided by the pupils:

“useful for job opportunities or going abroad”
 “I would like to travel the world”
 “I have family in Spain”
 “want to live in Spain”
 “I go to France every year twice”
 “I am interested in language and travelling”
 “Because when you learn 1 language you can travel to places and get by”
 “I want to move abroad”
 “Because I would like to travel”
 “Because I want to move to France when I grow up”

Dörnyei and Al-Hoorie, (2017:459) link this motivation to the “powerful 21st century process of migration,” because learners “plan to move” to a different country.

The desire to learn languages *per se* was identified in the responses of 33 pupils. Some responses included:

“I like learning about different languages”
 “I want to learn another language”
 “I enjoy the idea of speaking a foreign language”
 “I love learning about other cultures and learning their languages”
 “To learn a 2nd language”

“I would like to be fluent in French”

“I find languages very interesting and want to learn many more”

It seems that many pupils liked learning languages for its own sake. This motivation has been placed under an Intrinsic motivation in Table 2 above as it is linked to an ‘inherent satisfaction,’ (Parrish and Lanvers, 2018). This motivation also corresponds to the first element of the L2 Motivational Self-System, which refers to the type of L2 user that the learner would ideally like to be in the future, (Dörnyei and Al-Hoorie, 2017).

25 pupils mentioned that they were interested in the language taught and supplied some of the following reasons:

“because it is interesting”

“I am interested in the subject”

“because I am happy and interested in Spanish”

“I find the subject interesting”

Dörnyei and Al-Hoorie (2017) refer to Gardner's integrative motive which contained a component termed as an ‘interest in foreign languages.’ This is an element which the new Curriculum for Wales (2022b) wishes to develop in the future partly by introducing an international language in the primary school.

Reasons to do with enjoyment of the language were mentioned by 14 pupils as was the fact that the students found the subject easy. While Parrish and Lanvers’ table labels enjoyment of the language as an Intrinsic motivation (along with Interest and Inherent Satisfaction), it could be argued that enjoyment of the language is also linked with the L3 learning experience of the pupils (Dörnyei and Al-Hoorie, 2017). The perception of difficulty or ease of language learning is also linked to the L3 learning experience.

Pupils mentioned:

“I enjoy learning a new language”

“I enjoy the subject”

“I find it fun and easy”

“dwi’n joio’r iaith Ffrangeg” (*I enjoy the French language*)

“I’m good at it”

“I find it quite easy”

“I also enjoyed it and thought I was good at it”

“it is easy to learn”

“learning languages is easy for me”

“I’m good at it / better than other subjects”

These examples show that some pupils link enjoying the subject with the fact that it is easy for them. Many authors and reports have mentioned the fact that students find languages difficult and that this prevents pupils from studying them (Coffey, 2018; Rodeiro, 2017; British Council, 2019). In this study, finding the subject easy is a reason for continuing to study it. Ofsted (2021) has pointed out that it is important for pupils to feel successful in their learning and are clear about how to make progress. Taylor and Marsden’s study (2014: 913) also highlighted the importance of pupils’ perception of the subject’s difficulty or ease in their decision whether to choose it or not: ‘Whether the class was perceived to be easy or

hard significantly predicted language uptake in our study.’ In the current research, it was found that 218 of the 860 pupils felt that the subject was difficult and that this constituted a barrier for them to study the language for their GCSEs, (Jones, in press).

The positive influence of the teacher was mentioned by 5 pupils, e.g.:

“because sir is a awesome (*sic*) teacher”

“I like the teacher”

“I enjoy the subject and I like the teachers”

The influence of the teacher was not a major factor in this study, therefore.

Conclusion

Bearing in mind that the main reasons provided by the pupils in this study for continuing to study an MFL were to do with:

- careers,
- the benefit of languages for both jobs and travel,
- and the desire to learn languages for its own sake,

it is pertinent to ask whether adopting a plurilingual approach and teaching an international language in primary schools, in line with the new Curriculum for Wales, (2022b), will have an impact on increasing pupils’ motivation to study MFLs at examination level.

The Curriculum for Wales emphasises that:

[the] *plurilingual* approach is intended to ignite learners’ curiosity and enthusiasm and provide them with a firm foundation for a lifelong interest in the languages of Wales and the languages of the world”. (Welsh Government, 2022b: no page number)

It remains to be seen whether a focus on ‘curiosity,’ ‘enthusiasm’ and ‘interest’ in languages will lead to more pupils choosing to continue with the study of MFLs. While enjoyment and interest were important factors for the pupils in this study, the data also point to the importance of continuing with initiatives that highlight the benefits of languages in terms of future opportunities. Ushioda (2017), however, does not believe that focussing on an instrumental motivation will lead to increased uptake:

such an [instrumentalist] view (and its associated ideologies and discourses) may communicate a somewhat restricted set of motivations for learning languages in general that will not necessarily be helpful in promoting uptake or enhancing societal and individual engagement with language diversity. (Ushioda, 2017:471)

Current research has not yet offered conclusive evidence of the benefits of learning foreign languages in primary schools in terms of increasing motivation or attainment, (Bolster, 2009) but has been reported to be better at fostering enthusiasm for learning languages, (Myles, 2017).

When considering Dörnyei and Al-Hoorie’s (2017) theoretical framework for learning Languages Other Than English, it is important to point out that despite the global dominance of English, according to this research, English-speakers do see the value of other languages

for the job market, for travel and for the intrinsic value of language learning per se. Consideration must also be given to the fact that the pupils in this study are learning two Languages Other Than English in the school context and Bui (2023) argues that the plurilingual approach, as proposed by the new Curriculum for Wales, can create positive motivation towards the learning of both the L3 and the L2:

... teachers must appreciate the fact that L3 learners do not start from scratch. Therefore, teachers should draw students' attention to the potential advantages of prior L2 learning experiences. Teachers should provide guidance for developing approaches aiming at active cross-referencing between the L3 and other NNLs to identify similarities. This applies not only to the teaching, but also to the learning materials, where comparisons of L2 and L3 can be made. (Bui 2023:8)

These suggestions correspond to the guidelines of the Curriculum for Wales, (Welsh Government, 2022b) to enable learners to “transfer what they have learned about how languages work in one language to the learning and using of other languages.” Further research is needed to see whether the plurilingual approach will increase pupils' motivation to learn both Welsh, (the L2) and the MFL, (the L3) in the Welsh context.

This present paper has focussed on motivation to learn an L3 in the specific context of Welsh secondary schools and has contributed to a field that is presently lacking in research, as noted by Siridetkoon and Dewaele (2018:314), “Motivation research on L3 is scant compared to the large volume of English L2 motivation research.” The multilingual nature of Wales can provide a rich context for further research into motivation to learn an L2 and an L3 simultaneously and for further research into the growing field of motivations to learn Languages Other Than English.

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A Preliminary Framework for Teaching Strategies to Chinese as a Foreign Language (CFL) Students for Character Learning

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

Learning to read and write Chinese is seen as one of the most challenging aspects for Chinese as a foreign language (CFL) students, particularly those whose first language has an alphabetic writing system. The selection and orchestration of learning strategies is understood to be a key part of successful language learning and studies have investigated some of the strategies that CFL students employ. Some of these have suggested the need for strategy instruction, but there is little guidance for teachers who want to support their learners. This paper reports on a mixed-methods study investigating the range of strategies employed by CFL students to develop a framework for instruction. Interviews were conducted with 12 students to gain a deeper understanding of how and why students engaged in character learning outside the classroom. The qualitative data were then used in the design of a survey investigating strategy use by different types of learners. Responses were received from 117 students with a range of first languages and at different levels of Chinese learning experience and proficiency. Quantitative analysis of the survey data reveals the most used strategies by a highly motivated group of learners. A preliminary framework for strategy instruction is proposed based on the key findings.

Keywords: Chinese Characters, Learning Strategies, Chinese as a Foreign Language

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1. Introduction

Vocabulary acquisition is the foundation of language learning (Alderson, 2005), and since characters form the building blocks of vocabulary in Chinese, acquiring them is necessary to be literate. To pass the most advanced level of the Chinese proficiency test (HSK 6), learners must be able to recognise at least 5,000 characters (Hanban, 2019). The nature of its writing system is usually the main reason that Chinese is considered one of the most difficult languages for learners whose mother-tongue has an alphabetic script (Samimy & Lee, 1997; Hu, 2010). In addition to the quantity of characters that must be memorised, the logographic writing system presents several key challenges for learners including the complexity of the graphic configuration of Chinese characters (Ehrich et al, 2013), the lack of obvious sound-script correspondence (Ehrich et al, 2013; Shen, 2005), and the large number of homophones (Li et al. 2012).

As Chinese is considered a difficult language to learn (Samimy & Lee, 1997; Shen, 2005), it would seem to be an imperative for researchers to develop more knowledge and understanding of how learners master this challenging language. In the next section, the literature concerning Chinese character learning strategies is discussed in the wider context of second language vocabulary instruction and vocabulary learning strategies.

2. Literature Review

2.1 Second Language Vocabulary Instruction

Despite the widely held belief that second language learners could learn and consolidate vocabulary knowledge merely through extensive reading (Krashen, 1989), the resurgence of interest in vocabulary teaching in the 1990s (Cohen, 1990; Nation, 1990; Schmitt, 1997 and 2000) has shown that that explicit vocabulary instruction is desirable. There has also been an increased awareness of the role of learner strategies in successful vocabulary learning (Moir & Nation, 2008; Oxford, 2017) and calls for explicit vocabulary learning strategy (VLS) instruction (Cohen & Dornyei, 2002; Takač, 2008; Oxford, 2017). Given the specific challenges of vocabulary learning for CFL learners, both explicit vocabulary instruction and VLS instruction would seem even more important.

2.2 Vocabulary Learning Strategies (VLSs)

A significant amount of research on VLSs has focussed on developing taxonomies of strategies (Ahmed, 1989; Gu & Johnson, 1996; Schmitt, 1997 and 2000; Cohen & Dornyei, 2002). Two important distinctions are between cognitive and metacognitive strategies, and mnemonic and rote-learning strategies (Gu & Johnson, 1996; Schmitt, 1997 and 2000). Metacognitive strategies involve the planning and organisation of learning, what some language learning strategy (LLS) researchers have combined with the concepts of autonomy and agency to produce the term 'self-regulation' (Tseng, Dornyei, & Schmitt, 2006, Dornyei & Ryan 2015, Oxford, 2017). In terms of cognitive strategies, much of the early vocabulary learning research, both in the L1 and L2, focussed on the memorisation and retention of new words, leading to debates on the relative effectiveness of mnemonic and rote-learning strategies. Theories of depth of processing (Craik & Lockhart, 1972; Craik & Tulving, 1975), suggest that rote-learning strategies may not be as effective as deep-learning strategies which involve more elaborate processing. Deeper strategies include forming associations with items already stored in the long-term memory (Cohen & Aphek, 1981) and using the keyword

method (Atkinson, 1975; Pressley, Levin & Miller, 1982; Levin et al, 1992; Hulstijn, 1997). Baddeley (2015) suggest that, although there are limitations to the depth of processing theory, mainly in terms of the inability to measure depth of processing, as a rule of thumb, the more elaborate the processing, the longer the retention. Moreover, strategies which involve testing rather than reviewing will increase the chance that an item will be remembered, as recalling an item leads to better retention than presenting it again (Baddeley, 2015).

The current trend within LLS research is to move away from comparing specific strategies but rather focus on the way that students orchestrate a cluster of strategies for a specific task (Nassaji, 2003, Griffiths, 2013, Cohen, 2014, Oxford, 2017). The evidence from these studies suggests that rote-learning techniques feature strongly in the VLS-repertoire of the majority of EFL learners, while associative strategies are used by few students, and those students use them rarely. A study by Cohen and Wang (2018) shows that strategies can have different functions depending on whether they are used alone, in sequence or in clusters.

2.3 Chinese Character Learning Strategies

As noted by Grenfell and Harris (2015), there is a paucity of literature investigating learning strategies employed by CFL learners. The majority of the studies conducted have involved surveys to identify commonly used learning strategies by adult learners (Wang, 1998; Shen, 2005; Sung and Wu, 2011, Wang, Spencer & Xing, 2009) and young learners (Caceres-Lorenzo, 2015; Grenfell & Harris, 2015), and a few studies have focussed specifically on character learning (Yin, 2003; Shen, 2005; Sung and Wu, 2011; Grenfell & Harris, 2015; Mason and Zhang, 2017) These studies show that like EFL learners, CFL learners generally rely on rote memorisation strategies.

The reliance on rote learning is not surprising given initial training in character learning normally focusses on repeated writing of characters. Like school children in China, CFL learners are expected to spend significant time outside of the classroom on this activity. Even with the development of mobile technology which has more flexible and efficient strategies for character learning (Mason and Zhang, 2017), many learners still rely on traditional strategies such as repetition of the sound and memorising the stroke order (Kan, Owen & Bax, 2018). Learners who only depend on teachers to provide them information about Chinese learning are less likely to master the target language (Sung & Wu, 2011), while autonomous learners demonstrated better control over learning targets and learning strategies (Wang, 2016).

Understanding individual learner differences, particularly motivation, is crucial for understanding strategy use (see Rivera-Mills & Plonsky, 2007, for a review). Motivation is a complex construct and one that has been categorized and operationalized in many ways for second language acquisition research. The concept of the Ideal L2 Self (Dornyei and Ushioda, 2009) represents an individual's future vision of themselves as proficient users of the target language, the idea being that those who can imagine future success are more likely to invest the time and effort required to achieve it.

Understanding how successful learners select and apply strategies might help teachers help those who are less successful. In this context, this study seeks to answer the following questions:

- 1) What are the individual factors which influence the selection and use of strategies for the learning of Chinese characters?
- 2) What are the most used character learning strategies for students learning Chinese as a foreign language by different groups of learners?

In answering these questions, the authors aim to present a preliminary framework for strategy instruction.

3. Methodology

3.1 Mixed Method Research Approach

To answer the above questions, a mixed-methods approach was adopted. Qualitative methods were used to provide rich data and an in-depth understanding of the complexities and processes involved in strategy selection and use (Marshall & Rossman, 1999; Oxford, 2017), and to build an inventory of strategies to investigate further using a survey.

3.2 Qualitative Data Collection and Analysis

Semi-structured interviews were designed to explore learners' background, language learning experience, general approach to learning characters, and the types of strategies they employed. To obtain a better understanding of learners' implementation of strategies and any cognitive and metacognitive processes involved, at the end of each interview, a think-aloud task (Ericsson & Simon, 1987) was employed.

Convenience sampling was used to include a range of learners of different levels and experience. Following full ethical approval from the authors' institution, invitations to participate in the study were e-mailed to students who had a minimum of one years' experience of learning Chinese and who were learning to read and write Chinese.

A total of twelve interviews and verbal protocols were conducted by both researchers, either face-to-face or online via Skype, and recorded using a digital voice recorder. During the interview, participants were asked to share their learning experience in general, describe their overall approach to learning characters, and the types of resources they employed. A summary of the general themes of the interviews are provided in appendix 1.

The think-aloud task required participants to learn four new two-character words. After explaining the think-aloud process, the researchers gave the participants the opportunity to practice with one unfamiliar word. Following the practice, participants were given four unfamiliar words with their meaning and pinyin (the Romanization of the Chinese characters based on their pronunciation) and asked to memorise them following their usual study procedures. The process was audio-recorded, and the researchers took observational notes.

Immediately following the think-aloud task, the researchers encouraged participants to reflect on the process and probed them on various stages of the process. The verbal protocol, including instructions and example probes, is shown appendix 1. Participants were given the opportunity to ask the researchers questions before and after the interview and were also offered an opportunity for a follow-up interview to discuss any changes they had made to their approach to learning between interviews. Three participants accepted. The duration of

the interviews and verbal protocols varied from approximately 40 minutes to one hour. After each interview and think-loud protocol, the data were transcribed.

The data were analysed Independently by the two researchers to Identify key themes relating to factors influencing learners' selection and implementation of strategies. Appendix 2 provides a summary of the twelve learners' backgrounds in terms of experience of studying Chinese, approximate proficiency level and first language. The findings demonstrated four key factors which influenced the participants' choice and application of character learning strategies: learners' self-perceived learning styles, perceived effectiveness of strategies, attitude to technology and individual learning goals. These findings are discussed in more detail in section 5. A four-step process was identified in learning new characters: familiarization, memorization, recording and reviewing. These were included in the categorization of strategies for the questionnaire.

3.3 Quantitative Data Collection and Analysis

3.3.1 Questionnaire Design

The survey was divided into four main sections. Section 1 included demographic questions such as age, gender, nationality and mother tongue, as well as questions about proficiency level and reasons for learning Chinese. Section 2 focused on strategy use, employing insights from the qualitative research to build on previously published instruments (Shen, 2005 & Mason and Zhang, 2017), and using the literature on strategy taxonomy to inform the organisation (Schmitt, 1997 and 2000). A total of 78 strategies were included in the inventory: familiarization (18), memorization (33), recording (3), reviewing (11), planning and organising (7), social (6). Oxford's (1990) five-point scale was used to determine learners' frequency of use: 1=Never or almost never true of me, 2=Rarely true of me, 3=Somewhat true of me, 4=often true of me, 5=Always or almost always true of me. Section 3 was designed to identify learners with a strong visual learning style and used five items from the Perceptual Learning Style Preference Questionnaire (Cohen, Oxford and Chi, 2001 and Reid, 1984). Section 4 was designed to measure motivation in terms of 'Ideal L2 Self' using 5 items based on Dornyei and Chan (2013). The questionnaire was created using Jisc Online Survey.

3.3.2 Pilot Study

In December 2018, students in a university in China were invited to complete the pilot survey. Ten students completed the survey and no issues were identified.

3.3.3 Survey Distribution

In 2019, the survey link was distributed via two means. Firstly, it was shared via the Pleco Newsletter. Pleco is a Chinese dictionary app identified as widely used by learners of Chinese (Mason and Zhang, 2017). Secondly, staff at UK universities offering Mandarin Chinese instruction were invited to help distribute the questionnaire to their students, five agreed to do so. In total, 107 responses were received, and since the pilot survey was unchanged, the 10 responses from the pilot were included in the final analysis to give a total of 117 responses. However, as 20 respondents acknowledged that they were not currently active in learning to read and write Chinese characters, they were excluded from the analysis giving a final sample size of 97.

3.3.4 Analysis

Statistical analysis software SPSS was used to analyse the survey data. Some of the raw data were re-coded to enable analysis. Respondents had self-reported their reading proficiency levels according to 8 level descriptors adapted from the CEFR self-assessment descriptors for English (Council of Europe). These ranged from complete beginner to proficiency. Due to the relatively small proportion of respondents in the lowest and highest groups, the data were collapsed into three new groups: beginner, intermediate and advanced as summarised in figure 1.

Self-reported levels	Re-coded level
Zero to Post-beginner	Beginner
Pre-intermediate to Upper-intermediate	Intermediate
Advanced to Proficient	Advanced

Figure 1 - Recoding of reading proficiency levels

The five items measuring Ideal Future L2 self were collapsed into one variable 'Ideal L2 Self', and then data were re-coded into two groups, those with low motivation (scoring 1-3 on the scale) and high motivation (scoring 4-5). Twenty-one strategies were identified which were either deemed to require deeper processing through the formation of associations, and/or involved recall. These were combined into one variable called mnemonic strategies, shown in the full strategy inventory (appendix 3). Learners were grouped as high (4-5), medium (3-3.9) and low (1-2.9) in terms of visual learning style.

