

Developing a Conceptual Model: Integrating CALL in TBLT

Naureen Shehzad, Higher Colleges of Technology, United Arab Emirates

The European Conference on Education 2022
Official Conference Proceedings

Abstract

Over the last 20 years, task-based language learning (TBLT) has gained immense recognition from linguists all over the world. With the seamless assimilation of technology in the lives of educators and learners, a strong and growing body of literature has supported the efficacy of computer-assisted language learning (CALL) over the last decade. Recent research has proved the positive aspects of technology-mediated classrooms. As the two methodologies have matured and excelled in language classrooms, this research seeks to explore the interconnectedness of the two approaches and the intersection of technology to facilitate learning. The study investigates the affordances that technology-mediated task-based instruction brings in language learning. Furthermore, in light of the data gathered, the study is framed around grounded theory using coding and reflexive comparison to bring forth a modifiable conceptual model that consolidates the centralities of both TBLT and CALL models while keeping students at the centre of the paradigm.

Keywords: TBLT, CALL, Grounded Theory, Conceptual Model

iafor

The International Academic Forum

www.iafor.org

Introduction

Since the inception of task-based language teaching (TBLT) more than thirty years ago, it has received much attention from educators in second language acquisition. This process-oriented approach to language teaching centralizes around communicative language teaching (Nunan, 2006) with the essence of accumulating communicative tasks at the core of its instruction in a curriculum. Unifying learning around tasks provides learners with an experiential learning platform where students are engaged in the target language for meaning-making, understanding form and using language for communication in real life. Originating from Dewey's approach (1998) of experiential learning and rooted in sociocultural theory, this framework has taken many adaptations to fit the needs of students. The two most acknowledged TBLT designs centred on task-based stages were developed by Willis (1996) and later by Ellis (2006). The former involves a focus on language and form, whereas the latter agrees on communicative competence. However, in this age, as technology has seamlessly integrated into many aspects of learners' lives, educators alike have embraced the rise of technology and research has generated an increasing number of studies that well incorporate technology in language teaching (Ziegler, 2016; Blake, 2016). Manifesting on the various challenges in implementing TBLT in language classrooms, Lai & Li (2011) discovered the constraints could be minimized with the inclusion of technology in language teaching. In addition to the agreeable relationship between technology and TBLT, several researchers have looked closer to the interaction between digital literacy and TBLT. Research has also proved that language learning via technology motivates and engages students (Ziegler, 2016; Chong & Reinders, 2020).

This study endeavours to explore the technological proficiencies that TBLT can provide while incorporating CALL at its core in student-centred learning. Since 21st-century students are digital natives and believe in multimodal and multitasking manner, the use of technological gadgets like laptops, tablets and mobile phones is a norm to them. Hence, language teachers are welcoming Web 2.0 technologies in language classrooms benefitting the millennials with technology and upgrading their traditional face-to-face lessons. Moreover, TBLT researchers have not ignored the potential of fruitful synergies between the two theories. Collaborative technology-mediated tasks promote productive language output through interaction which motivates students to continue improving their language skills (Gonzalez-Lloret, 2020).

The affordances that CALL provides to TBLT underpins sociocultural and interaction theories advancing in language learning by providing synchronous and asynchronous learning environments. However, integrating the two models and formulating a model that consolidates the interconnections between the two has not been explored yet. Such an integrated model has not been found in the existing body of literature as far as the researcher has discovered. Technology mediation has informed and transformed learning over the last two decades, hence, CALL as an approach has been discovered to contour and navigate language learning competence. Many researchers have presented studies that conjoin both approaches to facilitate learning. Having a plethora of literature available to study devoid of any model, the researcher chose to develop a model to fill the gap and present a foundation for CALL and TBLT in literature that hasn't been prepared so far.

Literature Review

A growing body of literature has augmented task-based language learning from the last three decades. However, with the advent and normalcy of technology in every sphere of life, technology has seeped its way into education and flourished in language acquisition. Technology-enhanced language learning has provided a novel dimension to researchers by integrating it for meaningful learning in face-to-face as well as remote learning. This body of literature synthesizes task-based learning, computer-assisted language learning and the affordances technology provides forming an innovative pedagogical framework to fill the gap in the literature.

