Meta-Level Intervention in Case-Based Teaching Method Implemented in Esp Course

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Abstract

This paper discusses the fundamental principles involved in case-based teaching method applied in an ESP course; the implementation of meta-level intervention (metadiscourse) for developing technical writing skills and fostering learner autonomy among students at the university level. Most students were reluctant and were not interested in taking supplementary but compulsory English language courses. However, through the implementation of meta-level approach in case-based teaching, improvement has been observed to be evident in the student's performance and motivation in learning. Detailed findings and implications shall be elaborated further throughout the remainder of this paper.

Keywords: Case-based teaching; meta-level intervention; ESP writing class; learner's autonomy.

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1. A Complex Proficiency: Learning How to Write Technical Text in Esp Course

While writing is an act of discovery – one of learning by doing – it is also a thinking process. This is no-new concept and Craik (1943) stated that thinking involves translation of some aspect of the world into a schema, which can be called as 'mental model' (cited in Oatley and Djikic 2008). Thinking is as manipulation of such model where a new state of the world is produced into a schema. Then retranslation can occur of the derived state of the model back into terms of the world, for instance into words as in writing (Oatley and Djikic 2008). However, in an ESP course, the writing tasks set for students who are second language speaker of English involved many different dimensions than most educators would let on. For example, it entails the process of retranslating the model into words (1) within a specific frame – a format for technical text – and (2) channelling second language faculty for English in the mind with a high possibility of interference from the mother tongue's. Silva and Matsuda (2001) dubbed it as a complex web of relationships, which involves constant interaction between writers, reader, the text and reality. Hence, it is imperative to create 'learning medium' that would make it possible for students to transform all of these differing-components of mental-processes into one proficient capacity – a 'skill' in writing good technical text.

Additionally, according to Rose (1985:7), skill is a 'complex interweaving of sophisticated activity and rich knowledge'. In order to write a technical text, it involves a lot of other factors in its decision-makings such as the purpose of the text, the academic and cultural context of the text, the extent to which the writer is given advice on the positioning and organization of the text (Prior 1995). In addition, for learners who are second language speaker of English (ESL), research into English for Specific Purposes (ESP) has shown that they need to be competent as well, in certain language areas and skills, let alone to produce good technical text, but to be able to cope with academic demands that come with it (Cumming, 1994; Ferris & Tagg, 1996). Thus, it seems for ESL speakers particularly, technical writing tasks can be more demanding than it is for students who are native speaker.

Despite the complex skills and processes it entails, not to mention cognitively taxing, learning of skills such as technical English writing skills is usually separated from subject content and knowledge. This separation suggests 'that there is a difference between studying successfully and learning, and that if certain techniques are required, students can study successfully without deep engagement with the subject' (Wingate, 2006: 459). Later, it will foster a surface approach to learning among students due to higher education predominant method of assessment (Wingate, 2006) which should be avoided at all cost. Consequently, by teaching the students the skills without linking them to subject content encourages the undesirable epistemological belief that knowledge is an 'external, objective body of facts' which can be acquired with certain tricks and techniques (Gamache, 2002: 277), whereas writing is, following Rose (1997: 348), "...intimately involved in the nature of their inquiry. Writing is not just a skill with which one can present or analyze knowledge. It is essential to the very existence of certain kinds of knowledge".

Furthermore, with reference to the concept of metadiscourse, means of conceptualizing communication is seen as social engagement. It illuminates some aspect of how individuals project themselves into their discourses by signalling their

own attitude towards both the content and the audience of the text (Hyland and Tse, 2004). Therefore, writers do not simply produce texts that plausibly represent an external reality, but use language to offer a credible representation of themselves and their work, and to acknowledge and negotiate social relations with readers. Therefore, it should not have come as a shock when Pecorari (2008) found that Asian ESL students begin their academic writing from 'copying' which implies a lack of training in academic writing, when tertiary institutions hardly organize a solid platform for the students to acquire and learn such skills in the first place. Not only do the students struggle to familiarize themselves with the conventions and expectations of technical writing in English medium universities (Ballard & Clanchy, 1997) and to develop the linguistic competency it demands, they have to have the necessary subject mastery, critical thinking skills as well as know how to transfer or form a link between what they know into an acceptable technical text.