SPSS was used to generate descriptive statistics demonstrating the most used strategies by proficiency level, and inferential tests were performed to investigate potential differences between groups.

4. Findings

4.1 Demographics

Twelve participants took part in the interviews and think aloud. The majority were L1 speakers of English, and their levels ranged from post-beginner to advanced. The full list of participants can be seen in appendix 2.

The majority of the 97 survey respondents were male (n=62, 64%) and considered themselves as bilingual or multilingual (n=63, 65%). Ages ranged from 18 to over 80 years, with the majority in the 18 to 25 age group (n=37, 38 %) but a significant proportion aged 46 years or over (n=31, 32%). Respondents reported 24 different nationalities (24), and a broad diversity of linguistic backgrounds (20 different mother tongues). Some learners had been learning Chinese for less than a year (n=14, 14 %) while others had been learning for more than 10 years (n=27, 27 %). Most respondents received the survey link via the Pleco Newsletter (n=60, 62 %), 36 from a teacher (37 %) and one from a friend. In terms of reading proficiency, 16 % (n=16) of respondents were beginners, 65 % (n=63) were intermediate level, and 19 % (n=18) were classified as advanced. Most respondents (n=61, 62 %) agreed that they needed to be able to handwrite characters. Moreover, 85 respondents (88 %) agreed that being able to handwrite characters from memory helped them to recognise characters

more easily. The writing goal most important to the sample was being able to send text messages to friends and family on their phones with 79 respondents (82 %) agreeing they wanted to be able to do this.

In terms of their level of motivation, students scored highly on the measure of Ideal L2 self (mean=4.03, median=4, mode=4, SD=0.716), confirming that this self-selected sample were indeed highly motivated. The fact that the respondents are intrinsically motivated is supported by the fact that the most common reasons given for starting to learn Chinese were interest in the Chinese language (n=39, 42%) and interest in the Chinese culture (n=11, 11 %).

Seventy-two of the respondents were able to compare their reading and writing ability with their peers, with the majority (n=63, 88%) rating themselves as average or above average (n=63), and only 9 respondents (12 %) rating themselves as below average.

These learners relied heavily on learning apps to learn Chinese characters, with only 3 respondents never using apps to support their learning, and most respondents (n=79, 77 %) using apps some or most of the time. They had a positive attitude to using apps for character learning in relation to enjoyment (mean=4.12, median=4, mode=4, SD 0.78), efficiency (mean=3.74, median=4, mode=3.5, SD 0.85), and flexibility (mean=4.45, median=4.5, mode=5, SD 0.69). The 3 respondents never using apps were in the age groups 18-25, 26-35 and 80 or over. The most active app users were across all age groups.

4.2. What Are the Individual Factors Which Influence the Selection and Use of Strategies for the Learning of Chinese Characters?

In answer to research question 1 above, the findings of the qualitative analysis revealed four key factors: self-perceived learning styles, attitudes to technology, perceived effectiveness of strategies, learner goals, curriculum and environment. Each factor is summarised and illustrated below. The findings of the quantitative analysis are presented in section 4.3.

4.2.1 Self-Perceived Learning Styles

Although not prompted during the interview, four participants identified themselves as being a particular type of learner and discussed how that impacted their approach to character learning. This is best illustrated by P5 referred to herself twice as a ‘*verbal*’ learner and gave this as her reason for finding listening in Chinese easier than reading and writing. She stated twice that she was not a ‘*visual*’ learner and believed this was the main reason that she had ‘*always struggled*’ with writing, because in her words, ‘*you need to be a little bit visual in Chinese*’.

Throughout the interview and post-observation reflection, there was a strong sense of her struggle to overcome this perceived weakness. There was also frustration stemming from negative classroom experiences: she had initially tried to memorise the characters by writing them out repeatedly because that was what her peers did.

P11, the most advanced learner and proficient reader in the sample, appeared to be a strong visual learner. During the interview she says:

I think my brain does work in pictures. So when we were finding scripts in the bible, I would not remember what chapter, but I can remember where about on the page it is.

In terms of learning strategies, P11 mainly employed strategies relevant to her prime motivation, for example, reading Bible chapters in Chinese and checking the dictionary for the pronunciation and meaning of words and characters, listening to others reading the Bible and following them. At the beginning of her studies, P11 used traditional flashcards to help recognise characters. As an advanced learner who can recognize many Chinese characters already, she manages to learn new characters with relative ease.

P12 referred to himself as a ‘*practical learner*’, which signified that he learns better through communication. He believed he was improving his Chinese by engaging in authentic communication. When he first learnt Chinese at university, he learned through repetition and flashcards because he was taught to do so. However, he found these methods ineffective and uninspiring. His preference for ‘*learning through use*’ was evident in his description of how he frequently used WeChat for business and social purposes.

P5 showed a strong preference for social strategies. Peers and Chinese friends were often mentioned in relation to her strategy use. For example, her desire to communicate with others is exemplified in the quotation below:

I have a friend who has kind of become my Chinese dictionary. If I get a new word, I will send it to my friend and ask for a few sentences, then I will try to memorise that sentence.

Attitudes to Technology

P4 and P5 had contrasting attitudes to technology. Technology, particularly games, featured strongly in P5’s repertoire. She had abandoned repetitive character writing because she felt it ‘*was too boring*’, instead, spending time exploring online resources. Describing herself as a ‘*nineties*’ child’, that is a digital-native, she she found electronic learning ‘*more mentally stimulating*’ so she can stay ‘*more focused longer*’.

P4, although a similar age to P5, did not enjoy using technology.

I did try to do flashcards on my iPad, but I prefer to have things in my hand, I'm not a big one on technology, it's just a personal preference.

P3 also embraced technology when he became aware of it, moving from traditional paper-based materials to a dictionary app which allowed him to create his own flashcards from the textbook and practice them ‘*anytime, anywhere*’.

Learning Goals, Curriculum, and Environment

The influence of learning goals and curriculum are best demonstrated by P11, P9 and P2. Neither P9 nor P11 needed to learn to handwrite characters so their focus was on recognition rather than production. P11 was the most advanced learner interviewed and was able to read the Bible in Chinese, but was not good at handwriting.

P9 was at the beginning of his learning journey when interviewed. When he had first started learning Chinese, he had spent a lot of time repeat-writing characters. However, when his current teacher had removed handwriting from the curriculum, he stopped practising writing. P2 also changed her strategies to reflect her learning goals. She noted that she had adopted a

new strategy to meet her short-term learning goal of passing the Chinese Proficiency Exam, HSK 3.

Learning environment, particularly whether learners are studying in the target language community or not, had an impact on strategy use. P3, for example, noted that while he was in China, he was meeting 30-40 new characters every day, but these were taught and practised in class, so self-study time was spent doing exercises and reviewing what had been done in class rather than focussing specifically on character learning.

Perceived Effectiveness of Strategy Use

A few participants changed their strategy use according to their perceived effectiveness while the majority seemed to repeat behaviours out of habit. P2 was continuously seeking ways to improve her learning effectiveness. As noted above, she changed her strategies to meet a new learning goal but also when she believed current strategies to be ineffective.

I used to train by just rewriting the characters over and over again and that seemed to work pretty well but this summer I discovered that if I have a text with the characters I want to learn if I rewrite the text there is a much bigger chance that I actually remember the characters because I can understand them in a context.

P3 and P9 utilised the interviews to reflect on their current strategies and seek advice on improvement. But, like several of the participants, P4 had relied on a particular strategy throughout her Chinese learning journey because this was how she was taught by her teacher, and as she observed:

I just do it that way because I have always done it that way.

4.3 What Are the Most Used Character Learning Strategies for Students Learning Chinese as a Foreign Language by Different Groups of Learners?

The most used strategies by respondents overall, and by each proficiency level are shown in figures 2 to 5.

Strategy	Mean score
When I am not sure of a word or character's meaning, I look it up in my textbook or dictionary.	4.44
I try to identify characters I know whenever I see any writing in Chinese, for example a sign or advertisement.	4.42
I pay attention to how the word or character is used in context.*	4.25
I check the word or character in the dictionary to see other meanings and how it is used.*	4.09
I pay attention to the tone and try to associate the sound with pinyin.*	3.96
I actively seek out reading materials in Chinese such as children's stories, blogs, news stories.	3.89
I try to recognize the radicals that I have already learned.	3.88

I use a reading app with a built-in glossary (e.g. Pleco Clipboard Reader, Decipher) so that I can learn new words in context	3.88
I watch films and song videos with Chinese subtitles and try to read the characters.	3.81
I see what radicals are in the character and try to make sense of why they are there.	3.80

Figure 2 - Ten most used strategies

* Represents strategies with statistical difference between proficiency levels

I pay attention to the tone and try to associate the sound with pinyin.	4.25
When I am not sure of a word or character's meaning, I look it up in my textbook or dictionary.	4.17
I use an app or online resource to keep a record or 'history' of new characters and words.	4.08
I say the word or character or word several times aloud or silently to myself.	4.08
I use an electronic dictionary or other resource to listen to the pronunciation of the word or character.	4.08
When I am not sure about the stroke order of a character, I use an animation app or online resource to check.	4.00
I use flashcards (electronic or traditional) to test my recognition of new words and characters.	3.92
I try to identify characters I know whenever I see any writing in Chinese, for example a sign or advertisement.	3.83
I pay attention to how the word or character is used in context.	3.83
I use flashcards (electronic or traditional) to review (rather than test) new characters.	3.67
I use flashcards (electronic or traditional) to test myself on the tones.	3.67
I check the word or character in the dictionary to see other meanings and how it is used.	3.67
I see what radicals are in the character and try to make sense of why they are there.	3.67

Figure 3 - Most used strategies by beginner learners

I try to identify characters I know whenever I see any writing in Chinese, for example a sign or advertisement.	4.55
When I am not sure of a word or character's meaning, I look it up in my textbook or dictionary.	4.45
I pay attention to how the word or character is used in context.	4.22
I use a reading app with a built-in glossary (e.g. Pleco Clipboard Reader, Decipher) so that I can learn new words in context	4.11
I check the word or character in the dictionary to see other meanings and how it is used.	3.98
I actively seek out reading materials in Chinese such as children's stories, blogs, news stories.	3.94
I try to recognize the radicals that I have already learned.	3.91
I break down the character into smaller components.	3.88
I pay attention to the tone and try to associate the sound with pinyin.	3.83
I translate the word to my own native language and find an equivalent in meaning.	3.83

Figure 4- Most used strategies by intermediate learners

I check the word or character in the dictionary to see other meanings and how it is used.	4.74
I pay attention to how the word or character is used in context.	4.63
When I am not sure of a word or character's meaning, I look it up in my textbook or dictionary.	4.58
I try to identify characters I know whenever I see any writing in Chinese, for example a sign or advertisement.	4.37
I actively seek out reading materials in Chinese such as children's stories, blogs, news stories.	4.21
I pay attention to the tone and try to associate the sound with pinyin.	4.21
I use flashcards (electronic or traditional) to review (rather than test) new characters.	4.11
I use an app or online resource to keep a record or 'history' of new characters and words.	4.00
I watch films and song videos with Chinese subtitles and try to read the characters.	3.95
I try to recognize the radicals that I have already learned.	3.95

Figure 5 - Most used strategies by advanced learners

After generating the ten most common strategies, One-Way ANOVAs were performed to determine any statistical differences between levels. Differences were identified in three of the strategies highlighted with an asterisk in table 2 and the results of the ANOVAs are shown in figures 6 to 11.

ANOVA

I pay attention to the tone and try to associate the sound with pinyin.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.763	2	5.381	5.554	.005
Within Groups	91.072	94	.969		
Total	101.835	96			

Figure 6

Multiple Comparisons

Dependent Variable: I pay attention to the tone and try to associate the sound with pinyin.

LSD

(I) Q18new	(J) Q18new	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
beg	int	.723*	.276	.010	.18	1.27
	adv	.049	.338	.886	-.62	.72
int	beg	-.723*	.276	.010	-1.27	-.18
	adv	-.675*	.263	.012	-1.20	-.15
adv	beg	-.049	.338	.886	-.72	.62
	int	.675*	.263	.012	.15	1.20

*. The mean difference is significant at the 0.05 level.

Figure 7

ANOVA

I pay attention to how the word or character is used in context.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.601	2	2.301	3.862	.024
Within Groups	55.399	93	.596		
Total	60.000	95			

*Figure 8***Multiple Comparisons**

Dependent Variable: I pay attention to how the word or character is used in context.

LSD

(I) Q18new	(J) Q18new	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
beg	int	-.367	.216	.093	-.80	.06
	adv	-.736*	.265	.007	-1.26	-.21
int	beg	.367	.216	.093	-.06	.80
	adv	-.369	.207	.077	-.78	.04
adv	beg	.736*	.265	.007	.21	1.26
	int	.369	.207	.077	-.04	.78

*. The mean difference is significant at the 0.05 level.

*Figure 9***ANOVA**

I check the word or character in the dictionary to see other meanings and how it is used.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.387	2	4.193	5.147	.008
Within Groups	75.770	93	.815		
Total	84.156	95			

Figure 10

Multiple Comparisons

Dependent Variable: I check the word or character in the dictionary to see other meanings and how it is u
LSD

(I) Q18new	(J) Q18new	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
beg	int	-.440	.253	.086	-.94	.06
	adv	-.986*	.310	.002	-1.60	-.37
int	beg	.440	.253	.086	-.06	.94
	adv	-.547*	.242	.026	-1.03	-.07
adv	beg	.986*	.310	.002	.37	1.60
	int	.547*	.242	.026	.07	1.03

*. The mean difference is significant at the 0.05 level.

Figure 11

To test the hypothesis that highly visual learners would use more mnemonic strategies than less visual learners, a One-Way ANOVA was conducted providing evidence to support this. The findings are shown in figures 12 to 14.

Descriptives

Mnemonic strats	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
low visual	9	2.6085	.66785	.22262	2.0951	3.1218	1.81	3.48
medium visual	44	3.0271	.62210	.09378	2.8379	3.2162	1.90	4.43
high visual	33	3.3766	.81809	.14241	3.0865	3.6667	1.90	5.00
Total	86	3.1174	.73990	.07979	2.9588	3.2760	1.81	5.00

Figure 12

ANOVA

Mnemonic strats	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.908	2	2.454	4.893	.010
Within Groups	41.626	83	.502		
Total	46.534	85			

Figure 13

Multiple Comparisons

Dependent Variable: Mnemonic strats

LSD

(I) visualgroups	(J) visualgroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
low visual	medium visual	-.41859	.25908	.110	-.9339	.0967
	high visual	-.76816*	.26631	.005	-1.2978	-.2385
medium visual	low visual	.41859	.25908	.110	-.0967	.9339
	high visual	-.34957*	.16308	.035	-.6739	-.0252
high visual	low visual	.76816*	.26631	.005	.2385	1.2978
	medium visual	.34957*	.16308	.035	.0252	.6739

*. The mean difference is significant at the 0.05 level.

Figure 14

5. Discussion

The qualitative data revealed four key factors that influenced the selection and use of strategies and the most used strategies employed by different levels of highly motivated learners were identified using a survey. The combined findings are discussed below to provide a set of principles alongside a strategy inventory to guide instruction.

5.1 The Influence of Learners' Self-Perceived Learning Style and Perceived Effectiveness

The qualitative data showed that several participants selected strategies which best suited their perceived learning styles, or perhaps more accurately their learning preferences, providing further support for the assertion that *'language learning and use strategies do not operate in a vacuum, but rather are directly tied to learners' underlying learning style preferences'* (Cohen, 2012: 142). P11, a highly visual learner, appeared to learn new characters with ease. As Shen (2010) has shown, visual imagery can help learners' retention of Chinese vocabulary. Those students who do not naturally employ this technique are likely to struggle reading Chinese unless their visual skills can be enhanced (Chen et al, 2014) as demonstrated by P5. The quantitative analysis also provided some evidence that highly visual learners adopt more mnemonic strategies than less visual learners. Since these types of strategies are likely to lead to longer retention (Baddeley, 2015), they should be encouraged among all learners. Strategy researchers have been calling for teachers to encourage 'style-stretching' for some time (Nel, 2008; Wong & Nunan, 2011). For this to be most effective, teachers need an awareness of students' learner preferences. Gregersen and MacIntyre (2014) set out five principles to raise teacher awareness of style issues as well as providing classroom activities which may make classes more productive and enjoyable for both students and teachers (Cohen, 2012).

Two respondents who were relative beginners, used the research interviews as an opportunity to reflect on their approach and explore different strategies. If P5 had received such an intervention in the early stages of her learning journey, she may have been able to overcome some of the character learning challenges. Several participants appeared to have continued

using the same strategies throughout their learning journey out of habit rather than because they felt they were effective. The survey data revealed that few learners were regularly using strategies to plan and organize their learning although the most used strategy was '*I change my use of strategies whenever I think they are not helping me to learn as effectively as I would like.*' Providing learners with opportunities '*to reflect on and question their own learning behaviour*' (Moir and Nation, 2008:171) may lead to better outcomes over time (Nunan, 1995).

5.2 Attitudes to Technology

The qualitative data showed that many students were embracing technology to make their learning more fun and convenient. The quantitative data also revealed a positive attitude to mobile technology in terms of enjoyment, efficiency and flexibility. Gamification has been shown to increase both engagement and performance in Mandarin language learning amongst young learners (Ng et al 2022) and as large language models improve, the potential for language learning technology seems limitless. However, teachers cannot assume that all learners will favour using technology over traditional methods, nor that they will know how to fully exploit them (Mason & Zhang, 2017). Instead, they can encourage students to share their experiences of using the variety of available resources and provide training to support their effective use.

5.3 Learning Goals and Learning Environment

Some of the interview participants adapted their strategies to meet changing goals and environments. Teachers therefore need to consider this in relation to strategy instruction and teaching more widely. Although technological developments mean that many students no longer need to be able to handwrite characters, the survey results showed that learners still understood that being able to write characters enabled better recognition.

5.4 Limitations of the Study

There are several limitations of this study. The sample was relatively small and self-selected, so this cannot be generalized to larger populations of Chinese learners. Both the interviews and survey relied on self-reported success, so further experimental research investigating the use of different types of strategies which measure performance and retention over time would be valuable.

5.5 Pedagogical Implications

The study has provided an inventory of strategies (see appendix 4) which teachers and learners can select from, focussing initially, but not exclusively, on the ones most used in the appropriate level by the highly motivated students in this study. A provisional framework for strategy instruction is summarized in figure 15 based on the findings discussed above.

Level	Key focus	Example skills and strategies
Beginner	<p>Introduce technology/tools</p> <p>Develop visualization and association techniques</p> <p>Encourage style-stretching (Gregersen and MacIntyre , 2014)</p>	<p>When I am not sure about the stroke order of a character, I use an animation app or online resource to check.</p> <p>I say the word over to myself and try to picture what the characters look like in my mind. (visualisation and association)</p> <p>I try to make a story from the components of the character or word. (association)</p>
Pre-intermediate	<p>Encourage mnemonic and recall strategies over rote-learning</p> <p>Develop metacognitive strategies and knowledge sharing</p>	<p>I try to associate the sound of the character with its shape and meaning.</p> <p>I use flashcards (electronic or traditional) to test myself on the tones.</p> <p>I change my use of strategies whenever I think they are not helping me to learn as effectively as I would like.</p> <p>I discuss with other students different methods for learning new characters.</p>
Intermediate onwards	Encourage regular reflection and discussion	I discuss with other students different methods for learning new characters.