Task-based Language Teaching – TBLT

TBLT is a process-based approach that has gained significance as a methodological and pedagogical approach with theoretical underpinning traced back from John Dewey's (1998) and Prabhu's (1987) work on experiential learning or 'learning by doing'. Additionally, sociocultural theory involving its discourse-oriented nature with collaborative interaction gravelled its way in TBLT by engaging in language-oriented tasks (Tanaka, 2005). Moreover, TBLT works in the zone of proximal development of students ensuring that language is developed from scaffolding and interaction with peers. This foundation stresses the importance of experience and relevance to learning. Henceforth, basing the definition on the synthetic approach of learning, Nunan (2006) defined task as real-world activity and pedagogical tasks by simplifying learning into constituent parts and introducing each part separately and step-by-step. Willis (1996) defined task as a goal-oriented activity in which learners achieve a real outcome. TBLT does not depend on prior analysis of language learning and depends on unit of focus where the emphasis is placed on authenticity, interaction, meaning and learners' engagement with the language (Ziegler, 2016). Long (2015) referred to this as whole learning or holistic approach to learning by stressing the importance of learners; current and future communicative needs while engaging in authentic interactions. Ellis (2006), stated the stages of a task-based lesson with the task as a crux at each stage. Out of various designs proposed (Prabhu, 1987; Willis, 1996), all constitute three principles that reflect the chronology of a task-based lesson. Ellis (2006) entails the task-based lesson in three categories namely pre-task, during-task (the obligatory phase) and post-task. 'During-task' is based on the centrality of the task using different instructional techniques for students to work under a time restraint and get ready for the production stage. Finally, post-task involves follow-up activities on task performance. The pre and post tasks are not mandatory, yet their role is crucial in ensuring that task performance is optimal and effective for language development. Skehan (2003) raised his concerns on task complexity, careful planning of pre and post tasks, the familiarity of tasks and interactivity among participants. More recently, Long (2015) provided a framework based on Skehan's approach urging instructors for a need analysis, classifying tasks, developing pedagogy and sequencing tasks to form a syllabus.

Collectively, based on all the literature gathered, TBLT has laid its foundation in language acquisition concurring with seminal theories and presenting its basis for language learning using authentic meaningful tasks that involve peer collaboration.

With the seamless addition of technology in daily lives, the principles of task-based learning have intersected with computer-assisted language learning to provide a pedagogical framework that supports technology integration. Technology-mediation in TBLT has

extended the conceptualization of task (Zeigler, 2016) that includes EdTech tools and mobile assisted learning. Tasks, as a result, were reconceptualized and redefined with a focus on meaning, goal orientation, learner-centeredness, holism and reflective learning (Gonzalez-Lloret, 2014).

Computer Assisted Language Learning - CALL

Owing to the increase in computer literate people since the 90s, Chapelle (2001) was amongst the pioneers to decipher the relative correlation between technology-mediated instruction using task-based learning methodologies. The inclusion of innovation in learning has led to teachers' attraction and exposure to language teaching (Pierson, 2015). Chapelle (2003) researched beyond the gimmickry of technology and its diverse use in language learning. Thus, ubiquitous technology brought the potential benefits of communication which motivated the students in their writing tasks using blogs enabling them to receive individualized and personalized feedback (Cummins & Sayers, 1995; Rashid, Cunningham & Watson, 2017; Chen & Brown, 2012). Moreover, the challenges associated with the successful implementation of TBLT has coaxed the proliferation of technology in classroom contexts. Students' passive learning styles and overreliance on teachers, crowded and packed classrooms, diversity in learning styles, and students' avoidance in using the target language for communicative purposes are few temporal and physical challenges that hinder in reaping the complete benefits of TBLT (Carless, 2004; Bruton, 2005). These barriers could be potentially minimized with the incorporation of technology mediation in language learning (Chapelle, 2003). Recent research has proven that CALL-mediated language learning can promote productive skills both written and spoken, and the interaction pattern facilitates language acquisition (Gonzalez-Lloret, 2020). Another qualitative research based on the synthesis of 16 technology-mediated TBLT studies evidenced an emergent theory highlighting the constructive impact of technological materials and tools that attempt in authentic, meaning-focused and learner-centred tasks. This develops language and non-language skills, but it is contingent upon the teacher, student and environmental factors (Chong & Reinders, 2020). Moreover, previous research also indicated the importance of reading fluency in students of determination with technology-mediated instruction and proved it to be motivational for learners (Ozbek & Girli, 2017). A plethora of research is available that supports the intersection of technology in all four language skills with CALL as a framework in a more multimodal context where learners enjoy autonomy in producing language in different forms (Blake, 2016). Blake (2016) also posited that CALL coupled with TBLT produces a goal-centric approach enforcing learners to combine language skills in ways that engage them with digital facets in their own lives. TBLT language tasks heavily rely on meaning-oriented authentic tasks to achieve target language. For this purpose, CALL creates an environment of a *Brave New World* that is worth taking advantage of its affordances for L2 learning (Kern, 2014; Blake, 2016). This view is also supported by Zeigler (2016) that technology-mediated TBLT provides a framework of a mutually beneficial relationship, however, the impact of multiple methodologies and their impact still needs to be explored. Another longitudinal study suggested that technology apps like WhatsApp and other social networking apps significantly increase the performance of language learners (Taj et., al., 2017).