Hence, if this topic was to be pushed to its extreme logical point – discarding all dimensions to its most basic components – then, cognition and metacognition are at its centre, linking writing to thinking in an almost interchangeable state of relationship. With that said, while the name of the course portrays a limiting linguistic scope of possible teaching content, the teaching instructions or approaches however, should not be as limited and separated from thinking skills it requires.

1.1 Writing/ Thinking in ESP

Furthermore according to Bean (2011; 4), writing is "both a process of doing critical thinking and a product that communicates the results of critical thinking". He asserts that students are able to learn more of the subject content if more of critical thinking components and writing are integrated into a particular course (Bean, 2011). The ESP course offered by the local engineering university in questioned is in fact, an English Language course combined with a surface introduction into research methodology course. Students are required to write a proposal report as an assignment in order to be granted a passing grade. Thus, it is irrelevant to detach thinking skill components from the writing components in the course. The key is in improving student's performance through the adaptation and manipulation of teaching methodology and pedagogy. The teaching approaches apply in class should complies with the necessary skills students need in order to acquire and apply new knowledge, as expected of them to learn at the end of every semester. Therefore, it is more of an urgent matter to readdress the teaching method applied and focus emphasized by the educators in class.

Therefore, considering the complexity as well as the intricacy of variety of aspects involved when learning and applying ESP writing skills, students should be nurtured to become independent thinkers in their own learning process and that they be taught that writing is only one of the ways to retranslate their thinking products into the world. Moreover, they should be made aware of their own thinking processes and strategies used when learning and writing English academic text as a way, not only to improve academic writing skills but also their overall linguistic capacities as well as thinking and applying it to other possible situations.

2. The context: Learner diversity

Additionally, the obstacles do not lie in just the complexity of the skills involved nor in the effort in improving the student's basic English language and technical writing skills; their low motivation in learning the subject is also a cause for worry. Hence, it is vital to consider the aspect of learner diversity in this discussion. Not only do the students have different level of intrinsic and extrinsic motivation, they also have differing level of English proficiency and they come from a diverse socio-economic background.

Therefore, in order to cater to each student's needs as well as to address identified factors that might contribute to student's improved performance, meta-level intervention integrated in case-based teaching method has been observed to be effective in such context. Not only does it improved the students' overall performance and motivation to learn, it has also created an atmosphere in the learning environment that fosters and nurtures the development of their learner's autonomy.

3. Key Principles: Meta-Level Approach in Case-Based Teaching

3.1 Understanding the Intelligence System behind the Learning Process

Zull (2002) explains how learners build new knowledge on existing neuronal networks, "these existing networks must be partially dismantled if the learners are to create new networks that embrace fuller, more detailed knowledge", in other word or in the context of language learning, a specified-domain intelligence for that particular language. Most of the time, effective learning process failed to take place due to discrepancies between what is being teach in class, what students are expected to learn and how the students process new information during learning. It is important to recognize the process before appropriate planning should take place to reach the learning outcomes.

In the context of cognition and metacognition as the main operatives behind intelligence, it is advisable to take into account, their nature, functions and characteristics, and that this understanding should be well incorporated and applied in devising the appropriate instructional design for an ESP course. Furthermore, in a documented study involving selected gifted students in Malaysia; it has been found that they have the tendency to tap into their general intelligence in the absence of a specified-domain intelligence in situations where they need to cope with new lessons and unfamiliar territory of information (Wan Safuraa Wan Oman et. al., 2011). On the contrary, in reality, the course is presented in such a way that it gives an impression that to be able to channel into specified-domain intelligence (in this case, a linguistic domain for English language) is all that matters. Due to the demands made by future employers, most educators hasten to design a curriculum to cater to this special request, believing on the basis that it is to achieve a specific goal using a specific branch of English language. However, this notion runs opposite to the actual and natural process of learning that takes place in the student's intelligence system.