Figure 15 - Framework for Instruction

6. Conclusion

The findings of this study have provided an inventory of strategies and a preliminary framework for instruction guided by several principles. Firstly, visualization, association and recall techniques should be encouraged over rote-learning and review techniques. Secondly teachers should consider individual preferences but encourage ‘style-stretching’. Thirdly, teachers and learners should explore the use of various technologies together and share their experience and knowledge. And finally, learners need regular opportunities to reflect on their learning and its effectiveness.

Acknowledgments

We would like to thank our colleague, Dr Caroline Brett for acting as a critical friend in the design of our questionnaire. We would also like to thank Mike Love of Pleco and our colleagues in China and the UK for distributing the survey. And finally, we would like to thank all participants who took part in the interviews, think-loud tasks and responded to our questionnaire.

Appendices

Appendix 1 - Interview and Think-aloud Protocol

Background Questions

How long have you been learning Chinese?

How would you assess your level of Chinese?

What do you find are the most difficult aspects of learning Chinese?

Main Questions

When you have to learn a new word or character in Chinese, can you describe the usual process that you go through?

What do you do to memorize the new word?

How do you review the word?

Why do you do it like this?

Has your approach to learning new words and characters changed over time?

Think-aloud protocol:

Step 1 – check for unfamiliar words

Step 2 – Introducing task

I am going to give you the meanings and pinyin of four unfamiliar words and then I ask you to memorize them. Try to do what you would normally do when you learn new words in Chinese. You can use any tools or resources that you like such as a dictionary or app. Have you got all the materials that you need? While you are memorizing them. I would like you to say out loud what you are doing and thinking.

Step 3 – checking instructions and practice example

Let's do an example – imagine you have to learn this new word (show word, meaning and pinyin) – try to learn it now and say out loud what you are doing and thinking. (prompt as necessary).

Step 4 – task

Do you have any questions? Are you ready? Let's start. Here are the words and their meanings.

Step 5: Post-task reflection

How did you feel doing this? Did it reflect what you normally do? What did you do differently? Were there any steps or processes that you followed that you didn't say out loud? You were given four new words to learn, how many do you normally try to learn in one go?

Is there anything else you want to say about how you learn Chinese characters or your experience today?

Thank you very much for taking part.

Appendix 2 – Interview Participants

Participant ID	Gender	Experience	Approximate Level	Mother Tongue
P1	Female	Learning Chinese as a hobby for 15 years	HSK 3	English
P2	Female	Completed first year of degree in Chinese	HSK 2/3	Czech/English
P3	Male	1 year studying Chinese as a 'hobby' and for business,	HSK 1	Italian
P4	Female	Chinese graduate living in UK	HSK 5	English
P5	Female	Graduate in Chinese living in China	HSK 5	Lingala/French
P6	Male	Graduate in Chinese living in China	HSK 4	English
P7	Male	Learning Chinese as a hobby/work interest	HSK 2	English
P8	Male	Graduate in Chinese living in UK	HSK 4/5	English
P9	Male	Completed first year of degree in Chinese	HSK 2	English
P10	Female	Graduate in Chinese teaching primary Chinese	HSK 5	English
P 11	Female	Learning Chinese for religious purposes	HSK 5/6	English
P 12	Male	Graduate in Chinese, running export (to China) company in Spain,	HSK 3/4	Bilingual Spanish/English

Appendix 3 - Complete Strategy Inventory

* denotes characters identified as mnemonic

Familiarisation

	N	Mean
When I am not sure of a word or character's meaning, I look it up in my textbook or dictionary.	96	4.44
I check the word or character in the dictionary to see other meanings and how it is used.	96	4.09
I pay attention to how the word or character is used in context. *	96	4.25
I see if the character in a new word has been used in words or phrases I have previously learned. *	97	3.76
I use a reading app with a built-in glossary (e.g. Pleco Clipboard Reader, Decipher) so that I can learn new words in context	97	3.88
When I don't fully understand a word or character, I ask someone (e.g. a teacher, classmate or friend) how it could be used in different sentences.	96	3.00
I try to find sentences with the new characters from a dictionary or my text book.	96	3.52
I translate the word to my own native language and find an equivalent in meaning.	96	3.67
I use an electronic dictionary or other resource to listen to the pronunciation of the word or character.	97	3.55
I try to recognize the radicals that I have already learned.	97	3.88
I see what radicals are in the character and try to make sense of why they are there.	97	3.80
If I cannot identify the radical of a new character, I use an electronic dictionary or other resource to do so.	96	3.57
I look carefully at the strokes and try to make associations with a similar character (or word) I have previously learned. *	97	3.55
I look at the character and try to work out the stroke order.	96	3.29
When I am not sure about the stroke order of a character, I look it up in my textbook.	96	2.41
When I am not sure about the stroke order of a character, I use an animation app or online resource to check.	97	3.49
I break down the character into smaller components.	95	3.78
I use online resources to see the oracle bone or other ancient object inscription.	88	2.23
Valid N (listwise)	86	

Memorisation

	N	Mean
I pay attention to the tone and try to associate the sound with pinyin.	97	3.96
I say the word or character or word several times aloud or silently to myself.	97	3.78
I try to visualize the character in my mind.	97	3.52
I try to associate the sound of the character with its shape and meaning. *	96	3.22
I listen to the pronunciation of the word or character and think of the meaning. *	96	3.27

I listen to the pronunciation of the word or character and try to visualise the character(s). *	97	3.00
I say the word out loud and try to associate the sound with the meaning. *	96	3.28
I say the word out loud and try to associate the sound with the shape of the character. *	96	2.83
I memorize the sound first then the meaning and the shape.	95	2.88
I try to make a story from the components of the character or word. *	96	2.45
I write the word repeatedly focussing only on the stroke order or shape of the character.	97	3.29
I usually say the word or character to myself, out loud or silently, as I write it out repeatedly.	96	3.35
I count the strokes as I repeatedly write out the character or word.	97	2.05
As I write the word or character repeatedly, I think about the story or smaller components I have created. *	96	2.42
I say the word over to myself and try to picture what the characters look like in my mind. *	97	3.07
I watch animations of the stroke order to memorise the strokes.	96	2.52
I watch animations of the stroke order and copy with my fingers or hand at the same time.	96	2.65
I watch animations of the stroke order and try to predict the next stroke.	95	2.56
I watch animations of the stroke order while counting the number of strokes.	95	1.97
I use flashcards (electronic or traditional) to test my recognition of new words and characters. *	97	3.70
I use flashcards (electronic or traditional) to test myself on the tones. *	96	3.18
I use flashcards (electronic or traditional) to see if I can write the characters from memory. *	96	3.33
I associate the new character with previously learned radicals to find connections among sound, shape, and meaning. *	97	3.65
I classify the words into different categories according to their meaning. *	97	2.80
I group the words with similar features such as similarity in meaning, sound, or shape. *	97	2.89
I use my imagination to picture the meaning that the character represents, as if each character is a picture. *	94	2.78
I compare the new character with other characters I have learned to try to find similarities or differences in shape. *	97	3.64
I memorize the shape of the character first, then the pronunciation.	97	3.11
I quiz myself during memorization; for example, given the sound, I try to think of the character's shape and meaning. *	96	3.13
I memorize the characters (or words), then have someone test me.	97	2.15
I use an app to provide me with 'mems' – ways of memorising a character.	95	2.29
I create my own 'mems' (mnemonics) to help me memorise a character. *	97	2.36
I memorize phrases or whole sentences that contain the new word.	96	2.96
Valid N (listwise)	90	

Recording

	N	Mean
I write the character (or word) down in a notebook.	97	3.44
When I record a new word, I write down example sentences which contain the new word.	97	2.89
I use an app or online resource to keep a record or 'history' of new characters and words.	97	3.78

Valid N (listwise)	97
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Review

	N	Mean
I use flashcards (electronic or traditional) to review (rather than test) new characters.	97	3.66
I review characters by writing out sentences or texts which contain the characters.	97	2.75
I try to review new words and characters every day or every other day	97	3.47
I only review new words and characters before class tests and exams.	96	1.86
I review new words and characters by going over (not testing) my flashcards (electronic or traditional) whenever I have time during the day.	97	2.96
I review new words and characters by using flashcards (electronic or traditional) to test myself whenever I have time during the day.	97	3.36
I review new words and characters by writing them out many times.	96	3.07
I review new words and characters by asking someone to test me.	96	1.77
I review new words and characters by reading over notes, example sentences, and the lesson in the textbook.	96	3.24
I review new words and characters by reading texts that contain them.	96	3.52
I write new characters or words on my hand so I can review them regularly.	93	1.85
Valid N (listwise)	91	

Planning and Organising Strategies

	N	Mean
I discuss with other students different methods for learning new characters.	96	2.04
I do my homework first before memorizing the characters, since often I have to write out many of the characters in my homework.	96	2.31
I select different strategies according to the difficulty of the character.	97	2.67
I always study at certain times of the day when I know I learn best.	97	2.42
I plan my learning of new characters on a weekly basis.	97	2.39
I regularly reflect (at least once every 3 months) on how effective my strategy use is.	96	2.38
I change my use of strategies whenever I think they are not helping me to learn as effectively as I would like.	96	2.96
Valid N (listwise)	95	

Social Strategies

	N	Mean
I try to use new words in everyday writing activities such as shopping lists, emails or social media.	97	2.98
I try to use new words and characters when I speak to classmates or Chinese-speaking friends and family.	97	3.24

I try to identify characters I know whenever I see any writing in Chinese, for example a sign or advertisement.	97	4.42
I watch films and song videos with Chinese subtitles and try to read the characters.	97	3.81
I actively seek out reading materials in Chinese such as children's stories, blogs, news stories.	97	3.89
When I hear a word that I did not know, I ask the speaker to write it down for me.	97	2.76
Valid N (listwise)	97	

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***Incorporating Blended Learning to Improve Reading in English Language
as a Foreign Language in Lesotho***

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

In Lesotho, a country characterized by a diverse population speaking various languages, where English serves as the official language for instruction, students often face challenges in reading English due to limited resources. Despite previous examination reports indicating that students' failures are not due to a lack of subject understanding but rather an inability to comprehend instructions, traditional reading approaches persist among teachers. This stands in contrast to the modern educational technology available in the 21st century. As a result, it is imperative for educators to adopt strategies that enable students to thrive in a global context. Blended learning, which combines traditional in-person teaching with online resources, offers a promising solution. This study explores the integration of blended learning in Lesotho to enhance English reading abilities, considering it's a second language for many. The research employed a quantitative quasi-experimental design involving two groups: a control group (n=30) using traditional English textbooks and an experimental group (n=30) using both these textbooks and blended learning. pre-and post-test scores were subjected to inferential statistical analysis using SPSS software. The findings indicated a positive impact of blended learning on reading proficiency. The implications for education are significant. They underline the necessity of creating a comprehensive blended learning curriculum, delivering training and assistance to teachers, and addressing technological infrastructure requirements. Consequently, the study authors propose that integrating blended learning into foreign language classes could enhance the learning experience, furnish students with skills crucial for success in the global arena, and ultimately elevate overall academic performance.

Keywords: Educational Technology, English as a Second Language, Blended Learning, Reading Comprehension, Lesotho

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1. Introduction

In the landlocked country of Lesotho, located in Southern Africa, English is the official language of instruction in schools. However, many students face difficulties when it comes to reading in English as a foreign language (EFL). These challenges may arise due to factors like inadequate exposure, lack of resources, and insufficient teacher training. As a result, there's a clear link between poor academic performance and limited success in various opportunities (Tlali, 2016). For instance, an examination conducted by the Lesotho Ministry of Education and Training (MOET, 2016) revealed that learners struggle to understand the taught content due to significant reading difficulties. To improve students' reading skills, it became essential to revamp teaching methods and materials. Previously, conventional techniques such as the Grammar Translation Method (Lin, 2019) were employed to teach English language skills, encompassing reading, grammar, and vocabulary. However, the rise of educational technology has introduced innovative methods that can complement traditional teaching and enhance learning outcomes, particularly in reading.

Wu and Marek (2020) stress the potential of blended learning, a flexible approach that combines traditional classroom teaching with online learning, to enhance language skills. This approach enables students to access learning materials and activities at their own pace and convenience, while also facilitating interaction with teachers and peers (Huang and Li, 2020). In the context of Lesotho's EFL education, blended learning could be a valuable tool to enhance reading abilities and overall academic performance. Within this framework, teachers can utilize various online tools to support students' reading abilities. Li and Chen's study (2017) showcased that incorporating blended learning in an EFL classroom improved reading accuracy and speed among Chinese learners. Similarly, Kilickaya and Krajka's research (2019) demonstrated that blended learning significantly boosted reading comprehension and vocabulary development in Turkish learners. However, while this instructional approach is established in developed countries, it's relatively new in Lesotho. The effectiveness of blended learning in enhancing EFL reading skills in Lesotho has limited research. Thus, despite challenges related to limited internet access, available resources will be leveraged to implement this approach across the country.

Consequently, this research aims to investigate the impact of integrating blended learning to enhance English language reading proficiency among second language learners in Lesotho. Additionally, the study seeks to explore how factors like learners' age, gender, and attitudes influence their reading skills.

2. Literature Review

2.1 Teaching English Language in Lesotho

Teaching English in Lesotho, a Southern African country that also has Sesotho as an official language, presents substantial problems. To effectively teach English to Lesotho children as a topic and a method of global communication, educators must design innovative strategies. English proficiency is important for education and professional prospects in Lesotho since it opens doors (Ekajume-Ilongo, 2015). According to research, exposing learners to a variety of instructional techniques and resources without constraints improves second language learning. As a result, a variety of factors influence English language instruction in Lesotho. Notably, interference from students' native language (L1) can both impede and facilitate learning difficult English concepts, necessitating rigorous L1 usage monitoring in class

(Matee, 2019). Effective language learning, according to Krashen (1998), happens when learners and teachers have low "affective filters," which is helped by resource availability and a suitable learning environment. Lesotho's status as a poor country, on the other hand, leads to obstacles such as limited resources and inadequate teacher preparation, perhaps making it difficult for children to excel in English (Ekujume-Ilongo, 2015; Moea, 2023). Despite these obstacles, opportunities for professional development in English teaching exist in Lesotho. Using the digital age, instructors can collaborate with international colleagues and implement innovative techniques for language training such as interactive activities and technology (ibid). An effective language teacher in Lesotho is defined by effort, commitment, and classroom creativity (Kini, 2016, p. 40). By demonstrating passion and a genuine love for teaching, English language education in Lesotho can progress and become more inclusive, regardless of cultural differences. Ultimately, this improvement can provide students with the tools they need to excel academically on a global scale.

2.2 Traditional Teaching Methods

Reading is considered a fundamental key that paves a way for knowledge acquisition and comprehension in EFL. Traditional Teaching methods that have been employed in EFL classrooms for decades have proved to improve reading abilities. There are several traditional methods that teachers incorporate in their ELT. One of the most commonly used is Grammar Translation Method. Al- Shaboul (2016) propounds that, GTM is an effective method that emphasizes the translation of literary texts from the target language to the native language. It appears this method focuses mainly on vocabulary and grammar rules. This in turn not only helps learners comprehend texts but also analyze literary texts (Zarei and Zarei, 2018). On the other hand, Audio Lingual (ALM) is another traditional method that has been used to improve reading abilities in EFL. This method emphasizes the use of repetition and drills in a language class. Yaqubi and Tavakoli (2016) posit that ALM recognizes patterns in language and uses them to understand literary texts. Essentially, the Traditional Methods that have been used are believed to be effective in providing learners with a systematic approach to learning vocabulary and grammar rules. However, with a high demand for an epistemic turn, the effectiveness of these methods may vary depending on the context and needs of learners, especially in the 21st century, whereby learners are exposed to technology in their everyday lives.

2.3 Teaching English Language Using Technology

In today's global education landscape, teaching has become a thought-provoking experience due to the integration of educational technology across various fields. Particularly in the domain of English language teaching (ELT), ongoing debates centre around teaching methodologies and techniques. This paradigm shift has pushed modern educators to embrace emerging approaches that not only make language learning enjoyable and intriguing (Stanley, 2020), but also cater to diverse learners' multiple intelligences. Educational technology has become an integral part of ELT, motivating learners to achieve their language learning goals and adapt to contemporary trends. Educational technology, as Peachey (2021) suggests, positively influences learners' literacy skills, potentially reshaping the landscape of language education. Learning management systems and technological devices facilitate easy online access to learning materials and communication between learners. By incorporating digital tools like laptops, smartphones, computers, and tablets, teachers are encouraged to enrich their teaching practices (Stanley, 2020). These devices, connected to the internet, transform foreign language learning into an interactive and enjoyable experience.

Teachers embracing technology in classrooms have a positive impact on learners' motivation (Mayer, 2017), as seen in the case of gamification, where game-like activities and rewards foster engagement, leading to the subconscious acquisition of English language concepts. As Peachey (2021) states, "technology engages learners with the subject taught in the classroom" (p. 2). The use of technology in an English language classroom promotes a democratic learning environment, empowering learners to navigate digital tools freely, thus enhancing their language skills. A study by Rao (2019) in Saudi Arabia revealed that technology effectively motivates learners of all ages towards achieving their goals. This underscores the potential of educational technology to revolutionize English language instruction for students across age groups. Technological education opens avenues for learners to develop creativity, problem-solving abilities, critical thinking, communication, and other higher-order skills (Agyei, 2020). The accessibility and integration of technology in foreign language teaching generate interest in language learning, as it brings language concepts closer through technological devices. When utilized effectively, these authentic digital tools can lead to remarkable improvements in the learning environment.

2.4 Blended Learning

This is a strategic approach, that emerges as a means to enhance reading abilities. This method combines traditional teaching methods with online components (Krajc, 2019). Multiple studies highlight the positive impact of blended learning on English language skills, especially reading comprehension and vocabulary. Blended learning involves both online and face-to-face instruction in foreign language contexts, addressing teaching and learning challenges (Son et al., 2016). Research by Haggen and Duffmeyer (2016) indicates that blending technology with traditional methods significantly improves reading comprehension. This amalgamation of technology and conventional methods proves effective in catering to 21st-century learners while accommodating diverse needs. Moreover, Mistry and Mistry (2018) emphasize the role of teachers in moderating and facilitating technology in blended learning contexts, preventing misuse. Stutz and Hayers' study in 2016 demonstrated how blended learning enhanced literary skills in a class of learners with disabilities. This approach promotes inclusivity through diverse teaching methods, accommodating individual differences. However, certain studies suggest that blended learning can result in a digital divide among learners due to socioeconomic differences. Despite this consideration, blended learning has the potential to boost reading abilities (Son et al., 2016) by creating an engaging and personalized learning environment.

The utilization of technology in education has become more widespread, prompting an exploration of its relationship with various factors such as age, attitude, and gender. To enhance English language teaching through educational technology, researchers have conducted numerous studies assessing how these factors affect the integration of technology in education. These investigations have yielded diverse outcomes, revealing both positive and negative impacts. Thus, a comprehensive review of the literature on these factors offers valuable insights into individuals' interactions with technology and the potential obstacles they might encounter (Ayanwale & Oladele, 2021; Nguyen, 2021).