A large and growing body of literature has been investigated and published in the last 10 years owing to the congenial relationship between CALL and TBLT. On the contrary, a few noteworthy studies elaborated on the drawbacks like training on technology to skillfully use it

and delayed feedback as a concern (Paepe, Zhu & Depryck, 2018; Shadiev & Yang, 2020; Chong & Reinders, 2020).

Overall, major evidence from the study reveals that the advantages of technology outweigh its weaknesses. Teachers, learners and stakeholders have to devise ways to integrate and garner the benefits of technology that is freely accessible and widely available. Furthermore, collectively these studies outline a critical role of CALL in TBLT in enhancing language learning and serving as an educational framework. However, there is no noticeable study found in the literature that provides an integrated conceptual model for teachers to follow incorporating both CALL and TBLT.

Affordances of technology in language learning

There is a need for researchers to broaden the conceptualization of tasks beyond mere pedagogical and linguistic competencies (González-Lloret, & Ortega, 2014; Ziegler, 2016). A comparative study of technology and paper-mediated study in ESL classroom expressed the preference of more than 75% of participants in using technology (Payant & Bright, 2017). Moreover, the studies of Chen & Chih-Cheng (2018) discovered ESL learners' positive attitudes towards task design and implementation in technology-mediated TBLT that expanded language skill and learning gains. Research has established the positive effect of technology in language learning, however, to realize the full potential of technology in TBLT, it is imperative to consider the affordances that technology provides as a pedagogical tool to extend the learning experience and proficiency (González-Lloret & Ortega, 2014). Affordance is an opportunity for educational activity supported with technological features. Educational affordances of mobile technology presented by Churchill (2017) in a study by Xue (2020) summarizes resources, connectivity, collaboration, analytical and captivity as major affordances. Moreover, similar studies have reported facilitation, collaboration, interaction, positive attitude, student-centred learning, development of non-linguistic skills, freedom and flexibility and affective dimensions as affordances for technology in language learning (Blake, 2016; Payant & Bright, 2017; Chen & Chih-Cheng, 2018; Chong & Reinders, 2020). Based on the aforementioned evidence gathered that provide stimulating knowledge through authentic tasks, there still needs a conceptual paradigm that encompasses technology-mediation with students at its centre. The research indicates the impact of technology but the proposition of a pedagogical design that provides potential benefits of both CALL and TBLT still needs to be lamented.

Methodology

The complexities to understand the phenomenology were captured using grounded theory (GT) to analyze the qualitative findings that develop from 'extant data' (Charmaz, 2006). The grounded theory applies inductive technique and a theory is developed from research that is grounded to the data collected. The theory suggests a continuous interplay between data collection and data analysis (Cohen, Manion & Morrison, 2018). According to Glaser & Strauss (1967), a researcher discovers what is relevant as mentioned in their seminal work *The Discovery of Grounded Theory*. The intention of grounded theory is to build and generate a theory on existing theory rather than testing theories. This occurs with constant data analysis and comparisons that help in the formulation of a new theory (Cohen, Manion & Morrison, 2018).

Out of the three versions of grounded theory, the author relied on the constructivist model of grounded theory by Charmaz (2006). The constructivist model attributes subjective meanings from the data and there might be multiple meanings from the interpretations that will enable co-construction of knowledge. The researcher opted for this theoretical basis as it rejects objectivity (Glaser & Strauss, 1967; Strauss & Corbin, 1998), rather relies on subjectivity, interaction and constructivist methodologies. As an initial literature review scoping method was used to explore the relevant literature in order to map the key concepts underpinning the uses of CALL for teaching task-based language learning in undergraduate English classrooms in ESL settings. The scoping literature review method used for this study was taken from Arksey and O'Malley (2005).

Further, inclusion and exclusion criteria to narrow down the literature review was applied to form conclusions to the study. Using EBSCO host, various peer-reviewed journals from 2016 onwards were researched using different search phrases like: computers and task-based language teaching; CALL and task-based learning; technology in language learning; TBLT in higher education; TBLT in ESL; computers in ESL classrooms; computers and language teaching; computers and language teaching; technology in language learning. First, seminal studies were included by constantly comparing and analyzing the literature in different quantitative and qualitative studies. The literature review, in this case, sets the historicity, familiarization and contextualization of the study (Charmaz, 2006).