3.3 General Intelligence, Specified-domain Intelligence and Emotional Intelligence Roles in Student's Learning

Functional neuro-imaging findings support the hypothesis that intelligent brain process information efficiently (use fewer brain resources when performing cognitive tasks) than less intelligent brain (Deary et. al. 2010). This evidence marks the existence of a network of higher cognitive operations (thinking about thinking – metacognitive) that oversees and supervises other cognitive ability, that is – general intelligence (henceforth, as GI). However, upon encountering new information and unfamiliar concepts and problems, while general intelligence is responsible for all learning processes – input and output – but after the brain has stored sufficient information, in a sense reached its threshold and is ready to establish a specialized department (specified-domain intelligence, henceforth as, SDI), then, the responsible will be handed over to the department so that the situation can be handle more effectively and efficiently. Emotional intelligence (henceforth, as EI) on the other hand, concerns the ability to carry out accurate reasoning about emotions, and the ability to use emotions and emotional knowledge to enhance thoughts (Mayer, Roberts & Barsade 2007).

All three components – GI, SDI and EI – forms the intelligence system behind student's learning process. Internalization of new information falls under the jurisdiction of GI before it is ready to be passed down to SDI, a much specialized department or faculty. EI, in most circumstances and context involves emotion and emotional knowledge to enhance thoughts and facilitate thinking. The process of learning makes it possible for an individual to become an expert in a certain field. The cognitive ability that facilitates that process seems to be of higher intelligence – since it is able to cope up with any situation provided there is new information to be internalized. Once enough information and experience is gained, an individual is able to make better judgment and is able to come up with better product as the outcome. This is where he or she has crossed the threshold – a point of conversion – where most of the cognitive processes are now being transferred to specified-domain intelligence from general intelligence system.

3.3 Building SDI through Writing and Thinking Integrated Lessons

In meta-level approach in case-based teaching, the development of SDI following GI through writing and thinking integrated lessons, not only improves student's proficiency and motivation to learn the English language but also encourage the development of their learner autonomy. Critical thinking skills incorporated in ESP writing tasks, for instance, requires students to use their expanding knowledge of a subject matter to address disciplinary problems will "motivate better study habits by helping students see their learning as purposeful and interesting" (Bean 2011: 11).

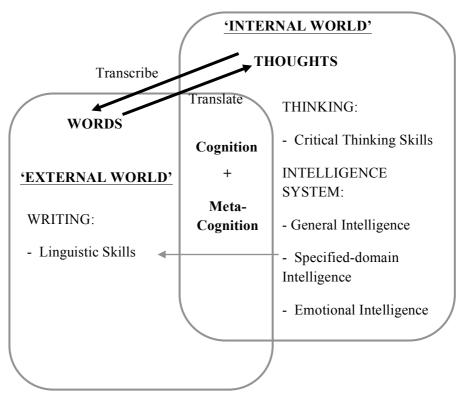


Diagram 2: Writing and thinking integrated process

It is imperative that students are able to internalize the skills needed, not only in knowing what to write about but also how to go about knowing what and how to write. In other words, writing is leaning towards cultivating the mental processes involved when a person writes. This entails to the concept of metacognition and cognition processes involved in thinking skills. While composing, students seem to exhibit a variety of behaviours, all of which indicated the non-linear nature of writing but teachers tend to under-conceptualize and oversimplify the process of writing to students (Zamel 2007). As Shaughnessy (1977 as cited in Zamel 2007) has put it, rather than being the development of some pre-conceived or well-formed idea, writing is the "record of an idea developing". Thus, writing is a task that evokes such necessity for mental processes to transpire in the mind, making it a suitable medium for meta-level intervention in case-based teaching to improve student's performance.

Metacognition acts as an agent for monitoring as well as agent for learning and relearning. The student perceives some stimuli from environment and acts rationally to achieve its goals by selecting some action from its set of competencies. An important dimension of writing involves the period before the actual writing begins, that is how writers get and form ideas before putting pen to paper. Given that everybody is granted with a form of intelligence, it is a basic tendency for the human minds when confronted with problems; they will first try to remember a case in which they faced a similar situation (Schank 1999). They will reuse information they have in their repertoire and if it is inadequate, they are conditioned to be receptive towards other solution through listening or reading stories that have shown how experienced people have dealt with similar problems (Edelson 1993). In a way, case-based teaching has provided an excellent platform where students are not only improving their ESP writing skills but also their metacognitive skills and learner autonomy development.