Understanding the impact of age contributes to the development of inclusive and accessible educational platforms. According to Al-Fadhli's (2020) research, age has a substantial impact on the adoption of technology for educational reasons. When compared to their older counterparts, younger kids are more likely to use technology in schooling. Similarly, Wang et al. (2019) discovered that younger students have a more favorable view regarding the

importance of technology in education. Gender has also been extensively researched in connection to the use of technology in education. According to Ma (2021), males have more confidence and competency with technology, potentially increasing gender-based professional gaps. According to Alzahrani et al.'s (2019) research, male students frequently have a more favorable attitude toward technology use in education than their female counterparts. However, Al-Fadhli et al. (2020) contradict this finding, identifying no significant gender-based disparity in technology adoption. Consequently, these studies suggest that women are also competent in STEM fields. More importantly, given the evolving technological landscape, educators must consider learners' attitudes toward technology to foster inclusivity. Learners' attitudes significantly impact their technology utilization in education. Alzahrani et al. (2019); Ayanwale et al. (2023); Oladele et al. (2023) demonstrate that students with a positive technology attitude are more inclined to employ it for learning purposes. Correspondingly, Wang et al. (2019) reveal that students with positive technological attitudes exhibit higher engagement and academic achievement. In a study published in 2018, Akbarov et al. investigated students' attitudes toward blended learning in an EFL context. Results showed that most EFL students prefer blended learning over traditional methods of teaching English because it enhances motivation. Furthermore, Ghazizadeh and Fatemipour (2017) argue that blended learning for language learners directly impacts their reading abilities.

2.5 Underpinning Theory

Various theories of foreign language learning have undergone shifts in understanding how to enhance second language acquisition. These theories acknowledge debates and controversies surrounding English language instruction, particularly in terms of improving pedagogical practices. In the present study, two theories, Maton's Legitimation Code Theory (LCT) (2014) and Van Dijk's Material Access and Resources Appropriation Theory (RAT) (2005), are elucidated. LCT offers a framework for exploring social practices, with a focus on four key codes: elite code, knowledge code, knower code, and relativist code. The interplay of these codes shapes how reading knowledge is generated, conveyed, and interpreted through blended learning (Kilickaya and Krajka, 2019). This entails integrating traditional teaching methods and technological education in blended learning, which is legitimized within the context of teaching and learning reading. This alignment resonates with learners' approaches to grasping vocabulary and comprehension concepts. Conversely, RAT underscores the roles learners assume in their reading-learning journey when exposed to digital tools. By employing RAT principles, educators can discern suitable technological devices for classroom use, promoting equity and inclusivity (Rouse, 2019). Lesotho's mainstream schools accommodate learners with diverse abilities within a single classroom. Consequently, teachers tailor their content delivery methods and learning resources to cater to individual learning styles. This underpins the selection and design of blended learning that harnesses these resources to enhance reading abilities. This approach minimizes conflicts in teaching methods by providing learners with a clear understanding of the reasons behind diverse reading instruction approaches. These two theories provide profound insights into the application of blended learning to foster reading abilities in a socio-cultural context. Moreover, they establish a personalized and democratic educational environment (Sushi, 2019) that capitalizes on the strengths of combining digital and traditional resources in teaching and learning a foreign language.

3. Methodology

The primary objective of this study was to enrich the reading abilities of ESL (English as a Second Language) learners through the integration of blended learning, employing a quasi-experimental design. Data collection encompassed the evaluation of pre-test and post-test scores obtained from ESL learners enrolled in three high schools situated in Maseru, Lesotho. The sample size consisted of 60 participants (30 in the control group: 13 boys and 17 girls, and 30 in the experimental group: 14 boys and 16 girls). These participants were purposefully selected based on their reading proficiency levels and the availability of Internet access and devices in their schools. Given the quasi-experimental nature of the study, the process of randomization proved to be challenging. It's also important to note that prior to participating, explicit consent was obtained from all participants. The research employed a factorial matrix design to visually illustrate the variation in the levels of the variables (refer to Table 1). The data collection process involved a treatment package implemented across three phases. Phase 1 encompassed administering a pre-test to both the control and experimental groups. In Phase 2, the intervention took place. The control group received traditional teaching methods, while the experimental group experienced blended learning. The final phase involved conducting a post-test for both groups to assess the effectiveness of the treatments. To minimize variance error and control for potential confounding factors, descriptive statistics, and analysis of covariance (ANCOVA) were applied using SPSS software version 26. These statistical techniques were utilized to analyze the eight hypotheses. Additionally, to ensure the reliability and validity of the instruments, a pilot study was conducted in nearby schools to assess if the instruments accurately measured their intended criteria. The credibility of the tests was further confirmed through information sharing and validation.

Table 1. Factorial matrix design

Age	Blended learning			
	Gender		Attitude	
	Male	Female	Positive	Negative
10-12	✓	✓	✓	✓
13-15	✓	✓	✓	✓

4. Results and Discussion

To test the hypotheses in the current study, the Analysis of Covariance was carried out with the aid of Statistical Package for Social Science (SPSS) software Version 26. The analysis was run at a confidence level of 95% and a significant level of 0.05. Most importantly, the post-test was treated as the dependent variable, the pre-test as the covariate, and the moderating variables (age, gender, and attitude) as fixed factors. Table 2 presents the results.

Table 2. ANCOVA Summary of the difference in the achievement of two groups

Source	Sum of Square	df	Mean Square	F	Sig.	Partial Eta Sq.
Corrected Model	4579.28	16.00	286.20	16.06	0.00	0.86
Intercept	3640.93	1.00	3640.93	204.30	0.00	0.83
Pretest	22.15	1.00	22.15	1.24	0.27	0.03
Treatment	3528.04	1.00	3528.04	197.97	0.00	0.82
Age	2.82	1.00	2.82	0.16	0.69	0.00
Gender	9.68	1.00	9.68	0.54	0.47	0.01

Attitude	29.09	1.00	29.09	1.63	0.21	0.04
Treatment * Age	0.33	1.00	0.33	0.02	0.89	0.00
Treatment * Gender	27.23	1.00	27.23	1.53	0.22	0.03
Treatment * Attitude	60.53	1.00	60.53	3.40	0.07	0.07
Treatment * Age * Gender * Attitude	11.57	1.00	11.57	0.65	0.42	0.01
Error	766.32	43.00	17.82			
Total	21092.00	60.00				
Corrected Total	5345.60	59.00				

R Squared = .857 (Adjusted R Squared = .803)

Dependent Variable: Post-Test

Ho1: There is no significant main effect of treatment on learners' reading ability.

Table 2 provides persuasive evidence suggesting a significant primary impact of the blended learning treatment on students' reading performance. Statistical analysis ($F(1,43) = 197.97, p < 0.05, \eta^2 = 0.82$). The treatment's large partial eta square value (0.82) emphasizes the significance of its effect on the dependent variable. As a result, the hypothesis that treatments had no substantial main influence on learners' reading ability was rejected. This result demonstrates that the interventions did, in fact, result in a significant improvement in pupils' reading abilities. To support this finding, the computed marginal means show that students in the experimental group had the highest mean score ($M = 24.53$) compared to those in the control group ($M = 7.87$). This result confirms that the blended learning therapy was significantly more effective than the traditional teaching technique in improving students' English reading ability. The significant difference in mean scores between the experimental and control groups highlights the significant benefit of blended learning in developing students' reading abilities. This discovery pushes for a change toward more contemporary teaching approaches that use technology to create engaging and effective learning settings. In support, research by Haggen and Duffmeyer (2016); Son et al. (2016) indicates that blending technology with traditional methods significantly improves reading in the English Language as a foreign language.

Ho2: There is no significant main effect of age on learners' reading ability.

Table 2 shows that there is no significant effect of age on students' reading ability in English ($F(1,43) = 0.16, P < 0.05, \eta^2 = 0.04$). As a result, the null hypothesis is accepted. The presence of a significant partial eta square value (0.04) suggests that blended learning has the potential to control the effect of age on learners' reading abilities. Because blended learning helped balance all the variances in the learning process, all learners read the same. This might be attributed to its personalized approaches (Graham, 2013; Liu and Li, 2021), which enabled learners of all ages to obtain tailored support and practice. However, Wang et al. (2019) discovered that younger students have a more favorable view regarding the importance of technology in education. However, in this investigation, the mean scores of both young learners and older learners have no difference.

Ho3: There is no significant main effect of gender on learners' reading ability.

According to Table 2, there is no significant effect of gender on students' English reading ability ($F(1,43) = 0.54; P < 0.05, \eta^2 = 0.03$). This result reveals that gender has no effect on

learners' reading ability. As a result, the null hypothesis is accepted, and the effect size (0.03) is very small. According to Yuxin Ma (2021), males have more confidence and competency with technology, potentially increasing gender-based professional gaps. Al-Fadhli et al. (2020), on the other hand, find no substantial gender disparities in technology adoption. This was demonstrated in this study since the introduction of blended learning in reading greatly improved the skills of both males and girls.

Ho4: There is no significant main effect of attitude on learners' reading ability.

The statistical analysis in Table 2 above reveals that the incorporation of blended learning in reading influenced the learners' attitudes. Thus, ($F(1,43) = 1.63$; $P < 0.05$, $\eta^2 = 0.04$). The presence of a significant partial eta square value (0.04) implies that blended learning has the capacity to manage the effect of attitude on learners' reading abilities. According to Alzahrani et al.'s (2019) research, students who have a good attitude toward technology are more likely to use it for learning objectives. However, in this study, learners' attitudes regarding reading in English as a foreign language were controlled and had no effect on the learners' reading abilities. As a result, the null hypothesis has been accepted.

Ho5: There is no significant interaction effect of treatment and age on learners' reading ability.

The statistical analysis in Table 2 above reveals that the incorporation of blended learning in reading has shown no effect of age on the treatment. Thus, ($F(1,43) = 0.02$; $P < 0.05$, $\eta^2 = 0.00$). The presence of a significant partial eta square value (0.00) implies that blended learning has the capacity to manage the effect of age on learners' reading abilities. Zhang and Zhu (2018) claimed that younger learners perform better than older learners. To dispute this Akbarov et al. (2018) argued that learners of all ages perform very well, and their English proficiency is improved with blended learning.

Ho6: There is no significant interaction effect of treatment and gender on learners' reading ability.

The statistical analysis in Table 2 above reveals that the incorporation of blended learning in reading has shown no effect of gender on the treatment. Thus, ($F(1,43) = 1.53$, $P < 0.05$, $\eta^2 = 0.03$). The presence of a significant partial eta square value (0.03) implies that blended learning has the capacity to manage the effect of gender on learners' reading abilities because it is very low. According to Ma (2021), males have more confidence and competency with technology, potentially increasing gender-based professional gaps. However, after comparing two groups with both males and females, the results have indicated that blended learning has resulted in a statistically significant positive effect on reading ability, despite the gender of learners.

Ho7: There is no significant interaction effect of treatment and attitude on learners' reading ability.

The statistical analysis in Table 2 above reveals that the incorporation of blended learning in reading has shown no effect on attitude to the treatment. Thus, ($F(1,43) = 3.43$, $P < 0.05$, $\eta^2 = 0.07$). The presence of a significant partial eta square value (0.07) implies that blended learning has the capacity to manage the effect of attitude on learners' reading abilities because it is very low. Akbarov et al (2018) investigated students' attitudes toward blended learning in

an EFL context. Results showed that most EFL students prefer blended learning over traditional methods of teaching English because it enhances motivation. This was evident in this study because the attitudes of learners became positive, and their reading proficiency improved.

Ho8: There is no significant interaction effect of treatment, age, gender, and attitude on learners' reading ability.

The findings in Table 2 indicate that the results of the statistical test ($F, (1, 43) = 0.65; P > 0.05, \eta^2 = 0.01$) do not provide sufficient evidence to reject the hypothesis. The effect size, which is small (0.015), suggests that variables such as age, gender, attitude, and therapy do not significantly influence learners' reading abilities. This aligns with the study conducted by Akbarov and Gonen (2018), where they found that most EFL students prefer blended learning due to its ability to enhance motivation to learn. Similarly, the research by Ghazizadeh and Fatemipour (2017) highlighted that the implementation of blended learning has a direct positive impact on language learners' reading skills. These outcomes collectively suggest that blended learning can counteract the potential effects of factors like age, gender, and attitude on learners' reading abilities.

5. Conclusions and Limitations

The study's findings imply that using online resources and technology efficiently improves learners' reading competency, regardless of their age, gender, or attitudes. Furthermore, the study emphasizes the need for specialized and individualized feedback for learners, as this input may have a greater impact on reading improvement than criteria such as age, gender, and attitude. In essence, the findings show that blended learning is a valuable tool for instructors looking to improve students' reading abilities, regardless of their demographics. As a result, the findings of this study provide a significant contribution to the existing body of literature by advocating for the use of blended learning as an instructional technique to improve reading for all learners. Also, it's important to acknowledge a limitation of this study, namely the quasi-experimental design which, due to its non-randomized nature, might introduce potential biases that could impact the validity and generalizability of the results.

6. Implications and Recommendations

The findings of the study highlight the favorable influence of incorporating technology into the teaching and learning process on learners' reading ability. To build an immersive and engaging atmosphere for students, it suggests a harmonious balance of traditional teaching approaches with technology-driven tools. Furthermore, schools are urged to invest in digital resources and provide extensive teacher training to prepare educators for the implementation of blended learning strategies. According to the study, this technique has the potential to greatly improve teaching quality and contribute to improved learning outcomes.

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Study on Emotions' Impact on Simultaneous Interpreting

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

The purpose of this study is to explore the interpreter's rendition during the interpretation of emotionally-charged content. In fact, the focus of the research is: What happens if the appraisal of an emotionally stressful experience increases psychological arousal in simultaneous interpreting? On the basis of this idea, I have carried out a pilot study and successively an experiment on 10 simultaneous interpreting students using an emotionally-charged video, the content of which relates to the Holocaust. After having analysed the results of the students' renditions, I have observed that during particularly emotional passages of the video almost all subjects tended to modulate their voices, and I therefore began investigating some of the paralinguistic elements, particularly prosody and pauses, in order to understand whether those elements were related to the video's content.

Keywords: Simultaneous Interpreting, Emotions, Psychology, Emotional Cognitive Activation, Verbal and Non-verbal Features of Communication

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1. Introduction

This article is an adaptation of my Master's Degree Research Thesis, which was dedicated on the study emotions' impact on simultaneous interpreting. When performing the simultaneous interpretation of emotionally-charged content, interpreters may incorporate paralinguistic elements into their renditions that were not present in the original speech.

Simultaneous interpreting inherently carries emotional elements due to its immediacy and the multitude of variables to which it is susceptible. On the other hand, translation can be characterised as a more analytical process. Based on this premise, the aim of this research is to explore the challenges that conference interpreters may face during their work, especially when dealing with emotionally-charged scenarios, and to examine the coping strategies they employ.

Existing literature has highlighted the various difficulties interpreters encounter in their profession, predominantly linked to cognitive load. Specifically, the process of simultaneous interpretation can be segmented into four stages: the initial reception of a message in the source language, its processing (decoding), subsequent reprocessing (recoding), and the production in the target language (Falbo, Russo, Straniero, 1999: 162). Throughout this process, short-term and long-term memory play a pivotal role by facilitating the integration of linguistic knowledge from the incoming message with the interpreter's pre-existing knowledge (*ibid.*: 163).

Simultaneous interpretation can be seen as a distinctive, communicative process, unnatural, purpose-constructed, and somewhat artificial. This arises from the interpreter simultaneously embodying the roles of listener and message producer (*ibid.*: 163). Consequently, my decision to explore this subject extends beyond a purely linguistic perspective. I have extended my research on the paralinguistic dimensions of simultaneous interpreting. Furthermore, my exploration covered emotions, cognitive approaches to emotions, as well as the concepts of psychological arousal, appraisal, and coping. This foundational understanding enabled the formulation of a robust methodology, as well as the selection of assessment instruments to explore the outcomes. This article encapsulates the essence of my thesis, and I have personally translated all quoted material into English.

2. Literature Review

2.1 Paralinguistic Features in Simultaneous Interpretation

Communication is a complex activity that involves both verbal and non-verbal elements. It plays a pivotal role not only in the transmission of verbal content, but also in conveying emotions. Anolli (2012) defines emotional speech as the manifestation of the speaker's emotions at the time of enunciation. The author describes non-verbal communication as a set of communicative processes and phenomena such as the prosodic and paralinguistic qualities of the voice, facial expressions, gestures, gaze, proxemics and haptics, chronemics, posture, clothing and makeup (p.155-156). These phenomena occur more spontaneously than verbal elements, which can be manipulated voluntarily. By encoding emotions through vocal cues, the non-verbal channel conveys the speaker's emotional states, irrespective of the verbal content of the utterance. The decoding phase, on the other hand, concerns the listener's ability to recognise a given emotion expressed through suprasegmental channels. During phonation, the suprasegmental canal runs parallel to the segmental plane, organising the intonation of the

speech (Lombardi Vallauri, 2010: 129). Poggi and Magno Caldognetto (2003) explained that, when expressing an emotion, there are many factors to consider, for example the purpose of its manifestation, the personal traits of the speaker, as well as the cognitive and personal traits of the interlocutor. According to Wierzbicka (2004), the vocabulary of emotions differs from one language to another. This implies that speakers of each language possess their own set of concepts for interpreting their own and others' feelings, specific to that language (p. 94).

Conference interpreters find themselves restricted in conveying the speaker's emotional nuances only through their vocal modulations, mostly due to their workspace in booths. In certain cases, even their visual access to the speaker is limited. Barbara Ahrens (2002) outlines the interpreter's paralinguistic communication is limited to prosodic elements and other aspects like intonation, emphasis, and pauses. This limitation arises from their spatial isolation within the booth, where their awareness of the audience is perceived solely through headphones (p. 38). Hence, when confronted with a discourse rich in non-verbal features, the interpreter strives to utilise their available tools to faithfully convey the speaker's message. This effort goes beyond mere lexical choices, as words inadequately replace the intricate interplay of verbal and non-verbal elements. Consequently, the interpreter can employ hesitations, silences, ironic laughter, syllable elongation, tremulous voice, and high-pitched inflections (*ibid.* 38). Numerous studies have explored the significance of paralinguistic components within communication. Elements such as facial mimicry, proxemics, and prosody play pivotal roles in precisely conveying messages. Pöchhacker (1994) argues that the speaker's discourse during simultaneous interpretation can be characterised as a multi-faceted process. This is due to the source text's message encompassing not only verbal content but also paralinguistic, non-verbal constituents, and visual materials (p. 99). All these elements are integrated to form a fundamental part of the original message, thereby serving as indispensable reference points for the interpreter tasked with decoding the message's essence.

Another aspect to consider is the immediacy of simultaneous interpretation. The speaker's message is presented in real-time, requiring the interpreter to skillfully grasp not only the linguistic features but also the paralinguistic elements inherent to the speaker's culture. Consequently, when paralinguistic facets come into play during simultaneous interpretation, a two-level scenario emerges. On one hand, the speakers deliver their message, using both verbal and non-verbal channels to effectively convey it. On the other hand, the interpreter occupies a completely distinct position in relation to the speaker's message. The interpreted speech should mirror the spontaneous articulation typical of monolingual discourse. Nevertheless, several factors influence the interpreter's production. As articulated by Shlesinger (1994), simultaneous interpretation possesses unique attributes not found in other forms of language (p. 226). Various characteristics of the source speech can pose significant challenges for the interpreter. These include the persistent presence of the source text, the intricacy of the subject matter, the speaking rate, the speaker who may read the speech from a written text, an atypical accent. These challenges can result in the interpreter experiencing false starts, hesitations, and prolonged pauses (Ahrens, 2002: 39). Another phenomenon arising in the target speech involves phonological interference. Nevertheless, the target speech maintains an inherent link to the source speech due to their interrelation: the target speech is shaped by the source speech.