Although the most popular way to conduct grounded theory studies is interviewing, there are no evidence that prove a preference for interviews as a primary source of data (Ralph, Birks & Chapman, 2014). Charmaz (2006) attests that documents, extant data, technical literature or textual data can be used as a primary or secondary source of data collection. In light of the constructivist GT tradition, the author utilized an informed grounded strategy with a constructivist approach by taking the advantage of pre-existing theories and research findings creatively and flexibly (Thornberg, 2012). This criticality led to the modification of existing models by paying attention to potentially relevant and important information in the extant data, and thus the development of a new conceptual model.

Data Analysis and Results

The researcher after finalizing an endeavour to GT, sampled and categorized the data relevant to the research objective of the study. This process of data collection for generating a theory involved coding, analysis and further data collection to develop an emergent theory (Glaser & Strauss, 1967). The researcher kept adding data to the literature by continuously refining the categories until enough data was gathered. The researcher delved into the theories until a theoretical saturation (Charmaz, 2006) arrived where no more concepts, definitions or theoretical categories arose from the literature and appropriate data was gathered to evolve and emerge a novel, technology-mediated conceptual model.

The process of coding began by disassembling and breaking down the data into discrete parts. It is an analytic process where concepts to data and phenomenon are attached during qualitative data analysis. The researcher segmented data into meanings for categories and fragments. Furthermore, the data was organized and structured under themes (Cohen, Manion & Morrison, 2018). These codes were achieved by a thorough study of TBLT and CALL. Axial coding at this point helped in establishing interrelationships between both the educational methodologies and came forward with the affordances of technology in TBLT. This interplay between the two models proceeded to the construction of a new model. Next,

generating memos are an important stage in this process. The author electronically wrote ideas, emerging themes, summaries, explanations and reflective analysis of the data gathered.

Constant comparison or reflexivity is most important in grounded theory. This constant reflexivity acknowledges the need for denying prior knowledge, preconceptions and theoretical influences (Ralph, Birks & Chapman, 2014). The researcher utilized constant comparison by coding incidents and comparing them with previous incidents which helped in categorization. Since the research involved the study of two theories, the author constantly reflected and analyzed all possible similarities and disparities in both seminal studies. This resulted in forming a common ground where the researcher evolved a new conceptual model that embedded the commonalities of both theories and incorporating the affordances of CALL to form an emergent and modifiable model. Constant comparison analysis led to the development of core variables that integrated concepts and more key categories. These categories served as a core of the emerging theory.

This research is limited to a particular phenomenon and grounded in existing theories to result in an emergent theory. The research is restricted to the explanation of a particular research objective to discover a phenomenon. Therefore, it does not have a wider application and cannot be generalized in other contexts. It is up to the readers' discretion to evaluate it as a grand or middle-range theory (Cohen, Manion & Morrison, 2018).

Findings and Discussion

Originating from the early 1950s from behaviourist CALL to communicative and integrative CALL, there came a surge of advancement in the 1990s with the emergence of the World Wide Web. The findings in this section are driven by the dense literature, personal experience in ESL teaching, empirical and critical reviews published since 2016. In light of the affordances of technology in TBLT and its use in all four language skills, the author will propose a conceptual model integrating affordances of CALL into the TBLT approach. The researcher acknowledges TBLT models by Ellis (2006) and Willis (1996), therefore, the study adopts parameters from both the models by choosing stages that fit the purpose of the study. While the first two stages in both the models offer similarity in the task definition, selection of resources, planning and reporting, however, there is a noteworthy variance in the third stage of both models. Willis's (1996) model encapsulates 'language focus' with form practice and analysis components, on the other hand, Ellis's (2006) model does not offer a direct focus on language form. While students are in the centre of each paradigm, encircled by sociocultural and interactive contexts, the proposed conceptual model will provide a holistic approach to language teaching, assimilating technology at its core. The findings of the study reiterate the implications of Chong & Reindeer (2020) where they believe that appropriate tasks, a congenial environment for learning and teacher readiness are the prominent features in integrating technology with TBLT. Moreover, in milieu to the conceptual model of Xue (2020), this study synergizes and serves as a roadmap incorporating the affordances of CALL in TBLT.

The proposed model will be first adapted from the stages of Ellis (2006) and the last stage will incorporate strands of Willis's (1996) model to give an all-inclusive impression of technology integration in the task-based learning model.

Phase	Examples of options
A. Pre-task	<ul style="list-style-type: none"> * Framing the activity (e.g. establishing the outcome of the task) * Planning time * Doing a similar task
B. During task	<ul style="list-style-type: none"> * Time pressure * Number of participants
C. Post-task	<ul style="list-style-type: none"> * Learner report * Consciousness-raising * Repeat task

Figure 1: Task-based Learning Framework (Ellis 2006)

CALL in the Pre-task stage

Under the framework TBLT provides for language learning and featuring 'learning by doing' (Dewey, 1998), the learners' exhibit skills adapting the principles of task-based learning in digital environments (Gonzalez-Lloret, 2015). Primarily, TBLT boasts for its uniqueness due to its authenticity and meaning-focused tasks that facilitate interaction in a second language.