4. Components in Meta-Level Approach in Case-Based Curriculum

A. Preparation (Before entering class)

[A1] Student's Profile

It is a normal practise to use the first class as a platform to collect data on the student's profile, such as their English language proficiency level, their opinions with regard to English language in general, what do they expect to learn from the course, their behaviours and attitudes, intrinsic/ extrinsic motivation, interests, etc. In other words, it is in order to get a 'sense' on what kind of students they are and what are the possible ways to plan the lectures/ lessons in order to cater to their needs. Having such information proves to be an advantage when deciding the best 'x-factor' to be used in class in order to attract their attention. In addition, their profile data facilitates the marking process of their progress and development throughout the semester.

[A2] Topic

Based on the discussion about general and specified-domain intelligence, topics/syllabus are arranged accordingly from general to more specific ones. With each completed topic covered in class, the students will acquire the skills and knowledge they need in order to finish their main assignment at the end of the semester.

[A3] Theme: Theme for a particular lecture/ class.

It helps to have a particular theme for a particular lecture/ topic. It brings the topic into focus and it also helps eliminate distraction or irrelevant details that might interfere with the students learning process. In addition, theme proves to be beneficial in aiding students with low English proficiency level. It serves by providing a coherent flow as the topic unfolds itself during discussion. It also functions as an 'analogy'; supplying the connection to better internalized the information presented.

[A4] 'X-factor': It can be a teaching aid, educational game or video, etc.

The 'X-factor' is the bridge that connects the course content and the student's world together. It could be a current, hit music video or excerpts of famous adverts or even snippets from hit movies; all of them can be used as an effective 'x-factor'. The main purposes are to attract the students' attention and arouse their curiosity, stimulate retention and formation of long-term memory, inspire motivation and to show the students that the lesson is connected to them in many ways. Additionally, as mentioned earlier, it is important that the lesson is designed to help ease the transition from general intelligence to specified-domain intelligence.

[A5] Activities

Apart from lecture/ class, having hands-on activities encourage students to be better engaged in their own learning process. Such activities attract their attention more effectively when compared to a monotone lecture. It is very important for them to see and acknowledge their learning process as a meaningful, purposeful and interesting development in order to encourage the growth of improved study and thinking habits. It helps to get them thinking and to be involved in class. It encourages them to be independent learners and it also ensures effective learning process.

B. EXECUTION (In class)

[B6] Introduction

Similar to the concept of having a theme for a particular class, introduction section enables the teacher/ lecturer to bring into focus the topic at hand as well as feel free to appreciate and discuss the topic in it general form.

[B7] Content: Conducting the class/ delivering the lecture.

[B8] 'X-factor'/ Extra activities

Depending on the situation, if it calls for a further discussion or explanation, it is advisable to have an open slot for any extra activity. It could be another 'x-factor' or just simply, another activity.

[B9] Discussion

It is better to arrange to have several phases in a discussion. It might started off with a big group discussion and then, shift to smaller groups and finally, if appropriate, a discussion between individual students. Moreover, it is also good to provide opportunities at the end of every discussion, for the students to share their ideas/answers gained from the discussion, with the rest of the class.

Such activities can be used as a method to facilitate and monitor their thinking/learning process by continuously assessing their depths of understanding, progress, etc. It also creates a good platform for the students to see how different individuals have different ideas and perspectives. It helps nurture empathetic values and awareness towards different people which is highly valued in a writer in order to negotiate meanings with the readers. Through interaction with other people, it helps create a chance for them to see themselves; to be aware of their own learning tendencies, thinking habits, attitudes, perspectives, etc.

[B10] Conclusion

C. RE-ASSESSMENT (After leaving class)

It includes evaluation on the effectiveness of the lesson plan, student's progress, etc. Either directly or indirectly conducted, these assessments influence the kind of plans and changes to be applied in the next class.

[C11] Feedbacks

[C12] Cataloguing Student's Works (Progress)

In order to keep track of each student's progress, it is advisable to have all of their works along with their profiles in a single file.