2.2 Emotional Cognitive Activation

The word "Emotion" derives from the Latin word "EMOVERE," signifying "to move out, remove, agitate."

In the 1960s, the landscape of emotion research underwent a transformative shift with the rise of cognitive approaches that sought to comprehend emotions from an innovative perspective. Schachter and Singer's Cognitive Arousal Theory stated that the interpretation of an event determines the experienced emotions. Weiner's Attribution Theory proposed that individuals attribute their emotional states to both internal and external factors, thereby shaping future behaviours and coping strategies. Lazarus' Cognitive Appraisal Theory of Emotion accentuated the role of personal goals, values, and beliefs in evaluating the significance of an event in order to elicit emotional responses.

Similarly, Goleman's work on primary and secondary emotions introduced the concept of emotional intelligence. Exploring non-verbal cues, the Facial Feedback Hypothesis, developed by Ekman, Levenson, and Friesen, suggested that altering facial expressions could potentially regulate emotional states. Frijda's Appraisal Theories proposed that emotions emerge from cognitive evaluations of an event's relevance, congruence, and implications for one's objectives. Scherer's Sequential Appraisal Model proposed a rapid sequence of cognitive assessments when confronting stimuli, encompassing the event's relevance, implications for well-being, available coping strategies, and one's capacity to implement them. Coping strategies could be primary or secondary, addressing stressors directly and managing emotional reactions.

These theories are pivotal in understanding emotional cognitive activation from a broader perspective. Concerning emotional cognitive activation in relation to work performance, Yerkes and Dodson's Law represented a pioneering effort to study the relationship between psychological arousal and performance (Eysenck, 1982). Easterbrook's theory emphasizes the role of appraisal in prioritizing information during emotional episodes. Broadbent's model highlights cognitive processes in emotion regulation, and Eysenck's theory establishes links between personality traits and levels of psychological arousal. Ultimately, Kahneman's Dual Process Theory highlights coping mechanisms that combine intuitive approaches with analytical reasoning. These theories underscore psychological arousal's importance, the appraisal's role in evaluating situations, and performance-linked coping strategies.

Conference interpreters work under conditions that psychologists consider stress-inducing. These conditions result from continuous information load, time pressure, heightened concentration demands, fatigue, and confined booth spaces. Multiple studies affirm that the performance of simultaneous interpretation carries numerous stress factors (Kurtz, 2003). Gile (1988) crafted the Effort Model based on cognitive psychology, proposing interpreters manage substantial cognitive load, especially during non-automatic tasks, like simultaneous interpretation, categorized as "efforts." Gile (1988) identifies three key efforts: listening and analysis, short-term memory usage, and target language production. To maintain equilibrium, interpreters must effectively manage their available cognitive resources (Falbo, Russo, Straniero, 1999: 166).

However, beyond cognitive demands, interpreters necessitate emotional stability and adept coping skills to navigate stressful situations and tolerate ambiguity. The intricate challenges of simultaneous interpretation are influenced by diverse factors, including task complexity and covered topic. Emotional topics can be particularly demanding. Interpreters should employ strategies such as enhancing their self-esteem and empathy to cope effectively. While interpreters possess unique linguistic mastery, they must balance emotional involvement to maintain professional impartiality. Otherwise, they could face the risk of emotional contagion. Hatfield suggests interpreters may mirror the speaker's expressions, leading to

emotional engagement (Hatfield, 1994). Napier notes that interpreter performance is influenced by both cognitive and personality factors, with personality playing a pivotal role alongside skills and motivation (Bontempo, Napier, 2017).

3. Methodology

My research aims to analyse the impact of emotions on simultaneous interpreting. To achieve this objective, ten Master's Degree students performed the simultaneous interpretation of an emotionally-charged video.

The selected video, titled "Holocaust Survivor Watched Her Mother Being Shot," has a duration of 13 minutes and 55 seconds, featuring an interview conducted by Sky News. The interviewee, Hannah Lewis, a Holocaust survivor from Poland who resettled in England after enduring the harrowing ordeal of life in a concentration camp, speaks with a British accent. Consequently, the entire video is presented in British English, with intermittent references to other languages (Polish and German) limited to the nomenclature of concentration camps, cities, and Nazi units.

Throughout the video, the speaker maintains a relatively consistent tone and moderate pace. Despite being an interview, the video provides a subjective account by the speaker and is predominantly characterised by brief flashbacks that recount her life before deportation up to the final moments spent in the concentration camp. As a result, the video lacks technical and specific language but it is marked by strong emotional content. Notably, from around minute 09:55:00 to minute 11:10:00, the speaker recounts a particularly poignant episode: during her childhood, she witnessed the killing of her mother by Nazi soldiers and saw her mother's body fall onto the snow. She further narrates that, despite the horror of the situation she found herself in, she could not scream because otherwise they would have killed her.

3.1 Participants

The first participant in the research, who conducted the exercise as a pilot study, is a native Italian speaker and a final-year student in the Master's programme in Interpreting and Translation. She attended the course in simultaneous interpretation from Italian to English (IT-EN-IT) and is 23 years old.

Regarding the participants chosen to perform the simultaneous interpretation of the video, ten female students who are native Italian speakers and are in their final year of the Master's programme in Interpreting and Translation, specialising in Interpretation, were selected. They attended the course in simultaneous interpretation from Italian to English (IT-EN-IT). Their ages range from around 22 to 26 years old. These participants showed greater familiarity with the English language and performing simultaneous interpretation. This is particularly crucial for my research, as comprehension is a necessary factor in analysing their interpretive performance.

3.2. Procedure

The research work was conducted in two phases: the first involved presenting the video, and the second involved administering the questionnaire. Initially, I conducted a pilot study of the simultaneous interpretation exercise with a student who then completed the questionnaire. I did not provide any indications about the video's content or any potentially complex parts or

words of the speech. Upon analysing the simultaneous interpretation, I observed that the student had omitted various parts of the speech, possibly due to not having received information about the video's content. Consequently, I decided to offer a brief introduction to the video's content before presenting it to the students.

After contacting the students, I arranged for them to meet at the university in a room equipped with interpreting booths to ensure that the exercise would take place without sound interference. I communicated with the participants and scheduled a day for their participation, forming groups based on availability and the number of booths in the room. The first group consisted of 5 students, the second group of 2 students, the third group of 2 students, and the fourth group of a single student. Before beginning the video playback, I ensured that the booth equipment was functional, and that the video's audio was clear. Subsequently, I explained to each group that the video was in English and, since they were all native Italian speakers, their interpretation would be passive, from English to Italian. I also clarified that the video's theme was the Holocaust, and the interview took place on Holocaust Remembrance Day. Furthermore, I mentioned that the speaker was a survivor of Polish origin but spoke English fluently due to her relocation to England. The video also featured two interviewers who required to be translated. I then asked the students to record their simultaneous interpretation using their mobile phones and send it to me via email.

Once the video concluded, without providing additional information, I waited for the students to exit the booths and distributed the questionnaire that I had printed on sheets for them to complete independently. After the exercise was completed, some students shared their performance experiences and emotions while conducting the simultaneous interpretation of the video.

3.3 Assessment Instruments

When evaluating how simultaneous interpretation is affected by emotionally stressful situations for interpreters, my comprehensive analysis of the recordings aimed to examine interpretive performance aspects crucial for my research. As Barbara Ahrens (2002) illustrates, various factors can pose challenges for interpreters, immediately impacting their interpretive output (p. 39). Ahrens further explains that the human voice is highly sensitive to stress and relaxation, and since simultaneous interpretation is demanding, it inherently involves a certain level of tension and stress. A speaker who is very nervous and stressed can induce significant tension in the interpreter, even when working in their native language (p. 40).

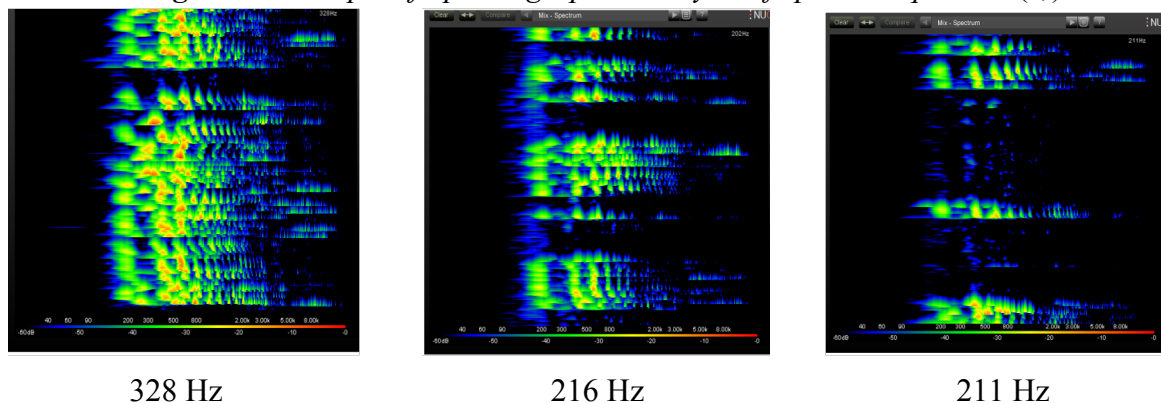
Among the various paralinguistic aspects, I examined the most common ones found in the recordings, particularly those related to the emotional sphere. These aspects include voice volume and tone, pauses, and omissions. Ahrens suggests that pauses can reflect hesitation, as the interpreters may pause analyse before continuing their interpretive output (*ibid.*: 41). Regarding omissions, Viezzi (2002) asserts that a certain amount of information loss is inevitable in interpretation, and this does not necessarily hinder communication (p. 148). However, given the emotionally-charged nature of the topic, it is important to assess whether any omissions in the recordings are linked to comprehension challenges, speaking speed, or emotional factors. To better understand these elements, I developed a questionnaire based on the COPE (Coping Orientation to the Problems Experienced) questionnaire to delve deeper into the analysis. Through this approach, I aimed to comprehensively explore the

paralinguistic features of the interpretive performances and to discern how emotional stress might impact the interpreter's output.

For vocal frequency analysis, I utilised a program called REAPER. REAPER is a comprehensive digital audio production application for computers, providing multi-track audio tools for recording, editing, processing, mixing, and mastering. Supporting various hardware, digital formats, and plugins, REAPER functions as a digital audio workstation (DAW), facilitating composing, producing, recording, mixing, and editing of audio music, vocals, and sound effects. DAWs aid in mixing multiple sound sources (tracks) on a timeline grid. The program allows for the analysis of sound waves to determine the dynamic changes in the voice at a specific point during simultaneous interpretation recordings.

For spectrographical analysis, I employed a plugin named VST3: NUGEN Visualizer2 (NUGEN AUDIO). This program enables vocal frequency analysis through spectrogram readings. A spectrogram graphically represents sound, based on sound measurements concerning frequency (Hz) on the vertical axis and time (t) on the horizontal axis. Different shaded (from blue to red) represent frequency and sound amplitude. To analyse vocal frequency and establish references, I examined the fundamental frequency (F0) on the spectrogram of the analysed segments. Ahrens (2002) emphasizes the importance of prosodic features of intonation, which are crucial for constructing and organising communicative interaction (Ahrens, 2002). Vassière (2005) asserts that while intonation varies across languages, the F0 pattern follows a common model (p. 247). Different patterns convey different meanings, such as F0 increases indicating the start of a unit (e.g., statement) and F0 decreases indicating its end.

During initial recordings analysis, a decrease in vocal frequency was identified in certain parts of the speech. However, the spectrogram analysis revealed frequency variation in specific segments. I chose to analyse three distinct speech segments at three different moments to determine if and how the vocal frequency changes occurred, forming a vocal frequency curve for later comparison. The first segment spans from minute 00:00:00 to minute 00:12:00, encompassing introductions from the presenters, the speaker, and the main theme introduction - the Holocaust. The second segment covers around minute 09:55:00 to minute 10:05:00 and focusing on the emotionally engaging start of the speaker's story. The third segment spans around minute 10:47:00 to minute 11:04:00, capturing the speaker's account of witnessing her mother's shooting. Determining the cause of a lower voice tone and whether it stems from the video's content or other factors is complex. To enhance greater accuracy, a questionnaire was administered after simultaneous interpretation to confirm or challenge the initial hypothesis.

Figure 1: Example of Spectrographic Analysis of speech sequences (I₇)

3.4 Error Classification and Pauses Analysis

As a basis for error classification, the Simonetto (2000) grid was considered, which in turn adopted the grid proposed by Ricci and Russo in 1997, based on Altman's analysis in 1994 (p. 160). This grid primarily distinguishes content errors (misinterpretation of the text) and form errors (inadequate expressions) (*ibid.*: 160). Among the common errors and difficulties identified from the analysis of the recordings, it was evident that in the initial part of the speech, Interpreter 1 (I₁) translated the sentence containing the subject pronoun "you" - "It is a privilege to have YOU here" - from minute 00:06:00 to minute 00:09:00 as "è un privilegio avervi qui" (I₁ translated the subject pronoun "you," which refers to the interviewee, into the second plural person form in Italian "voi"), while Interpreter 3 (I₃) translated the same sentence as "è un piacere averti qui", resulting in a more informal tone. In Italian, it would have been more appropriate to maintain the formal use by translating it into "averla." Omissions were present in all recordings. Among the content errors recorded, notable errors included additions (*ibid.*: 162), particularly for Interpreter 2 (I₂); contradictions (I₃ and I₁); coherence errors (I₆ and I₈). Concerning form errors, errors in verb agreement were predominantly noted (I₁, I₄, I₆, I₇, I₉), as well as morphosyntactic calques (I₂ and I₆). Another evaluative tool pertaining to intonation, a component of prosody, is pauses. As Vassière (2005) states, there is currently no universally accepted definition of intonation. The term may be strictly restricted to the perceived F₀ pattern or encompass the perception of other prosodic parameters that fulfill similar functions: pauses, relative loudness, voice quality, duration, and segmental phenomena related to varying strengthening of the speech organs (p. 238). In almost all the analysed interpretations, the presence of filled and unfilled pauses, along with omissions, were observed. The aim was to quantify the occurrences of longer filled pauses, unfilled pauses resulting in omissions, in each speech, which hindered the fluidity and smoothness of the discourse. Instances when these pauses and omissions occurred were recorded to investigate if they were in any way related to the emotional content of the speech.

Table 1: *Filled and unfilled pauses assessed during the analysis of the recordings.*

	Filled pause	Unfilled pause
I₁	-00:17:00 / 3sec	-04:13:00 / 7sec with omissions -10:40:00 / 6sec
I₂	-Various pauses throughout the entire speech. -05:57:00	-03:53:00 / 7sec -06:00:00
I₃	-	-
I₄	-10:37:00	-00:00:41 / 4sec -03:20:00 / 7sec -10:22:00 / 4sec -10:39:00 / 8sec
I₅	-	-01:46:00 / 6sec -09:33:00 / 6sec -09:52:00 / 6sec
I₆	-	-
I₇	-01:45:00 / 1sec	-01:24:00 / 3sec -01:40:00 / 10sec
I₈	-	-01:41:00 / 10sec
I₉	-	-
I₁₀	-	-10:41:00 / 17sec -11:10:00 / 6sec -11:20:00 / 8sec

3.5 Questionnaire

After performing the simultaneous interpretation, the interpreters were given a questionnaire to answer regarding their performance and emotional state. The questionnaire was specifically designed for this study, using the COPE questionnaire (Coping Orientation to Problems Experienced) as a reference. The questions were rated on a scale of 0 to 5 points, with 0 indicating "not at all" and 5 indicating "very much" (Brace, 2012). The questionnaire was structured into three distinct parts, each containing 4 questions. These three parts aligned with the phases before, during and after the simultaneous interpretation. The questions were designed to assess the interpreter's attitude and confidence in their abilities. However, the final open-ended question was more general, allowing the interpreters to share their personal thoughts on the interpreted video (*"What is your reaction to the content of the video?"*). From

the analysis of the responses, it emerged that: I₁ spoke about interpretive difficulties but also mentioned being moved while listening to the interviewee's story; I₂ expressed emotional involvement with the story's content; I₃ mentioned experiencing anguish and sadness; I₄ referred to both the emotions she felt while listening to the story and translation issues; I₅ stated that the narrative was very touching; I₆ referenced the nature of the discourse without considering the emotional aspect; I₇, on the other hand, mentioned the emotions she felt while listening to the story; I₈ only referred to the difficulties encountered when interpreting the interviewee's speech; I₉ referred to the emotional nature of the story and some translation difficulties she encountered; I₁₀ mentioned that, in her opinion, a significant *décalage* needed to be maintained and commented on the speaker's life choices.

From the analysis of the responses to the open-ended question, 4 interpreters solely considered the emotional nature of the discourse (I₂, I₃, I₅, I₇); 4 interpreters referred to both the emotional nature of the story and the encountered translation difficulties (I₁, I₄, I₉, I₁₀); I₆ and I₈ focused solely on translational matters without addressing the emotional aspect.

Table 2: *Answers to the questions related to "before performing the simultaneous interpretation."*

	You had a calm attitude, without worries	You felt quite confident in your abilities	You were afraid of making mistakes during simultaneous interpretation	You did not feel capable of performing the requested exercise
I ₁	4	2	3	2
I ₂	2	2	5	3
I ₃	4	4	2	1
I ₄	0	3	3	0
I ₅	4	4	2	0
I ₆	4	3	4	0
I ₇	2	2	5	1
I ₈	5	3	5	1
I ₉	4	4	0	0
I ₁₀	0	0	5	5

Table 3: *Answers to the questions related to “during the simultaneous interpretation.”*

	You considered your skills to be inadequate for the task at hand	You had other thoughts that hindered the interpretive performance	You remained undistracted by thoughts and maintained a high level of concentration	You assessed the exercise as fairly easy, which inspired tranquility
I ₁	1	0	4	3
I ₂	4	5	4	4
I ₃	1	0	5	3
I ₄	0	1	1	3
I ₅	2	1	4	2
I ₆	2	1	4	3
I ₇	3	2	3	3
I ₈	1	1	2	1
I ₉	2	0	4	3
I ₁₀	3	5	1	0

Table 4: *Answers to the questions related to “After completing the simultaneous interpretation.”*

	You believe you can comfortably interpret similar videos in the future	You feel you were not able to handle the situation optimally	Despite potential errors, you evaluated your performance as satisfactory	You perceived the exercise as too challenging for your abilities
I ₁	4	3	2	2
I ₂	4	3	3	3
I ₃	3	2	4	1
I ₄	4	2	3	0
I ₅	3	2	4	1
I ₆	3	1	3	1
I ₇	3	2	1	2
I ₈	4	4	3	2
I ₉	5	2	4	3
I ₁₀	2	5	0	4

Conclusion

Taking into consideration the questionnaire responses and the spectrographic analysis, we can observe in the figure below (Figure 2) how certain respondents, who indicated in the questionnaire that they were particularly affected by the speaker's narrative, demonstrated a decrease in vocal frequency in the spectrographic analysis. Specifically, this is most pronounced for I₁ with a decrease of 90 Hz from the second to the third speech segment. I₃ recorded a decrease of 87 Hz from the first part to the second, followed by a further 29 Hz decrease from the second to the third part; I₄ showed a range of 65 Hz between the analysis of the first and second portions; I₅ recorded a decrease of 55 Hz from the first portion to the second, and subsequently a further decrease of 14 Hz from the second portion to the third; I₆ recorded a decrease of 62 Hz from the first analysed part to the second; I₇ recorded a range of 112 Hz. I₉ consistently maintained a vocal frequency ranging from 190 Hz to 175 Hz throughout the recording.