The pre-stage task as mentioned by Ellis (2006) captures the teachers' ability to activate students' schemata, engage students in tasks that facilitate the transition of learning from pre to during task stage with formal instruction as an initial task. The learners are introduced to resources that are drawn from linguistic features and facilitated by the affordance of technology to attempt the task (Xue, 2020). As Skehan (2003) mentioned to conduct a need analysis, at this particular stage a teacher can use game-based strategies like a short engaging Kahoot or a Quizizz to identify the gap before the real instruction begins. Moreover, students' ability to utilize the technology to maximize the learning opportunity has to be introduced at this stage. The choice of linguistic resources needed to complete the task and non-linguistic outcomes are prerequisites at this stage (Ellis, 2006).

Technology integration for remote learning needs to identify asynchronous and synchronous communication that occurs between teachers and students to facilitate the task. This refers to the interaction, communication and collaborative affordances that technology contributes to learning. Synchronous videoconferencing technological tools like Collaborate, Skype, Zoom typically allow learners and teachers to engage in real-time discussions to trigger students interest in the topic by introducing pictures, brainstorming ideas and speed chatting by answering questions on the topic. Asynchronously, students can be engaged with the translation of lexical items as a pre-reading stage using Quizlet that offer flashcards and test practices for language learners. Moreover, Flipgrid, Snapchat, B612 and other Vlog applications serve as asynchronous communication tools for recording videos with a voiceover which can later be shared with peers and teachers. This gives students time to plan, think and act before submitting tasks. The options are vast in embedding technology in instruction from encompassing Web 2.0 tools to virtual reality leading to augmented reality for generation Z.

CALL in the During-task stage

This stage is the core of TBLT in task performance where learners complete the task in collaboration with their peers. Collaboration is the fundamental aspect of TBLT as it provides opportunities to learners for interaction and engagement in the achievement of tasks through its positive cyclic reciprocal process (Xue, 2020). This communication occurs due to the setup of meaningful tasks that encourage students to share knowledge of past experiences, contextualize meaning, and construct new knowledge from scaffolding and socio-cultural interaction. This creates an environment of constructivism, learner-centred interaction and linguistic competence to complete the tasks which can be commendably performed in groups with technology mediation. Collaborate Ultra and Zoom break-out rooms provide an opportunity to split the class into smaller groups where students can think analytically and reflect on their practices fostering learner autonomy. This technology mediation also provides a chance for oral or written feedback which is a source of intrinsic motivation for passive learners. Consequently, this serves as self-regulation by cultivating a positive attitude among learners, eliminating anxiety and dealing with real-life problems along with the repetition of tasks post-feedback (Ellis, 2006; Chong & Reinders, 2020). These technology affordances can be employed by exploiting different online apps and YouTube is amongst the prominent ones for providing authentic videos on multiple genres. YouTube videos can be annotated with questions, comments, and comprehension tasks that serve best for Listening and Reading activities (Blake, 2016). Furthermore, these videos can be embedded in other EdTech tools like Nearpod, Bookwidgets and ISL collective which provide a student-centred learning environment while offering a variety of activities depending on students' level and interest. These platforms are best suited for blended and remote learning platforms as they enable the teachers to track students' performance, scores, speed and provide feedback instantly. Randal's ESL lab is a freeware platform for students to listen and comprehend authentic materials from native language speakers.

Accordingly, CALL has been consistently highlighted in the L2 reading. The most frequently mentioned advantage of CALL is textual persistence that gives learners a chance to process unfamiliar linguistic structures (Payne, 2004). To further incorporate game-based learning strategies in online environments, reading quizzes in Kahoot and Quizziz fosters enthusiasm and thrills students in blended learning environments. Furthermore, BookWidgets with WebQuest, Nearpod, Dreamweaver, Readtheory provide comprehensive learning by forming integrated lessons that can be both teacher and student-paced. Teachers' upon their discretion can enhance the reading tasks by utilizing other LMS platforms to encourage students to write shorter texts. The array of writing tools includes Padlet, WhatsApp, Facebook, Instagram and Twitter which provides real-time textual communication to millennials who are native to these apps. These social media handles extol the virtues of the collaborative writing approach. Text composition which requires significant length can be shared through wikis, blogs, discussion boards, google docs and other platforms. The end product of all these activities is student's artefacts that can be saved in online and offline libraries.