[C13] Next action plan & [C14] Important 'points'

As mentioned above, depending on the results of the re-assessment, the next class will be planned and arranged accordingly.

4. EXAMPLE: CASE 1 (1ST WEEK OF LECTURE)

During the first week of lecture, the content was planned to include some basic concepts and ideas about the course. It is always good to include as many 'x-factor' as possible in order to attract the students' attention.

Below is the activity sequence for Week 1:

- i. Introduction (first 15 minutes): Course description and requirements (assignments and assessments), class rules, etc.
- ii. A short ice-breaking session where students introduced themselves to the rest of the class (e.g. name, age, program, hometown, etc). All these information serves as the general data for their profiles too.
- iii. Activity 1: 'Technical Communication'.
 - A picture was used to elicit the student's understanding of the concept of communication in general.
 - Relation to the communication model.
- iv. The 'X-factors': several videos were used to introduce the students to some important key points in technical communication and technical writing.
 - There were three sets of videos; students were asked to make comparison between them.
 - Each video serves as an example of the application of the communication principles.
- v. Activity 2: 'Why' section.
 - With reference to the videos, questions were asked and answers were elicited from the students on why it is important to communicate.
 - This section was elaborated further to include a topic on different types of communication.
- vi. Activity 3: again, the usage of videos to show the impact of different communication presentation can have on the audience/ readers.
 - After they have made the comparison between the two videos, the students were asked to choose one with a stronger impact and they were also asked to explain the reason why.
- vii. Activity 4: A short introduction for the following week's class, through a short activity; an overview of the topic on 'Technical Writing' was presented.
- viii. Conclusion

4.1.1 Narative Observation: Key Points in Case 1

There are several important key points that I would like to highlight in detailed explanation concerning activity 1 (in Case 1); introduction of the concept of 'Technical Communication'. For this particular activity, the picture of a red heart stowed away in a corner was used. The picture was shown on slides following a discussion on the general concept of communication. Students were asked the question; "What do you 'see'? The picture serves as an analogy – an outlet to introduce and explain the components in a communication model. Rather than presenting the model directly to the students, by using the picture and eliciting

answers from them, I was able to build or add in information based on what they know. My intention was to state and convey very clearly that this course is everything but boring, foreign and difficult – it is something that they do every day and it is everywhere around us.

Based on the variety of answers that I received from the students on what the picture might mean; I was able to highlight how each individual have different interpretation, background or even other factors that might influence how people perceives their environments. These factors might act as barriers in communication and most importantly, to consider how vital it is to weigh in all of these differing aspects in communication. Then, I explained using the communication model to further enhance their understanding and to provide a concrete platform for their initial idea on what the concept of communication is.

In addition to the picture and the communication model, I showed them several more videos to strengthen and further facilitate their understanding. These videos were my main 'X-factors' for the day. The first set was downloaded from Youtube.com; popular independent singers (Sam Tsui, Christina Grimmie, Jake Bruene and Kirk) singing their version of other artist's hit song.

Students were asked to make comparison between Video 1 and 2, and later, choose one that they prefer and explain why they are different. From these two videos, I was able to highlight and made references to the communication model; giving them hard-evidence how it is applied in the real world. They learned how different people have different interpretation of a certain thing, how it will affect the end product and its importance when communicating and writing to ensure our intended meaning was conveyed successfully.

The next set of videos is Japanese music videos. None of the students could converse and understand Japanese; to them, it is a foreign language. Without divulging the title of the song or the artists' names, I asked them to try and make sense of the stories presented in the music videos. Later, we had a short discussion in which they confessed that Video 3 was much harder to understand compared to Video 4.

Then, I guided the discussion by posing another question, 'What makes Video 4 easier to understand?' By having this Q & A session with the students, I was able to highlight the importance of taking into consideration the kind of readers/ audience involved in one particular communication process. They found Video 3 particularly hard to understand because they lack the linguistic ability as well as the knowledge of Japanese culture in order to be able to make sense of the symbols and context presented in the video (e.g. Rain Gods, etc). For Video 4, it was easier for them to understand since the topic of wedding is common in all culture and the video did not require prior knowledge on certain topics to be understood. In addition, the arrangement of scenes and facial expressions has made it easier for the students to guess the meaning behind the Japanese lyrics. All of these points were successfully concluded by my students on their own – all I did was prodded them with question into the right direction.