From the analysis of these data, it can be affirmed that the research hypothesis has been confirmed. When interpreters perform the simultaneous interpretation of emotionally-charged content, a decrease in the fundamental frequency (F0) is observed, often accompanied by an increase in unfilled pauses. As noted earlier, 9 out of 10 interpreters exhibited a decrease in their F0 during speech segments involving emotionally engaging content. Among these interpreters, those who not only reported encountering translation difficulties but also

expressed being moved or experiencing strong emotional involvement in the questionnaire, demonstrated a more substantial decrease in F0. This is particularly evident when considering the intervals of the three analysed speech segments.

Interpreters are human beings, and it is unreasonable to expect them to remain emotionally detached linguistic performers when confronted with highly emotional scenarios. Each interpreter will know how to implement their adaptive strategies to cope with emotionally-charged situations and fulfill their role as communicative bridges between two different languages and cultures.

Figure 2: *Vocal frequency analysis – figures shown in Hertz (Hz)*

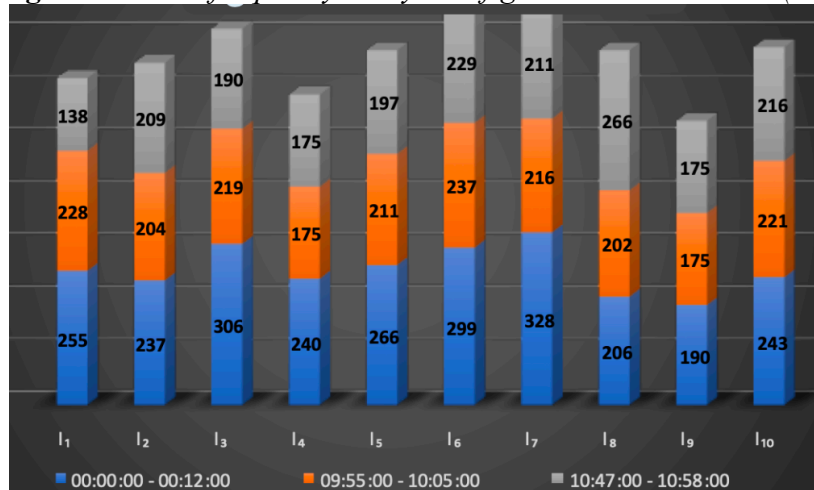
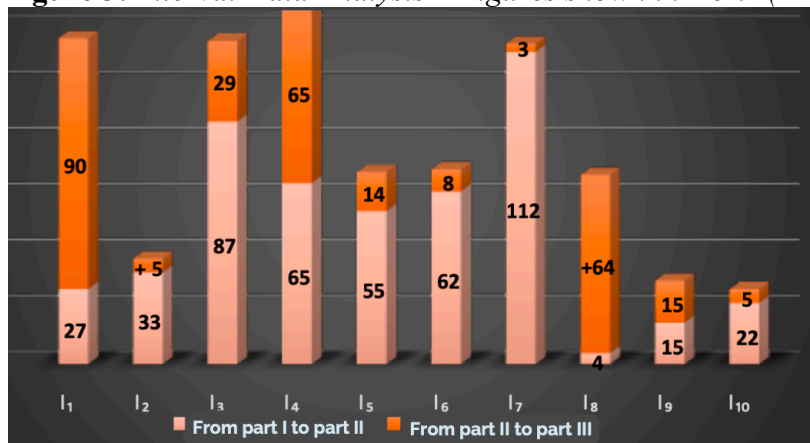


Figure 3: *Interval Data Analysis – Figures shown in Hertz (Hz)*



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Designing and Researching an Intertextual Reading-Into-Writing Summary Task

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The European Conference on Language Learning 2023
Official Conference Proceedings

Abstract

This paper reports on the design and evaluation of an innovative intertextual reading-into-writing task for use in academic admissions. Existing tests of English used for university admission avoid intertextual reading (Weir and Chan, 2019) and do not ask test takers to synthesize information from multiple texts into a single piece of writing. Therefore, there is a divergence between the design of language tests for university entrance and subsequent ‘academic writing’ required at university. We designed a mediation-focused Summary task which requires test takers to read two texts on the same topic (a total of 300 words) and to summarize the information using their own words (up to a maximum of 100 words). Seven trained judges provided CEFR ratings for 48 internally benchmarked test taker scripts across four Summary tasks (n=24) and four Essay tasks (n=24). Data were analyzed using many-facet Rasch analysis to investigate task, judge and rating scale performance. We also analyzed the level of agreement with internal benchmarking. We found a strong level of agreement between internal and external expert assessors and that the task is highly effective for distinguishing B2 from C1-level performances. Assessors were able to score responses using an analytic rating scale incorporating source use across four individual components at similar levels of reliability to a more traditional Essay task. Test takers’ lack of familiarity with the task design means the introduction of such tasks will have a significant washback effect.

Keywords: Assessment, Summarizing, Integrated-Skills

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1. Introduction

Language testing has long been predicated on a ‘four skills’ approach of speaking, reading, writing and listening (Lado, 1961). Tests of English predicated on skills-based modules may treat these skills as unnaturally isolated, whereas in the domains for which the tests were created, these skills are often combined to complete specific tasks (Gebriel & Plakans, 2014; Plakans & Gebriel, 2012; Yu, 2013) which “more closely resemble the kinds of language use tasks examinees are expected to encounter in everyday life” (Sawaki, Stricker & Oranje, 2009, p. 5). When considering higher education more specifically, universities have emphasized the importance not only of text comprehension, but of other crucial skills such as summarizing and synthesizing information and reading complex texts without instruction or guidance (University of California, 2002). The importance of integrated skills is also evident in the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001), which include the concepts of ‘interaction’ and ‘mediation’, both of which emphasize combining skills for describing overall language ability. As a result, Oxford University Press has sought to develop an integrated intertextual reading-into-writing task, developed from the ground up against expanded CEFR guidelines, for use in university entrance and professional contexts. This paper reports on the initial development and evaluation of this task.

2. Literature

Given the renewed focus on mediation in the CEFR Companion Volume (Council of Europe, 2020), this formed the starting point for developing the task.

2.1. Mediation in the CEFR

‘Mediation’ typically refers to ‘indirect conveyance or communication through an intermediary.’ Within the CEFR Companion Volume (2020), the concept of mediation is “a social and cultural process of creating conditions for communication and cooperation, facing and hopefully defusing any delicate situations and tensions that may arise” (Council of Europe, 2020, p. 106). This includes both cross-linguistic mediation and mediation within a target language. In both conceptions, it is chiefly concerned with facilitating the communicative needs of others. It is also significant that mediation often happens across modalities, so that written output may for example involve processing and relaying the message of a spoken text or synthesis of multiple sources.

2.2. An Intertextual Reading-Into-Writing Construct

The purpose of developing an integrated reading into writing task is to better represent higher order processing in reading and writing that is a cornerstone of academic proficiency. When students are required to read for writing, they will use appropriate reading strategies to construct elaborate models of text structure using higher order processes to construct textual and intertextual representations which allow them to select, evaluate and use information according to the writing purpose (Weigle, Yang, & Montee, 2013). In academic settings, students are required to read *multiple* sources and integrate information into extended pieces of writing using their own words. Although integrated-skills tasks are not new, existing tests of English used for university admission or professional purposes have completely eschewed intertextual reading (Owen, 2016; Weir and Chan, 2019) and do not ask test takers to synthesize information from multiple texts into a single piece of writing. Asking test takers to

write a *summary* of two texts requires test takers to read and differentiate main from supporting information in two (or more) texts, then *synthesize* that information into a new text for a specified audience.

2.2.1. Task Requirements: Discourse Synthesis in Summary Writing Tasks

Discourse synthesis (Nelson and King, 2022) refers to operations such as organizing, selecting, and connecting content from multiple sources on the same topic. Therefore, marking criteria should examine content transformation and degree of source use rather than just appropriation. This is crucial to successful summary writing. Higher scores should be awarded for making explicit links across sources, especially where such links may only be inferred. Summary tasks could employ an upper word limit rather than a minimum word limit traditionally associated with second language writing tests to ensure idea selection and transformation rather than just reproduction. This is crucial to a successful summary task, as Crossley et al. (2023) found that text length proved to be the strongest predictor of test taker performance in such tasks.

Given increased cognitive demands placed on L2 writers in processing multiple texts with a subsequent writing requirement, sufficient planning time is a key element of successfully creating a summary task (Leijten et al, 2019). Hyland (2009) notes that L2 writers tend to plan less than L1 writers, encountering more difficulty in setting goals and generating text. Shaw and Weir (2007) also note that novice writers plan very little and focus on generating content from within remembered resources from the topic or genre. However, skilled writing entails a heightened awareness of task purpose. A strong reading ability, including the ability to identify reading purpose, has been linked to characteristics of students' synthesis of input texts such as successful organization of ideas (Spivey, 1988).

2.2.2. Source Text Genre in Summary Writing Tasks

Explicitly stating genre is crucial, as Li (2014) notes that source text genre has a significant impact on test taker performance in summary tasks. Narrative and expository texts pose different challenges and elicit different strategies from students. Li found that students perform better when summarizing an expository text compared to a narrative text. Students experience greater difficulty identifying main ideas and creating a thesis statement for narrative text. This is because expository texts contain more explicit topic sentences and hierarchical structures compared to narrative texts with linear plot structures.

2.2.3. Designing Rating Scales for Assessing Test Taker Performance in Summary Writing Tasks

Productive components of language tests (speaking and writing) are scored using rating scales. Rating scales can be analytic or holistic. Holistic scales are those in which a single score is awarded to a sample of writing (Hamp-Lyons, 1991) and analytic rating scales those in which multiple scores are awarded to the same sample, each of which represents an aspect of the construct as identified by the test developer. For a fuller review of the advantages and disadvantages of analytic and holistic rating scales, see Barkaoui (2011). Analytic scales tend to be preferred for integrated reading-into-writing tasks (Lestari & Brunfaut, 2023; Lestari & Ho, 2023). Developers must decide whether source use is a separate scale or whether this is integrated into descriptors for other rating scale components. Lestari and Ho (2023) compared a scale with a separate criterion for reading/source use with one integrating reading

aspects into other criteria. Analysis indicated both scales functioned well, but the separate criterion was slightly clearer to raters. In contrast, Leijten et al (2019) recommend avoiding source use in language criteria to prevent assessor confusion. When investigating the performance of analytic scales for reading-into-writing tasks, dimensionality analysis is therefore paramount for analyzing the performance of the different scales or whether assessors are unintentionally focusing on one aspect of language (Knoch et al, 2020; Leijten et al, 2019).

2.3. Research Questions

The discussion of the literature in Section 2.2 reveals that there are many ways in which the validity of a summary writing task can be investigated. However, as this is a new task and rating scale, we restricted our initial investigations to the functioning of the rating scale and the suitability of the task for its intended purposes. Therefore, the following research questions were devised to investigate task and rating scale performance:

RQ1: To what extent does test taker performance in the summary task align with other measures of writing proficiency?

RQ2: To what extent do each of the analytic scale components provide unique information?

3. Methodology

To address the research questions, the study employed a quantitative research design, analyzing numerical data collected from assessors to make judgements about task suitability and rating scale performance. The overall research design is presented in Table 1:

Data Collection	Data Analysis	Research question
<ul style="list-style-type: none"> Rating of 24 summary task performances by seven assessors using rating scale aligned to the CEFR 	<ul style="list-style-type: none"> Many-facet Rasch measurement (rating scale model) of Essay and Summary data Correlation analysis Separate Rasch analysis of Essay and Summary data 	RQ1. How does test taker performance in the summary task align with other measures of writing proficiency?
<ul style="list-style-type: none"> Rating of 24 Essay task performances by seven assessors aligned to the CEFR 	<ul style="list-style-type: none"> Many-facet Rasch measurement (partial credit model) of Essay and Summary data Correlations between components of the rating scale 	RQ2. Does each of the components provide unique information?

Table 1. Research design

3.1. Assessors

Seven assessors (five male, two female) participated in this study. All were English first language (L1) speakers, while all held English language teaching qualifications. Three hold PhDs in language assessment while the remaining four possess extensive experience in English language teaching, item writing and materials development. All participants possess at least a BA. Three participants had experience working as professional assessors for high-stakes standardized English language tests, including experience with analytic rating scales of

the kind used in this research. The assessors were recruited through professional networks via email and provided signed consent forms.

3.2. Research Instruments

Having considered the lessons from both the CEFR and recent literature, Oxford University Press designed a summary task as represented by the example in Figure 1:

<p>You have 20 minutes to write a summary. Write 80–100 words.</p> <p>You have been learning about psychology in a college class. Your tutor has now asked you to read about research in psychology and write a summary of the main ideas to share with your class.</p> <p>Read the two texts below and write one paragraph using full sentences, combining the information given in the texts. Use your own words where possible. Your summary should provide the reader with enough information to understand the main ideas in the texts.</p> <p>Do NOT write more than 100 words. Write your summary.</p>	
<p>Psychology textbook extract</p> <p>In theory, when researchers conduct research, their experiments are not biased and provide valid results. In practice, the research results can be negatively affected in various ways. One common cause of bias is the researcher themselves. For example, a researcher can make mistakes when recording results. This is referred to as the ‘experimenter effect’ as it is the experimenter that affects the outcome of the experiment, reducing confidence in the experiment’s result. There are two main kinds of experimenter effects. First, let’s turn to non-interactive effects. These effects are found in research that does not require the researcher to interact with the research subjects, for example where the researcher does not record accurately what they have observed, known as the Observer Effect. Another example is where the researcher interprets the evidence from an experiment incorrectly, known as the Interpreter Effect. Less common are Intentional Effects, where researchers do not report the research results accurately on purpose.</p>	<p>Psychology lecture transcript</p> <p>“Back in the late sixties, psychologist Robert Rosenthal conducted an experiment into ‘Interactional Effects’, that is, ones that involve the researcher interacting with the subject. Two teams of researchers were set up, each given a maze containing rats to observe. One team was told they had intelligent rats; the other team were told they had unintelligent rats. The intelligent rats solved the maze well while the unintelligent rats didn’t. What makes this surprising is that the rats, in fact, were all equally intelligent! This is a classic case of ‘expectancy effect’, where the researcher unconsciously influences the subject to act in a way the researcher wants them to, making the research less valid. It’s believed that the ‘intelligent’ rats did better because the researchers with the ‘intelligent’ rats treated them better than those with ‘unintelligent’ rats.”</p>
<p>GLOSSARY</p> <p>experimenter: a researcher maze: a system of paths with walls designed so that it is difficult to find your way through. subject: a person or animal that a researcher collects information on. unconscious: if you are unconscious of something when you are doing it, you are not aware you are doing it. unintelligent: not intelligent</p>	

Figure 1. Example of written summary task for the Oxford Test of English Advanced

The task contains instructions, two texts and a glossary. The time limit for the task is 20 minutes, including both reading and writing time. The task rubric specifies the context and topic, in this case psychology. Test takers are specifically asked to write a single paragraph in full sentences to avoid the impulse to write bullet points. The instructions specifically call on the test taker to identify the main ideas in the texts. The word limit for the task is 100 words to avoid the issue of test takers trying to write too much. There is a multimodal aspect to the task, as one text is an extract from a textbook, and is a lecture transcript. There is a glossary which identifies and provides short definitions of low- frequency lexis. However, subject-specific vocabulary is *not* defined, as this would overly assist the test takers with the task.

3.3. Rating Scales for the Summary Task

To score test taker responses, assessors use an analytic rating scale. The rating scale contains four components: task fulfilment, organization, grammar and lexis. Source use is integrated across all four criteria, rather than having an independent scale. Scores range from ‘Below B1’ to ‘Above C1’ in half-band increments. Each test taker therefore receives four scores, one each for task completion, organization, grammar and lexis (maximum score = 28). The full rating scale can be viewed in Appendix A.

3.4. Assessor Training

Assessors were provided with a series of materials, including the summary task specification, summary rating scale (Appendix A), additional guidance on using the criteria as well as CEFR materials on mediation. Assessors were also provided with twelve samples of test taker responses to two different summary tasks (six samples per summary task). Assessors were asked to familiarize themselves with the materials, then use the rating scale to score the twelve samples. Assessors entered their scores into an Excel spreadsheet which were then returned to Oxford University Press. These scores were used as the basis for a synchronous online training webinar. The webinar lasted approximately two hours. Assessors were able to ask questions about the rating scale. Three samples from the training were selected based on the assessors scores – two which had strong disagreement, and one which had strong agreement. These were used as the basis of discussion among participants to come to a shared understanding of the criteria.

3.5. Main Data Collection

Upon the conclusion of the webinar, assessors were given access to the samples used for the main data collection. Four summary tasks were used in this research. Six test takers provided responses to each summary, resulting in a total of 24 samples of test taker writing. Samples were selected from pretesting conducted in 2022. The samples had all been scored internally and were chosen to represent a range of scores from B1-C1 of the CEFR. All 24 samples of writing were marked by all seven assessors, who gave four scores per sample (task fulfilment, organization, grammar and lexis). The assessors did not have access to the scores initially awarded to the samples during pretesting. The same data collection procedure was performed for 24 test takers who completed Essay tasks. Of these 24 test takers, 17 also completed the summary tasks. These seventeen test takers provided the basis for addressing Research question 1, by comparing their performance on the Essay task with the Summary task. The Essay task also has an analytic rating scale with four components (task fulfilment, organization, grammar and lexis). However, the content of the scales is different, due to differing task requirements. Data collection took place in February – March 2023.

3.6. Methods of Data Analysis

Assessors’ ratings were analyzed using many-facet Rasch measurement (MFRM) within the programs FACETS v3.84 (Linacre, 2023a) WINSTEPS v5.2.4.0 (Linacre, 2023b). MFRM is a variant of Rasch measurement used when data is reported on a rating scale by independent judges. To address Research question 1, a five-facet model was adopted (assessors, test-takers, task (Essay/Summary), test, component). Because each test had a unique cohort with no overlap (no test taker took more than one test), the test facet was used as a dummy variable (anchored at zero) to link the dataset and avoid the emergence of subsets. The

research adopted a variation of MFRM called the rating scale model (Wright and Masters, 1982). This model specifies the probability, P_{nij} , that person n of ability measure B_n is observed in category j of a rating scale F specific to item i of difficulty measure D_i as opposed to the probability $P_{ni(j-1)}$ of being observed in category $(j-1)$:

$$\log_e(P_{nij} / P_{ni(j-1)}) = B_n - D_i - F_{ij}$$

In this variant, the rating scale structure $\{F_{ij}\}$ becomes specific to item i , although difficulty, ability and assessor leniency measures are still plotted on the same scale in the output. Additionally for both Research questions 1 and 2, the rating scale model (Andrich, 1978) was also employed to further explore the individual components as independent criteria. In the rating scale model, the partial credit model treats individual rating scale criteria as having their own scale structure. This is expressed as:

$$\log_e(P_{nij} / P_{ni(j-1)}) = B_n - D_{gi} - F_{gj}$$

The subscript ‘g’ in the rating scale model specifies the group of items to which item i belongs and identifies the rating scale structure that belongs to the group (Linacre, 2023c, p. 3). This allows for scrutiny of the scale performance for each component of the rating scale. This model assumes equal threshold parameters for each component and so is appropriate for analyzing the functioning of an analytic scale (McNamara, Knoch & Fan, 2019). The same analysis was performed on the Essay data. Correlations were also calculated for the test takers who had taken both the Summary and the Essay task.