CALL in Post-task/Language Focus stage

The last stage of TBLT is the post-task stage where evaluation is a crucial part of effective learner-centred learning experiences. The post-task phase affords some major options not just limited to repetition of a task but encouraging self-reflection on task performance and paying attention to the problematic forms that occurred while learning (Ellis, 2006). Apart from these propositions, Willis's (1996) model emphasizes 'language focus' by practising new

words, phrases and patterns including the form and meaning of the target language. The author rejected this argument and accepted Ellis's model and opted for the concise and integrated conceptual model that encompasses all the centralities.

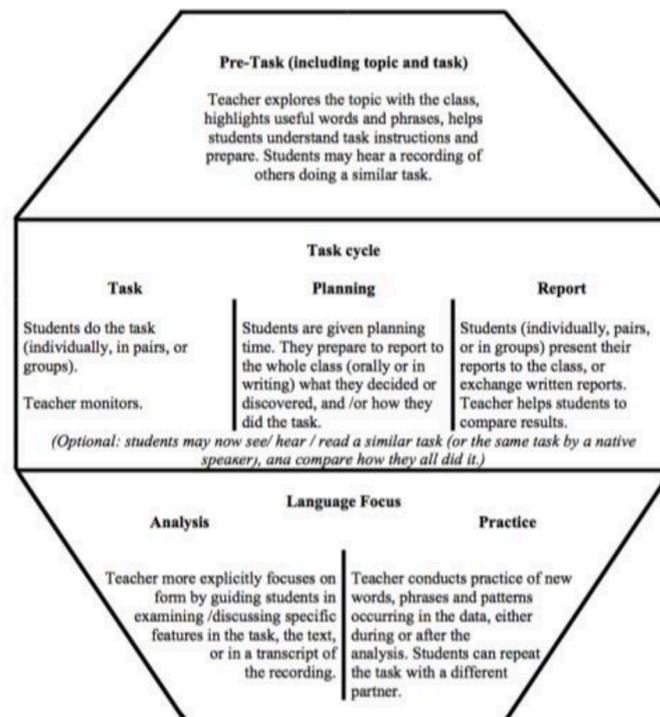


Figure 2: Task-Based Language Learning Model - Willis (1996)

The post-task stage provides a prospect to students for practising language inside and outside the classroom. During this phase, students produce artefacts that are administered by teachers and students' performance is recorded. This gives guidance to students for improvement in the task. For task finalization, out of class task activities have to be brought back into the class to offer reflection and discussion to complete the task (Burston, 2015). Post-task when carefully designed leads to assessments in the classrooms that have to be flexible and diverse corresponding to different student needs. Learners have to be evaluated based on their assimilated information, linguistic development and overall task performance (Xue, 2020). Technology affordance at this stage is the development of linguistic and non-linguistic skills that may lead to life-long learning outside the classroom. Moreover, self and peer-evaluation can be encouraged at this stage based on the teacher's feedback. This is an imperative stage for teachers to reflect on their resources, teaching practices and learning process.

Technology integration in the post-task stage can be based on short online assessments with applications like Kahoot, Quizizz, Mindmaps, Microsoft Forms etc. Formative assessments in online reading platforms can utilize the built-in feature of assessment that provides automated feedback to learners. FlipGrid can be used to encourage students to produce videos collaboratively and assists in students' communication. BookWidgets provides teachers with a wide opportunity of task-based questions which can be based on reading, writing short answers, matching, multiple-choice questions which can help in task repetition and analysis. Online real-time discussions with teachers using video tools allow students to reflect and regulate. This improves their fluency and accuracy in the target language. Online polls are

one such helpful tool that enables the teacher to record students' responses on their learning experiences and teachers can self-reflect.

Based on the above findings on technology-mediated TBLT and about the impetus for technology in task-based learning, the author has attempted to reach a consensus by integrating CALL and TBLT model and materialize a new conceptual model that consolidates the assistances of both approaches.