Moreover, another reason as to why I chose Japanese music videos instead of English is because I want my students to see the possibility to learn something from

everything there is in our surrounding. It is one of my main goals to foster this learning habit in my students – to encourage them to see the endless possibilities in learning opportunities. I hope this in time will inspire lifelong learning process in many years to come, post-university. In addition, by stripping or eliminating the 'language barrier' so often the reason behind students' feeling unconfident and inferior as well as their reluctance in expressing their opinions, we were able to conduct the discussion at its earnest in a safe learning environment. Creating such atmosphere is very important in a classroom involving ESL speaker students.

Video 5 and 6 (downloaded from Youtube.com) serves as support to give concrete evidences to what the students had already understood from watching Video 3 and 4; how a clear storyline helps readers/ audiences to understand better. Video 5 has no storyline whatsoever when compared to Video 6; only the singer's face can be seen throughout the whole music video.

Last but not least, the last two videos (Video 7 and 8) – are an advert and a video-letter addressed to 'Mom and Dad' (downloaded from Youtube.com). Prior showing the videos to the students, I asked them to decide on which they think will have more impact. Will it be the advert or a video-letter with just words? As expected, they chose the advert and they were more convinced that they have made the right choice after watching it. However, they started crying only seconds into the video-letter. My 'X-factors had served its purpose and my students learned never 'to judge a book by its cover', ever again.

As usual, we discussed and compared the two videos together. Through the videos (Video 7 and 8), I wanted to instil within my students that as the writer or the sender in a particular communication process, they hold all the key to ensure its success – to create impact and to make sure that the intended meaning is being conveyed successfully to the receiver/ reader. I wanted them to remember that 'a great calligrapher does not blame his brush'.

4.1.2 Conceptual Framework for CASE 1

As shown in Figure 1, there are three important aspects that need to be considered when deciding the content, process and product of a lesson as well as the learning environment suitable for the growth and learning of students; the 'Heart', the 'Mind' and the 'Soul'.

It is important to 'tackle' all three simultaneously in order to create strong and lasting impact on the students to ensure effective teaching and learning processes are taking place. Frank (2006, as cited in Tomlinson, 2003) said that intelligence is about the ability to solve problems, but over-excitability is about the passion for solving them. When the emotional and mental energies meet, the mind supplies the energy of sustained concentration while emotional energy drives interest (passion). Interest is one of the basic emotions (Izard 1971).

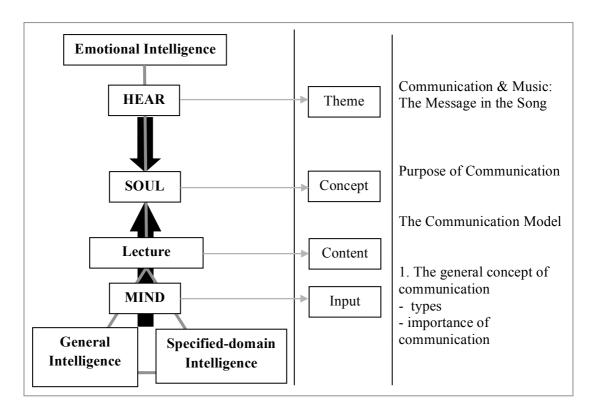


Figure 1: Conceptual Framework of CASE 1

i. The 'Heart'

Emotions can have a powerful impact on memory. Past research has shown that most vivid autobiographical memories tend to be of emotional events, which are likely to be recalled more often and with more clarity and detail than neutral events. In addition, it helps students who are more prone to absorb lesson through experiences and relations to real-life events to understand the lesson better – nothing works best, apart from comprehensive understanding of the lesson content, than to create a meaningful lesson by tackling the students' hearts.