4. Findings

RQ1: To what extent does test taker performance in the summary task align with other measures of writing proficiency?

To address Research question 1, we directly compared the performance of test takers in the Summary task to their performance in the Essay task. This was initially addressed by examining the MFRM output from the partial credit model (Table 2). This model incorporated five facets, of which four are reported below. The fifth facet was rating scale component, but as the content of the scales are different for the Essay and Summary, this facet is not reported here.

	Test taker	Assessor	Pretest	Task (Essay/Summary)
Measure				
M	-0.07	0.00	0.00*	0.00
SD (pop)	1.02	0.68	0.00*	0.43
Average SE	0.17	0.08	0.06	0.04
n	31**	7	4	2
InfitMS				
M	0.94	0.99	1.00	1.00
SD (pop)	0.38	0.23	0.14	0.14
OutfitMS				
M	0.96	1.02	1.03	1.03
SD (pop)	0.41	0.28	0.16	0.18
Separation statistics				
Ratio	6.81	8.69	0.00	10.25
Strata	9.41	11.93	0.33	14.00

Reliability	.98	.99	.00	.99
Fixed X ²	1513.1***	503.3***	0.00	212.3***
df	30	6	3	1
*Pretest anchored at zero (dummy variable). Assessor facet mean set to zero. Test taker facet allowed to float. **24 test takers each took an Essay and Summary task in total; only 17 test takers took both tasks. *** $p < .001$.				

Table 2. Summary statistics of three facets (MFRM rating scale model)

Table 2 provides details of the performance of the three facets. This is interpreted through fit statistics: infit and outfit mean square (MS) values. These have an expected value of 1 (Linacre, 2023d), with deviations above and below this indicating that the collected data are unproductive for measurement. McNamara (1996) states an acceptable range for this statistic is between 0.7-1.3, although Lunz, Wright and Linacre (1990) suggest a less strict criteria of 0.6 to 1.5 for fit statistics. The figures for test taker, assessor and task facets were all close to or exactly 1, indicating that data for the Summary and Essay tasks both meet expectations for productive measurement. The fixed Chi-square statistic tests the hypothesis that elements of each facet share consistent patterns and are thus of the same ‘type’. The highly significant results suggest that there are different types in every facet. For example, the separation statistic (6.81) indicates that a rating scale with seven levels is appropriate for describing the performances in the test which were selected to represent different CEFR bands. The large figure for task (10.25) indicates that the score patterns for each task are sufficiently different from each other and that the tasks are measuring different skills.

The overall outcome of the MFRM analysis is represented in Figure 2 below, which shows the vertical ruler, or FACET map, for all four facets in the model (with pretest anchored at zero).

Measr	+Assessor	+Test taker	-Script	-Pretest	S.1	S.2	S.3	S.4
3					(7)	(7)	(7)	(7)
2		*			6	6	6	6
		*			---	---	---	---
1	1	*			5	5	5	5
		*			---	---	---	---
	3	***	Script 2		---	---	---	---
	2	*			4	4	4	4
0	4	***		OCT_W_C_P005 OCT_W_C_P011 OCT_W_C_P016 OCT_W_C_P017	4	4	4	4
	5	*	Script 1		---	---	---	---
	6	**			---	---	---	---
-1		*			3	3	3	3
		*			---	---	---	---
	7	***			---	---	---	---
		**			2	2	2	2
-2		*						
		*						
-3					(1)	(1)	(1)	(1)
Measr	+Assessor	* = 1	-Script	-Pretest	S.1	S.2	S.3	S.4

Figure 2. All FACET vertical rulers from rating scale model analysis

Facets 1 (assessor leniency) is oriented such that positive logits indicate greater amounts of the construct (leniency). That is, the higher the score, the more lenient the assessor. Facet 2 displays the weakest test takers are towards the top of the measurement scale, with stronger writers at the bottom. Facet 3 (Essay/Summary difficulty) is oriented such that higher scores indicate greater difficulty. The assessors are mostly clustered together between -1 and +1 logits, showing that most were not excessively harsh or lenient, except for assessor 7, who appeared harsher than other assessors by almost a full logit (assessor 7 = -1.30, assessor 6 = -0.41). The test-takers in column 3 are dispersed from -2.40 to +2.18 logits, indicating that the approach to test taker selection was effective in identifying a range of test taker abilities for the research and represents evidence that both Essay and Summary tasks are appropriate for assessing language ability at different levels of the CEFR. Task difficulty showed that the Summary task was almost a full logit more challenging than the Essay task (Essay = 0.43; Summary = -0.43). The full measurement reports for assessor, test taker and task facets can be seen in Appendices B, C and D respectively.

To look at the task data in more depth, we compared the performances of test takers in the Summary and Essay tasks directly. As noted in Section 3.5, the samples used in the data analysis were all collected during pretesting and had been double marked internally. These scores were used as the basis for sample selection. This allowed us to correlate the internal scores with the fair mean scores derived from the FACETS analysis of the ratings of the seven participants. The fair mean is a Rasch measure to raw score conversion, producing an average rating for each element that is standardized against average values of the facet (Linacre, 2023d, p. 211). The data is depicted in Figure 3 and Table 3 below.

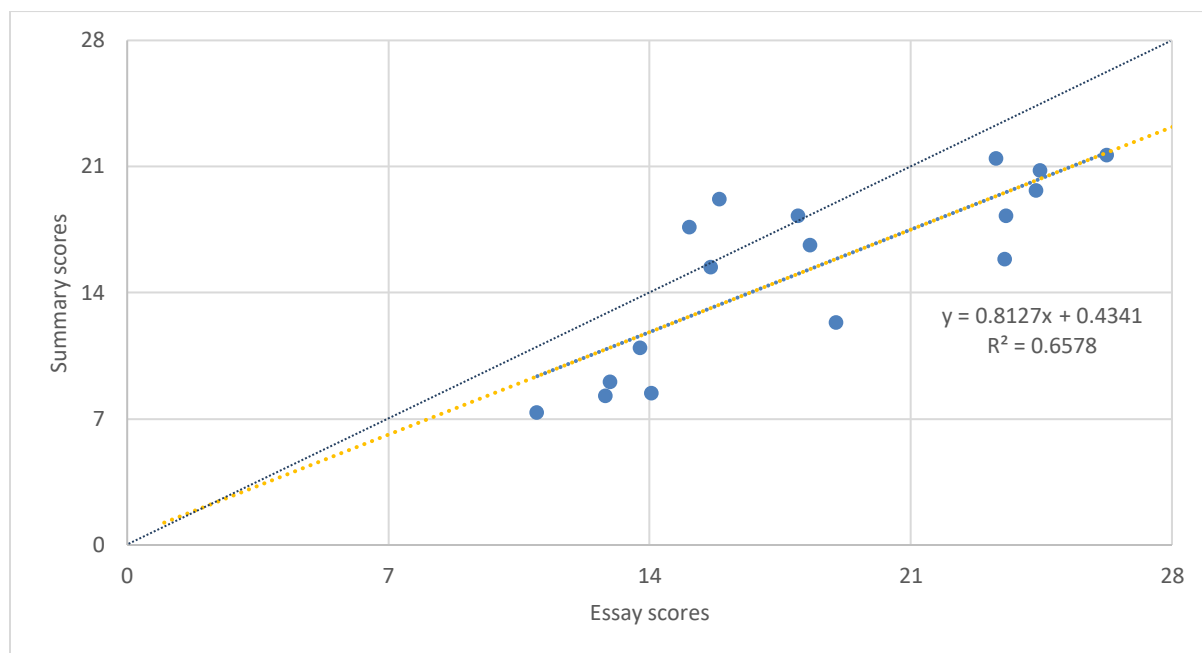


Figure 3. Comparison of Essay and Summary scores

Correlations		Agreement (Internal vs. External)		
Essay	0.90	Essay	19	24
Summary	0.94	Summary	18	24
Overall	0.91	Overall	37	48
				0.77

Table 3. Correlations and agreement between internal and assessor scores

Figure 3 shows the relationship between raw scores awarded to the seventeen test takers who completed both a Summary and Essay task. They show a strong association, with approximately 66 percent shared variance. The blue line is the ideal line, in which participants would receive the same score for both the Essay and the Summary. However, only three test takers are above this line, with the majority below it. This indicates that test takers generally receive slightly lower scores for the Summary than the Essay, indicating that they found this task more challenging. Table 3 shows correlations between the scores awarded by the seven assessors and the scores awarded to the samples from pretesting and the level of agreement between the CEFR bands awarded during pretesting and CEFR bands awarded by the seven assessors. 18 out of the 24 Summary samples were awarded the same CEFR band by the assessors as awarded during internal pretesting. This was consistent with the finding for the Essay task. Correlations are high (above .9), indicating strong agreement between internal markers and the assessors. The overall level of agreement for awarding CEFR bands to test takers was .77.

Figure 4 below shows the fair mean scores for each component derived from the partial credit model. This model was used to analyze each component separately to obtain the fair means for each test taker for each component. Scores for the Essay and Summary tasks were then plotted against each other.

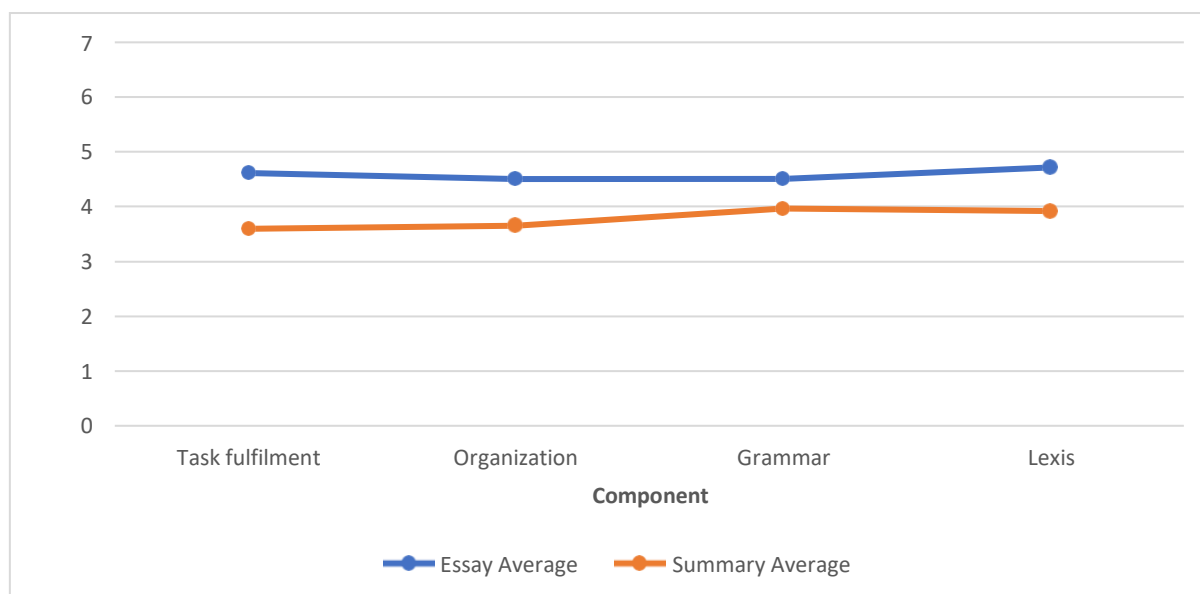


Figure 4. Fair mean average component scores for Essay and Summary tasks

Scores for the summary responses were uniformly lower than Essay scores but were closer for grammar and lexis than they were for task fulfilment and organization. This suggests that participants (both test takers and assessors) were less familiar with the Summary task design and that test takers were rewarded for their language use (grammar and lexis) but marked down for task and organization due to this lack of familiarity potentially affecting their task performance. This difference then impacted their overall scores as seen in Figure 3.

RQ2: To what extent do each of the analytic scale components provide unique information?

Research question 2 was addressed in two ways. First, the rating scale model was used to analyze the Summary data independently of the Essay data. Secondly, Essay and Summary data were analyzed using the partial credit model in WINSTEPS to investigate the multidimensionality of the four components of the rating scales used in the Summary task. The fair means depicted in Figure 4 already suggest that different components of the rating scales may have different difficulty levels. In the FACETS analysis, the pretests were unanchored to explore task difficulty in more detail. Dummy test takers were anchored at zero and weighted at .0001 to link the dataset and eliminate the problem of disjoint subsets. The outcome of the analysis is shown in Figure 5:

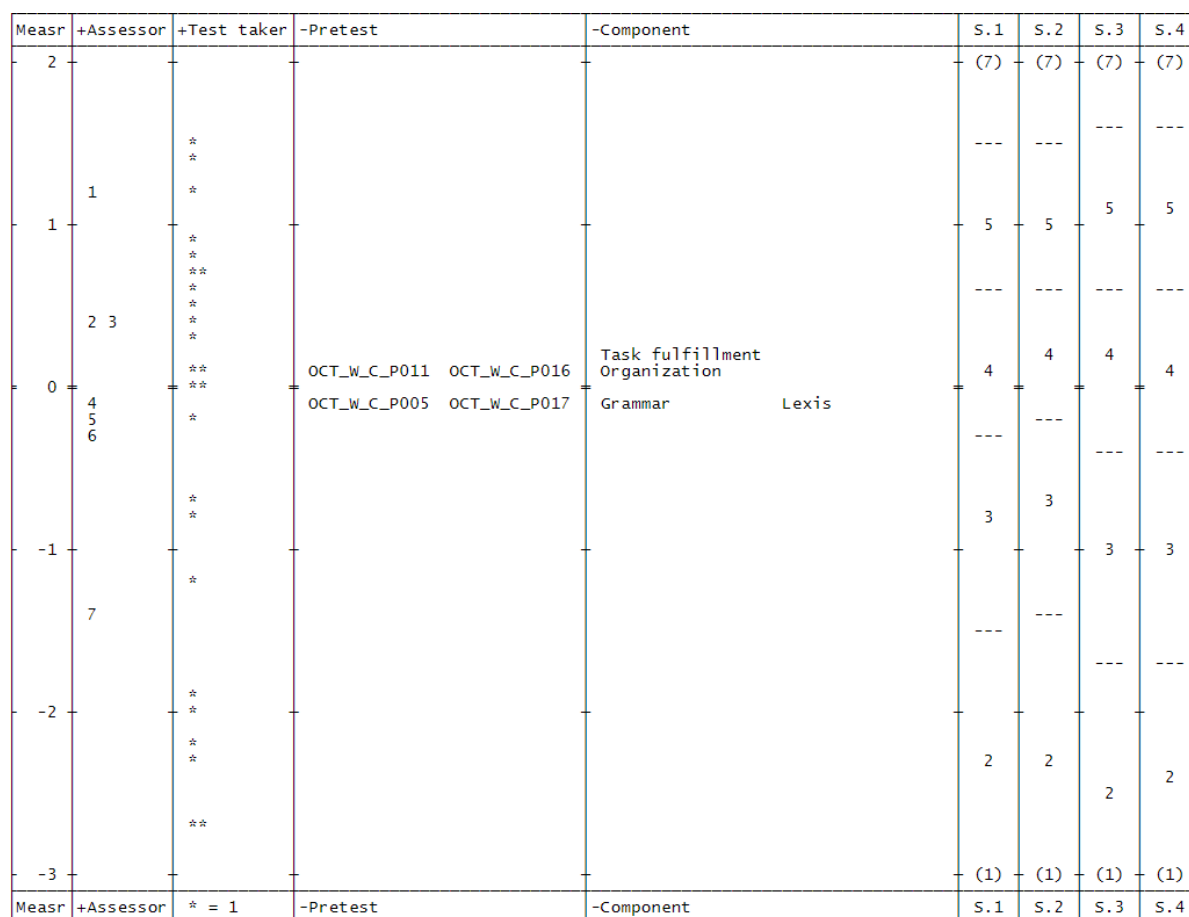


Figure 5. FACET vertical rulers from rating scale model analysis (Summary data only)

Figure 5 displays the relationship between test-taker ability, assessor leniency and rating scale component difficulty with the individual components modelled with their own scale structure. S1-S4 respectively represent task fulfilment, organization, grammar and lexis. Category thresholds are marked by the three dashes between each score within the rating scales. The data confirms that task fulfilment and organization were slightly more challenging than grammar or lexis. Scale data can be seen in Appendix E. Task fulfilment and organization recorded logit values of .17 and .06 respectively, while grammar and lexis recorded -.14 and -.09 respectively. However, all fit statistics (infitMS and outfitMS) were close to 1, suggesting that the data meet the expectations of the Rasch model for rating scale development. Scale discrimination was investigated further by performing separate three-facet analysis (test taker, assessor, pretest) on each of the four components of the rating scale. The outcome of this analysis is presented in Table 4.

Component	Range of test taker ability (Logits)		Difference
	Low	High	
Task fulfilment	-4.20	1.43	5.63
Organization	-3.25	1.46	4.71
Grammar	-3.05	1.71	4.76
Lexis	-3.58	1.62	5.20

Table 4. Scale component discrimination

The data confirms the initial finding that task fulfilment and organization proved to be more challenging for test takers than grammar or lexis (which recorded higher average ability

estimates), and a slight truncation (narrowing) for organization, suggesting fewer score bands are being used for this component. To investigate this, we explored the monotonicity of the scale. This means that the average test taker ability should *increase* with each category of the rating scale. This was investigated by exploring the Rasch-Andrich thresholds for each of the four components, the outcome of which can be seen in Table 5.

Score	Task fulfilment		Organization		Grammar		Lexis	
	Measure	SE	Measure	SE	Measure	SE	Measure	SE
1	*	*	*	*	*	*	*	*
2	-3.03	.31	-3.25	.34	-3.02	.37	-2.85	.35
3	-1.39	.22	-1.26	.22	-1.78	.25	-1.78	.25
4	.21	.20	.29	.20	-.15	.20	-.08	.21
5	.25	.21	.21	.20	.72	.20	.52	.20
6	1.31	.25	1.45	.25	1.28	.23	1.33	.23
7	2.66	.47	2.56	.43	2.95	.43	2.85	.43

*Bottom category; no threshold below this level (scores of zero were not used by assessors)

Table 5. Rasch-Andrich thresholds of the four components of the Summary rating scale

We can see for organization, scores of 4 were under-utilized relative to scores of 2, 3, 5 and 6, as the scale is not monotonic (the ability measure for Band 5 is lower than the ability measure for Band 4) suggesting that either this ability band was under-represented in the relatively small sample size of 24 test takers. To eliminate the possibility this was caused by systematic misuse of the organization criterion, we then compared the performance of each component of the rating scale across the Essay and Summary tasks. To do this, we examined the average Rasch values for each assessor in each component for the Essay and Summary tasks. This data was then plotted in a scatter graph in Python v.3.11.4, using the standard errors for each Rasch value to calculate 95 percent confidence intervals for a regression line. The outcome of this analysis can be seen in Table 6 and Figure 6.