Proposed Conceptual Model

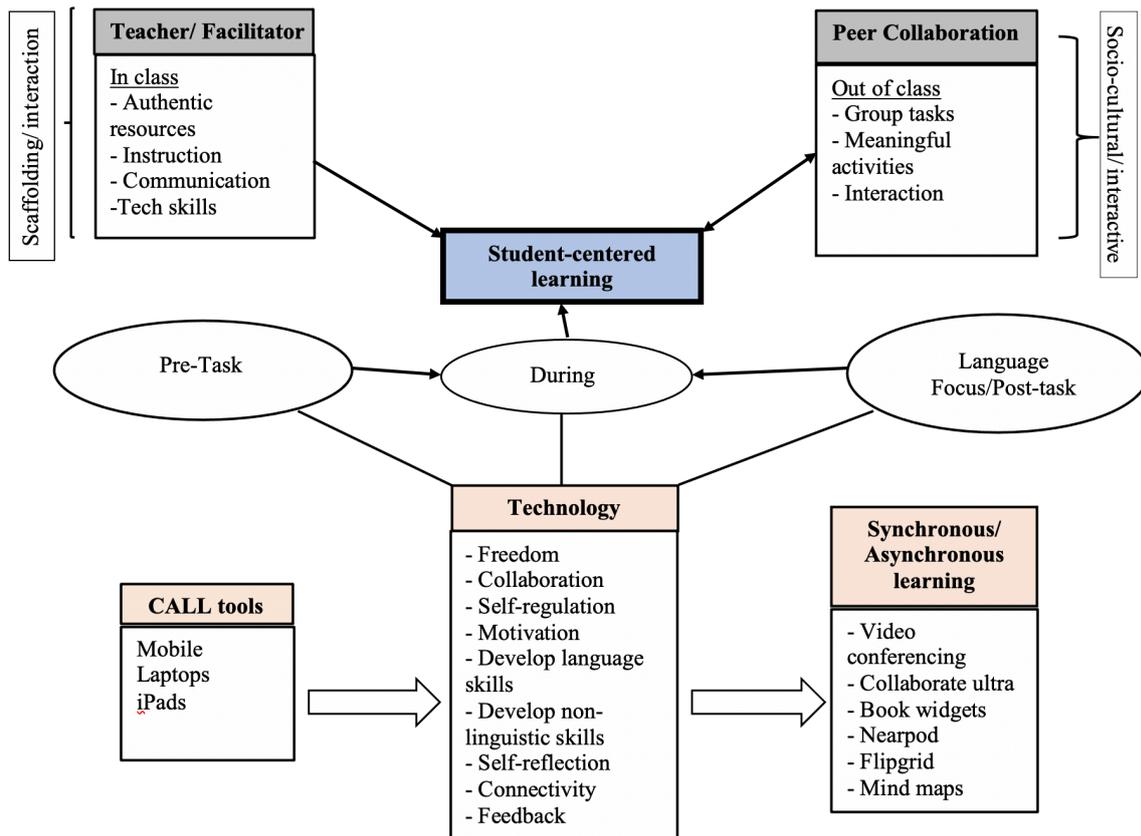


Figure 3: CALL - TBLT Integrated Model

Conclusion

This research provides a baseline to further researches in the domain of technology mediation in TBLT. Several studies have indicated the positive influence of technology in classroom instruction that encouraged student participation, reduced cognitive burden and provided educators with opportunities to explore the diversity and individualized instruction that technology has to offer. The developmental benefits have also been attributed to the TBLT framework by providing a sound and flexible framework that motivates the learners. The conceptual model proposed in this study is reckoned to be in the centre of the paradigm to construct linguistic knowledge based on the constructivist and sociocultural theories. The teachers' pedagogical role is of paramount importance as they are the designers of the tasks. Although technology provides a congenial environment to learning, its implementation is still not void of challenges. Teachers' readiness and knowledge in the use of technology in the classrooms cannot be overlooked. Moreover, students' enthusiasm in technology-mediation

can be built only if they are ardent users of technological tools. CALL has provided a multimodal concept of learning where learners enjoy greater autonomy, however, learners positive attitude and other novel skills like digital literacy, communicative and intercultural competence (Xue, 2020) are of much importance. The balance in the development of linguistic and non-linguistic skills is of utmost importance and it is teachers' role to be selective and discrete in the choice of tech tools. The teacher has to act like a facilitator to raise awareness, model tasks, monitor students' performance and conduct follow-up activities. It must also be noted that context and culture play a vital role in task selection and its completion. Further research needs to be conducted including technology as a part of language curriculum, syllabus and instruction. The research urges stakeholders to invest in appropriate software that are beneficial in language acquisition. This research also sets a stone in ESL literature by providing an integrated model which had not been established thus far.