It is at the 'Heart', that educators could stage the 'x-factor' in a lesson to attract the students' attention and interests. While it is important to develop their creative and critical thinking skills, it is vital too, to help them develop their emotional maturity to rival their cognitive as well as to develop emotional intelligence. Therefore, it is wise to start a lesson by first, 'touching' their 'Hearts'.

ii. The 'Mind'

Intellectual energy has certain consequences: relentless questioning, critical thinking, and evaluation (Piechowsky 2009). While keeping in mind of their thinking 'habits' and tendencies, the lesson should be designed to cater to the needs of their general and specified-domain intelligence as well. In another word, follows closely after the 'Heart' is the 'Mind'.

When deciding the content of a particular lesson, it is easier to separate it into two sections; one that would be internalized as sets of generative skills and knowledge (ones that the students have accepted as part of their own thinking repertoire) and the

other one is information related to the topic being taught ('raw materials' or facts which have yet become knowledge for the students, pending learning and internalization of the content). According to Wan Safuraa et. al. (2011), there is three most important components of intelligences that form the basis of a person's universal thinking repertoire as well as his or her higher-order thinking skills and that is general intelligence, specified-domain intelligence and emotional intelligence.

The findings have shown that general intelligence functions as a substitute in the absence of specified-domain intelligence, when a person is undergoing a learning process. Therefore, while the content of the process is rich with new information and introduction to new sets of perspectives and skills, it is important to include as well, 'spaces' or guidance where a more general sets of skills and realization are made available for the students. Therefore, the teacher needs to always be several steps ahead when dealing with students – to a point that she or he is 'omniscient' when it comes to the students' needs. Hence, it is learning inside of a learning process. While the lesson provide the information which later becomes knowledge to be stored as part of the specified-domain intelligence for a particular faculty or field of specialty, the lesson (or rather the teacher) needs to bridge the 'link' as well in order for internalization process to occur (to form parts of the general intelligence). For examples, to form a general overview of the topic and the process that it took to come to that conclusion and to be able to be critical in deciding the real meaning, selfopinions regarding the topic and lastly, to come to a consensus where does it stand in the student's personal and world-view (how does that piece of knowledge affect the students).

iii. The 'Soul'

The last 'pit-stop' is the 'Soul'. It can be deemed as the highest level of internalization where it no longer just influence your thoughts and your world-view, it colours your personality, habits and preferences. Life-long learning is a good example of goal-achieved when an educator has successfully tackled the 'Soul'. If at the 'Mind' stage, the 'fuel' is made out of 'information', but at the level of the 'Soul', the fuel is made of insight and inspiration. This could as well be one of the toughest hurdles in educating the students for educators in general.

At this stage, there is no immediate results to see whether the objectives were successfully achieved or not – it will only become apparent several years later. It takes the sincerity and honesty on the teacher's part to be able to inspire a student to do or to become somebody in the future. Hence, the combination between the 'Heart' and the 'Mind' will inspire the 'Soul' to have ever-lasting effect on the student.

4.1.3 Ever-evolving Conceptual Framework

It is high time that a spiritual and emotional element is considered as an important part in creating the best possible teaching approach for the students. Tomlison (2005) stated that curriculum (what students learn) and instruction (how students learn it) should work in tandem to ensure that each student is consistently engaged with high-quality ideas and processes and that "curriculum and instruction should also be responsive to a student's affective needs as well as to his or her cognitive needs" (2005: 161). After they have completed the course, majority of the students claimed to have changed their perceptions towards learning technical English.

"I have really enjoyed the classes especially the video sessions; added more understanding".

Student 1A

"The classes were interesting; no stress and I was able to learn in a relax way. I think it is the best approach for me to learn the subject. The part that I like the best is during the video-watching. There were many motivational aspects to it besides content related to the subject".

Student 1B

"The lecturer's way of teaching is different compared to the others".

Student 1C

"It helps to have other activities when we are learning – like games and videos – because it makes it easier to understand than when the lecturer uses only slides".

Student 1D

"The classes have given me the motivation to learn English. I used to hate attending English classes but after I met my current lecturer, I have been enjoying it since. I have enjoyed the games, videos and songs used in class!"

Student 2A

"I like the part when she explained details in the lecture using technical aids such as posters, advertisements etc., related to the topics."