NAME	Component	Essay Rasch Value	Essay SE	Summary Rasch Value	Summary SE
ASSESSOR 1*	Task	-1.23	0.26	-0.10	0.21
ASSESSOR 1*	Organization	-0.94	0.26	-0.19	0.21
ASSESSOR 1	Grammar	-0.71	0.25	-0.61	0.22
ASSESSOR 1*	Lexis	-1.57	0.26	-0.63	0.22
ASSESSOR 2	Task	-0.43	0.24	-0.92	0.22
ASSESSOR 2	Organization	-0.42	0.25	-1.01	0.22
ASSESSOR 2*	Grammar	-0.02	0.25	-1.49	0.24
ASSESSOR 2*	Lexis	-0.58	0.25	-1.40	0.23
ASSESSOR 3	Task	-0.31	0.24	-0.32	0.21
ASSESSOR 3	Organization	-0.81	0.26	-0.41	0.21
ASSESSOR 3	Grammar	-1.03	0.25	-0.47	0.22
ASSESSOR 3	Lexis	-0.77	0.25	-0.35	0.22
ASSESSOR 4	Task	0.08	0.24	0.30	0.21
ASSESSOR 4	Organization	-0.23	0.25	0.26	0.21
ASSESSOR 4	Grammar	-0.52	0.25	-0.08	0.22
ASSESSOR 4	Lexis	-0.52	0.25	-0.06	0.22
ASSESSOR 5	Task	0.47	0.24	0.30	0.21
ASSESSOR 5	Organization	0.29	0.25	0.08	0.21

ASSESSOR 5	Grammar	-0.08	0.25	0.01	0.22
ASSESSOR 5	Lexis	-0.07	0.25	0.27	0.22
ASSESSOR 6	Task	0.63	0.24	0.39	0.21
ASSESSOR 6	Organization	0.48	0.25	0.21	0.21
ASSESSOR 6*	Grammar	1.07	0.26	0.36	0.22
ASSESSOR 6	Lexis	0.51	0.25	0.32	0.22
ASSESSOR 7	Task	1.97	0.26	1.53	0.25
ASSESSOR 7	Organization	1.81	0.28	1.45	0.25
ASSESSOR 7	Grammar	1.75	0.27	1.30	0.25
ASSESSOR 7	Lexis	1.16	0.26	1.27	0.24

*Rasch measures differ by greater than 2x standard error

Table 6. Average Rasch values for each assessor for each component

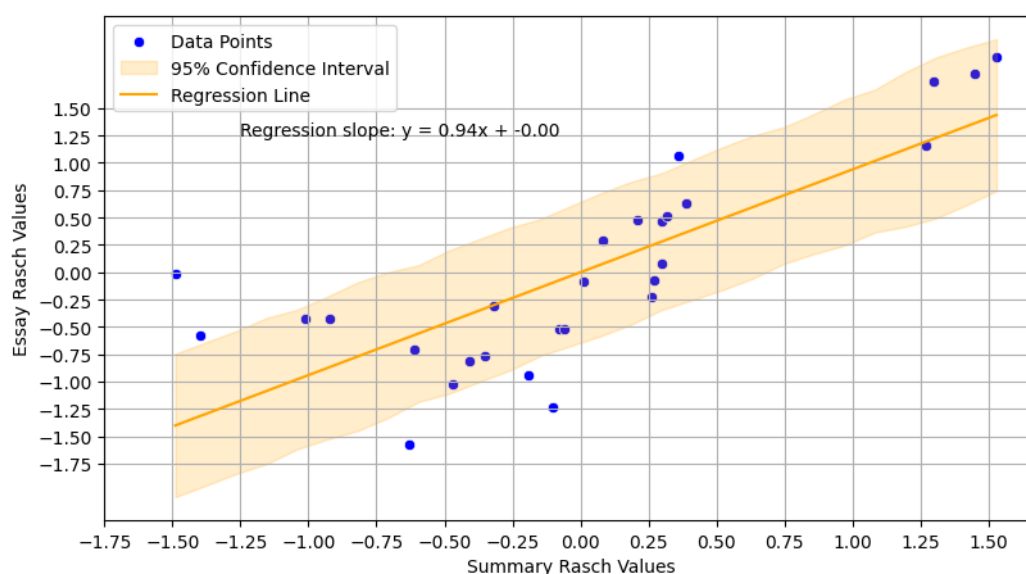


Figure 6. Average Rasch values for each component for each assessor with 95 percent CI

The regression slope in Figure 6 indicates a nearly 1:1 relationship between Summary and Essay Rasch values. The relationship shows a strong positive correlation (.78, $p < .01$), showing that as Summary Rasch values increase, Essay Rasch values increase by a similar amount. Assessors' Rasch measures are very consistent across the two writing tasks, meaning their relative leniency/severity remains similar whether rating Summaries or Essays. Note that the assessor facets were centered at zero for both analyses, resulting in the regression line intersecting 0,0. The shaded area in Figure 7 represents the 95 percent confidence interval of the regression slope. This was calculated by multiplying the average standard error by two. There are six data points outside the shaded area, meaning that assessor behavior for that component is different in the Essay and the Summary by more than two standard errors. These six data points are marked in Table 7. Assessor 1 accounts for three out of the six data points for task fulfilment, organization and lexis. However, for the remaining six assessors, there is no systematic difference in how the different components are used across the two tasks.

Finally, correlations between the components of the rating scale were calculated based on the raw scores to examine the interrelationships between the components. The output is presented in Table 7.

Task	<i>Task</i>			
	<i>fulfilment</i>	<i>Organization</i>	<i>Grammar</i>	<i>Lexis</i>
Task fulfilment	1			
Organization	0.92	1		
Grammar	0.89	0.90	1	
Lexis	0.90	0.89	0.94	1

Table 7. Correlation matrix for the four components of the rating scale for the Summary task

The data shows that all the criteria for the Summary task are strongly correlated at approximately .90. The correlation between grammar and lexis is higher, at .94, indicating that assessors perceive these two criteria as more closely related than they are to organization or task fulfilment.

Conclusions

This study represents the first step in providing validity evidence for an intertextual, reading-into-writing summary task to be used in the Oxford Test of English Advanced. We recognize that validation is an ongoing endeavor, and that further evidence will need to be presented to ensure that the task is fit for purpose in a test designed to be used for professional purposes and entrance to higher education. Evidence presented in this study shows that an intertextual reading-into-writing task is a good approach for an English test as the task was able to elicit responses from test takers at different levels of ability and presents evidence that assessors are able to score responses at similar levels of reliability to a more traditional Essay task.

The analytic rating scale incorporated reading-related and source use within the four individual components of task fulfilment, organization, grammar and lexis. The data analysis presented here provides additional support for the use of analytic rating scales to score Summary task performances and for the incorporation of source use within language use criteria, rather than creating a separate criterion specifically for source use. This avoids the problem identified by Lestari and Brunfaut (2023), who found that an independent ‘reading for writing’ discriminated less than other criteria.

Despite the integration of source use within existing criteria, scores for task fulfilment and organization were generally lower than scores for grammar and lexis in the Summary task. This may be due to test takers’ proficiency level being below the difficulty of the task (Cumming, 2014) or test-takers’ general lack of familiarity with this kind of intertextual reading-into-writing task (Chan, Inoue & Taylor, 2015). However, given that the test takers were specifically selected for participation in this study based on teachers’ expert judgement of their level and subsequent recommendation, we consider the latter explanation to be the most plausible. As a result, test developers seeking to implement these kinds of tasks within high-stakes assessments must ensure that they are well-supported by supplementary materials, publicly available information about the construct and test specification, practice test tasks, hints, guides and advice on test-taking strategies to successfully complete the task.

A lack of familiarity with the task means it is likely to have a significant washback effect on test takers, who will adapt to the requirements of the task by regularly engaging in summarization practice. This is a hypothesized benefit of adopting this task, as Marzec-Stawiarska (2016) found that students who regularly summarized texts showed significantly greater improvement in reading comprehension compared to students who did more traditional reading activities like multiple choice questions. She also found that summary writing had a much more positive effect on developing reading skills for weaker readers.

An additional challenge identified in this study is the very high intercorrelations among the different components of the rating scale. This may indicate that assessors are struggling to distinguish between the components. Brown (2006) and Chan, Inoue & Taylor (2015) have previously noted this problem as endemic to analytic scales and identified this as an issue common to all criteria of this type. This is an issue which must be subject to ongoing monitoring in live testing, and asl speaks to the need for substantial assessor training to ensure that assessors pay attention to the multiple elements of the task.

The present research is not without limitations. The research presented here has been entirely quantitative. As part of the research, we have collected substantial feedback from both assessors and test takers to capture their perceptions of the suitability of the task for the stated purpose and how assessors felt using the criteria to score responses. However, for reasons of brevity, there is not sufficient space to present the findings from the qualitative aspects of the research here. Additionally, there is a need to explore the reading practices of test takers in more detail. A further avenue for research could also be to explore the reading phase in more detail in which test takers map intertextual relations before writing, which would make the synthesis process visible. Finally, an exciting avenue of exploration for tasks of this kind are natural language processing (NLP) approaches to automatically score source use elements like semantic overlap. Given that the task design already controls text length (up to 100 words), the task is well-designed for computational linguistic approaches which could complement human rating by identifying source integration behaviors automatically.

Appendices

Appendix A

CEFR	Score	Task fulfilment	Organization	Grammar	Lexis
C2	7	<ul style="list-style-type: none"> response skilfully redrafts the main ideas with appropriate supporting details from both texts response is consistently clear, sophisticated and appears effortless, with no redundancy register is consistently appropriate for task purpose 	<ul style="list-style-type: none"> reconstructs ideas to produce a response with a natural flow consistently coherent; well-structured with logical sequencing of ideas uses sophisticated cohesive features appropriately at all times 	<ul style="list-style-type: none"> exploits grammatical resources creatively to write with a distinct voice maintains consistent grammatical control to produce a very concise response maintains a high level of accuracy throughout; errors are rare and only concern complex forms 	<ul style="list-style-type: none"> exploits lexical resources creatively with a high degree of sophistication maintains consistent control of lexis and phrases to produce a very concise response maintains a high level of accuracy of both lexis and phrases; errors are rare and difficult to spot
C1.2	6	Comfortably meets the positive descriptors of 5 and negative descriptors minimally if at all.			
C1.1	5	<ul style="list-style-type: none"> response synthesises the main ideas with appropriate supporting details from both texts response is clearly communicated with little redundancy register is nearly always appropriate for task purpose 	<ul style="list-style-type: none"> reorganizes ideas in a logically connected way consistently coherent; well-organized progression of ideas uses appropriate cohesive features with rare instances of misuse 	<ul style="list-style-type: none"> exploits grammatical resources to adapt grammatical structures maintains grammatical control to produce a concise response maintains a good level of accuracy; occasional errors when adapting grammatical structures 	<ul style="list-style-type: none"> exploits lexical resources to adapt lexis maintains lexical control to produce a concise response maintains a good level of accuracy; occasional errors when adapting lexis
B2.2	4	Comfortably meets the positive descriptors of 3 and negative descriptors minimally if at all.			
B2.1	3	<ul style="list-style-type: none"> response synthesises at least two main ideas with some supporting details from both texts response is generally clearly communicated; shows awareness of task purpose register is generally appropriate; response shows awareness of task purpose 	<ul style="list-style-type: none"> integrates ideas coherently while maintaining original sequence generally coherent; able to connect ideas across sentences uses simple cohesive features to link sentences, generally appropriately 	<ul style="list-style-type: none"> uses grammatical resources to paraphrase some grammatical structures moderate grammatical control; response may lack conciseness generally accurate; grammatical errors occasionally impede communication 	<ul style="list-style-type: none"> uses lexical resources to paraphrase some words and phrases moderate lexical control; response may lack conciseness generally accurate; lexical errors occasionally impede communication
B1.2	2	Comfortably meets the positive descriptors of 1 and negative descriptors minimally if at all.			
B1.1	1	<ul style="list-style-type: none"> response includes at least one main idea from one text response is not always clearly communicated register is not always appropriate; limited awareness of task purpose 	<ul style="list-style-type: none"> reproduces ideas in their original sequence; little attempt to manipulate order of ideas not always coherent; presents ideas as list of separate points occasionally uses some simple cohesive features to link sentences 	<ul style="list-style-type: none"> uses grammatical resources to paraphrase in a simple fashion limited grammatical control; response relies on original structures sometimes inaccurate; errors may occur when paraphrasing simple structures 	<ul style="list-style-type: none"> uses lexical resources to paraphrase some words in a simple fashion limited lexical control; response relies on original wording sometimes inaccurate; errors may occur when paraphrasing frequent lexis
Below B1	0	Response does not fulfil all the positive descriptors of 1 (B1) OR task not attempted (i.e. off-topic)			
Score cap: Use of input texts		<ul style="list-style-type: none"> Only one source text is used: Band 2 (Task fulfilment <u>and</u> organization) 			
Score cap: Maximum word count		<p>The word limit for this task is 100. Therefore:</p> <ul style="list-style-type: none"> Up to 105 words: any score may be awarded. 105-120 words: Band 4 (all criteria) 121 words or more: Band 2 (all criteria) 			

Appendix B. Assessor measurement report

Assessor	T.Score	T.Count	Obs.Avg	FairMAvg	Measure	S.E.	InfitMS	InfitZ	OutfitMS	OutfitZ	PtMea	PtMeExp	Exact Obs %	Agree Exp %
1	939	192	4.89	4.86	1	0.08	1.44	3.87	1.61	5.12	0.67	0.77	20.5	22.3
2	824	192	4.29	4.14	0.33	0.08	0.95	-0.48	0.95	-0.47	0.74	0.78	25.8	26.2
3	848	192	4.42	4.29	0.47	0.08	0.9	-1.04	0.9	-1	0.86	0.78	28.4	26.8
4	777	192	4.05	3.86	0.06	0.08	0.94	-0.62	0.94	-0.63	0.77	0.78	28	27.3
5	743	192	3.87	3.66	-0.14	0.08	1.11	1.1	1.11	1.09	0.79	0.78	27.1	27.2
6	697	192	3.63	3.39	-0.41	0.08	0.95	-0.46	0.95	-0.51	0.8	0.77	28.4	26.3
7	555	192	2.89	2.63	-1.3	0.08	0.7	-3.18	0.72	-2.98	0.77	0.74	20.3	19.4

Appendix C. Test taker measurement report

Test taker	T.Score	T.Count	Obs.Avg	FairMAvg	Measure	S.E.	InfitMS	InfitZ	OutfitMS	OutfitZ	PtMea	PtMeExp	Discrim
30040	157	56	2.8	2.74	-1.23	0.15	1	0.05	1	0.09	0.65	0.58	0.93
30042	106	28	3.79	3.34	-0.54	0.19	0.45	-2.67	0.44	-2.72	0.69	0.57	1.61
60021	256	56	4.57	4.59	0.67	0.13	1.08	0.49	1.06	0.37	0.38	0.64	0.93
60022	107	28	3.82	4.24	0.35	0.19	0.64	-1.54	0.64	-1.55	0.76	0.57	1.44
81264	96	28	3.43	3	-0.91	0.2	0.38	-3.06	0.39	-2.97	0.63	0.55	1.64
81265	86	28	3.07	3.41	-0.46	0.2	0.45	-2.5	0.42	-2.72	0.79	0.54	1.61
81266	50	28	1.79	1.96	-2.4	0.27	0.96	-0.05	0.98	0.01	0.19	0.42	0.95
120033	148	56	2.64	2.58	-1.44	0.16	1.41	1.92	1.32	1.6	0.68	0.57	0.67
120035	136	28	4.86	4.43	0.53	0.19	0.65	-1.51	0.65	-1.5	0.83	0.58	1.37
120831	298	56	5.32	5.39	1.47	0.14	0.74	-1.5	0.8	-1.12	0.62	0.62	1.27
120832	110	28	3.93	3.47	-0.39	0.19	1.18	0.74	1.24	0.97	0.83	0.57	0.66
120854	68	28	2.43	2.69	-1.29	0.23	0.55	-1.84	0.58	-1.74	0.73	0.49	1.45
120855	69	28	2.46	2.14	-2.09	0.23	0.64	-1.42	0.72	-1.06	0.21	0.5	1.28
121146	312	56	5.57	5.66	1.77	0.15	0.94	-0.28	0.97	-0.12	0.71	0.6	1.1
121148	294	56	5.25	5.32	1.39	0.14	0.89	-0.56	0.86	-0.73	0.65	0.62	1.2
130200	273	56	4.88	4.91	0.98	0.14	0.7	-1.81	0.68	-1.95	0.77	0.63	1.38
130201	227	56	4.05	4.03	0.15	0.13	1.3	1.56	1.38	1.96	0.21	0.63	0.62
130203	254	56	4.54	4.55	0.63	0.13	1.74	3.46	1.84	3.85	0.43	0.64	0.15
250032	106	28	3.79	4.2	0.31	0.19	0.65	-1.48	0.66	-1.45	0.52	0.57	1.36
250034	329	56	5.88	5.97	2.18	0.16	1.59	2.63	1.99	4.03	0.51	0.58	0.49
250036	228	56	4.07	4.05	0.17	0.13	0.83	-0.94	0.81	-1.07	0.58	0.63	1.18
270018	82	28	2.93	2.55	-1.48	0.21	1.03	0.2	1.02	0.17	0.38	0.53	0.99
270020	157	56	2.8	2.74	-1.23	0.15	0.97	-0.09	0.92	-0.35	0.66	0.58	1.04
270021	128	28	4.57	5.02	1.09	0.19	1.55	1.94	1.53	1.89	0.56	0.58	0.4
270030	137	56	2.45	2.38	-1.72	0.16	1.18	0.95	1.16	0.88	0.53	0.55	0.79
270031	320	56	5.71	5.81	1.95	0.15	0.62	-2.22	0.63	-2.18	0.74	0.59	1.43
320025	229	56	4.09	4.07	0.19	0.13	1.23	1.23	1.2	1.1	0.65	0.63	0.85
320054	100	28	3.57	3.14	-0.76	0.19	0.39	-3.01	0.38	-3.09	0.82	0.56	1.69
320055	236	56	4.21	4.2	0.31	0.13	1.64	3.05	1.72	3.37	0.31	0.63	0.2
760038	168	56	3	2.94	-0.99	0.15	1.02	0.16	1.04	0.27	0.56	0.59	0.96
760039	116	28	4.14	4.58	0.67	0.19	0.75	-1.02	0.73	-1.1	0.81	0.58	1.37

Appendix D. Task measurement report

Task	T.Score	T.Count	Obs.Avg	FairMAvg	Measure	S.E.	InfitMS	InfitZ	OutfitMS	OutfitZ	PtMea	PtMeExp	Discrim
Essay	2888	672	4.3	4.25	-0.43	0.04	0.9	-1.89	0.9	-1.98	0.81	0.8	1.12
Summary	2495	672	3.71	3.38	0.43	0.04	1.1	1.86	1.15	2.74	0.78	0.79	0.89

Appendix E. Rating scale measurement report (Summary task)

Component	T.Score	T.Count	Obs.Avg	FairMAvg	Measure	S.E.	InfitMS	InfitZ	OutfitMS	OutfitZ	PtMea	PtMeExp	Discrim
Task fulfillment	598	168	3.56	3.3	0.17	0.08	0.97	-0.23	1.04	0.41	0.8	0.8	1.02
Organization	609	168	3.63	3.36	0.06	0.08	0.98	-0.11	1.05	0.46	0.8	0.8	1
Grammar	647	168	3.85	3.71	-0.14	0.08	0.96	-0.31	1.01	0.16	0.81	0.81	1.04
Lexis	641	168	3.82	3.68	-0.09	0.08	0.95	-0.44	1.02	0.21	0.81	0.81	1.04

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