References

- Blake, R. (2016). Technology and the four skills. *Language Learning & Technology*, 20(2), 129–142.
- Bruton, A. (2005). Task-based language teaching: For the state secondary FL classroom? *Language Learning Journal*, 31, 55-68.
- Carless, D. (2004). Issues in teachers' reinterpretation of a task-based innovation in primary schools. *TESOL Quarterly*, 38, 639-332.
- Chapelle, C. A. (2001). *Computer Applications in Second Language Acquisition*. Cambridge: Cambridge University Press
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. sage.
- Chen, J. C. C., & Brown, K. L. (2012) The effects of authentic audience on English as a second language (ESL) writers: A task-based, computer-mediated approach. *Computer Assisted Language Learning*, 25(5), 435–454.
- Chen, T.H. & Chih-Cheng, L. (2018). Enhancing L2 English Learning through Mobile-Assisted TBLT: EFL Learners' Perspectives. *Journal of Asia TEFL*, 15(2), 453.
- Chong S.W. & Reinders H. (2020). Technology-mediated task-based language teaching: A qualitative research synthesis. *Language Learning & Technology*, 24(3), 70–86.
- Churchill, D. (2017). *Mobile technologies and digital resources for learning*. Singapore: Springer
- Cohen, L., Manion, L. & Morrison, K. (2018). *Research methods in education*. Routledge.
- Cummins, J. & Sayers, D. (1995). *Brave New Worlds: Challenging Cultural Illiteracy*.
- De Paepe, L., Zhu, C. & Depryck, K. (2018). Online Dutch L2 learning in adult education: Educators' and providers' viewpoints on needs, advantages and disadvantages. *Open Learning: The Journal of Open, Distance and e-Learning*, 33(1), 18-33.
- Dewey, J. (1998). *Experience and Education*. Indianapolis, IN: Kappa Delta Pi (Original work published 1938, New York, NY: Macmillan)
- Ellis, R. (2006). The methodology of task-based teaching. *Asian EFL journal*, Vol. 8(3).
- González-Lloret, M., & Ortega, L. (2014). Towards technology-mediated TBLT: An introduction. In M. González-Lloret, & L. Ortega (Eds.), *Technology-mediated TBLT: Researching technology and tasks* pp. 1-22. Amsterdam, the Netherlands: John Benjamins.
- González-Lloret, M. (2020). Collaborative tasks for online language teaching. *Foreign Language Annals*, 53(2), 260-269.

- Hassan Taj, I., Ali, F., Sipra, M. & Ahmad, W. (2017). Effect of technology enhanced language learning on vocabulary acquisition of EFL learners. *International Journal of Applied Linguistics & English Literature*, 6(3).
- Kern, R. (2014). Technology as Pharmakon: The promise and perils of the Internet for foreign language education. *Modern Language Journal*, 98(1), 340–357.
- Lai, C. & Li, G. (2011). Technology and Task-Based Language Teaching: A Critical Review. *CALICO Journal*, 28(2), 498.
- Long, M. (2015). *Second language acquisition and task-based language teaching*. Malden, MA: WileyBlackwell.
- Nunan, D. (2006). Task-based language teaching in the Asia context: Defining 'task'. *Asian EFL journal*, 8(3).
- Özbek, A.B. & Girli, A. (2017). The Effectiveness of a Tablet Computer-Aided Intervention Program for Improving Reading Fluency. *Universal Journal of Educational Research*, 5(5), 757-764.
- Payant, C. & Bright, R. (2017). Technology-Mediated Tasks: Affordances Considered From the Learners' Perspectives. *TESOL Journal*, 8(4), 791-810.
- Payne, J.S. (2004). Making the most of synchronous and asynchronous discussion in foreign language instruction. *Teaching with technology*, 171-179.
- Pierson, S. J. (2015). Bridges to Swaziland: Using task-based learning and computer-mediated instruction to improve English language teaching and learning. *Teaching English with Technology*, 15(2), 105–119.
- Prabhu, N.S. (1987). *Second language pedagogy*. Oxford: Oxford University Press.
- Ralph, N., Birks, M. & Chapman, Y. (2014) 'Contextual Positioning: Using Documents as Extant Data in Grounded Theory Research', *SAGE Open*.
- Rashid, S., Cunningham, U. & Watson, K., (2017). Task-based language teaching with smartphones: A case study in Pakistan. *Teachers and Curriculum*, 17(2), 33-40.
- Shadiev, R. and Yang, M. (2020). Review of studies on technology-enhanced language learning and teaching. *Sustainability*, 12(2), 524.
- Skehan, P. (2003). Focus on form, tasks, and technology. *Computer Assisted Language Learning*, 16(5), 391–411.
- Strauss, A. & Corbin, J. (1967). Discovery of grounded theory.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research techniques*. Thousand Oaks, CA: Sage publications.

- Tanaka, N. (2005). Collaborative interaction as the process of task completion in task-based CALL classrooms. *The JALT CALL Journal*, 1(2), 21–40.
- Team, E. (2021). Technology and Language Learning : A Short History (Infographic) | We are E3. Retrieved 5 May 2021, from <https://wearee3.com/the-short-history-of-technology-and-language-learning/>
- Thornberg, R. (2012). Informed grounded theory. *Scandinavian journal of educational research*, 56(3), 243-259.
- Willis, J. (1996). *A Framework for Task-based Learning*. Boston, MA: Addison Wesley.
- Xue, S. (2020). A conceptual model for integrating affordances of mobile technologies into task-based language teaching. *Interactive Learning Environments*, 1-14.
- Ziegler, N. (2016). Taking technology to task: Technology-mediated TBLT, performance, and production. *Annual Review of Applied Linguistics*, 36, 136.