Student 2B

"My personal opinion is to please ask the other lecturers to use the same teaching approach because boring teaching style only makes boring subjects worse!"

Student 2C

The key is in it being flexible, not rigid as what we all are accustomed too in the Malaysian mainstream education system. Like in one fluid movement, teachers need to be able to imagine the syllabuses/ curriculum framework as something of a stacked multi-dimensional, multifaceted, intricately woven on every level and of evolving/ metamorphic in nature. They have to form this mental framework in mind in order to be able to make sudden modifications when needs be — when a time came that a student does not or no longer respond to the original framework.

5. Meta-Level Approach in Case-Based Teaching Fosters Learner Autonomy

Based on experiential learning theory, teaching strategies should encourage students to reflect upon and evaluate their own experiences, to develop and articulate appropriate generalizations. In case-based teaching on the other hand, Schank stated that "when confronted with problems, people first try to remember a case in which they faced similar situation (1990: 1999).

Therefore, it appears that the concept of case-based teaching compliments meta-level approach in so many ways. Particularly in this context where ESP writing and thinking skills are combined to serve as the medium for students to learn effectively and thus, helps improved their performance as well as foster learner's autonomy. The idea of adding on information to already existing prior knowledge is similar to the concept of general intelligence while assimilation and adaptation of new information resembles the formation of specified-domain intelligence. While emotional intelligence is a new added factor presented in this chapter to be incorporated as part of case-based teaching method, its effects nonetheless, in enhancing and facilitating students' thought proved to be valuable in increasing the students' motivation to learn.

Thus, it can be concluded that a curriculum comprising case-based teaching should be built on the basis of promoting thinking skills and this paper has only highlighted one of the ways on how it can be done; through ESP writing class. By incorporating thinking skills (metacognitive and cognitive) into presentation of case examples – where students can be made aware of their own tendencies and learning styles compared to those of professionals – not only will it improves student's performance and thinking skills, it will also foster learner's autonomy within the students.

Apart from the integration of meta-level intervention in case-based teaching method, there are several key principles that have been incorporated into the overall methodology as well and they are;

- i. Writing equals thinking.
- ii. The need to tap into the use of general intelligence in the absence of specified-domain intelligence for English.
- iii. Emotional intelligence functions in facilitating thoughts.
- iv. Tackling the 'heart', 'mind' and 'soul' of students ensures effective learning in diversified classroom.
- v. Case-base teaching with meta-level intervention fosters learner's autonomy.

6. The Importance Of Nurturing Learner Autonomy

University students should be nurtured to be the pilot of their own thinking. They should be groomed to pursue life-long learning with a clear understanding of their own learning tendencies, nature and the process it entails, certainly not just to pass a grade and to be to graduate. In the case of the course in questioned, upon completion, the students should be able to write a good proposal report, conduct survey, apply technical communication skills, and improve their soft skills. However, as had been discussed throughout this paper, with meta-level intervention in case-based teaching, teaching and learning can be taken up to a whole new level and that is, in fostering learner autonomy within the students.

This is made possible through case-based teaching. It provides the learning environment/ medium that caters to the needs of the students. Through the combination of writing and thinking medium in case-based teaching, it is possible to tackle all three components of intelligence system behind the student's learning process; the general intelligence, specified-domain intelligence and emotional

intelligence. The presentation of different models or problems allows the students to contemplate on their own thinking nature/ habits. Such teaching not only provides the necessary information to increase their knowledge, but it also helps build tools for students to use in order to learn and function well in the society.

7. Conclusion

Three components – thinking skills and writing skills as well as English language as the medium of communication; all three has become an integral part of today's education scene; one cannot survive mainly on 'memorizing' in today's classroom, one cannot complain of disliking writing since it is now one of the main assessment tools used at the university level and one cannot dispense of the advantages of acquiring English language with its status as the language of knowledge. By bridging all three components as highlighted in this paper, I believe that it will improve students' learning process and experience altogether for a better prospect in the future as a whole. Thus, even when its medium is a second language, through case-based teaching, a meta-level intervention in both of the individual's process of learning writing and when writing brings about the cohesion needed between something personal and impersonal, to make learning fun and meaningful.

8. References

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