

PERSONALISING ENGAGEMENT WITH T-MALL "FIRST TIME HAVING MY FRENCH CLASS USING IPADS~!! WOOHOO!!<3"

Cécile Gabarre (Corresponding Author) Department of Foreign Languages, College of Arts and Sciences, University of Nizwa, Birkat Al Mouz, P.O. Box 33, PC 616, Ad Dakhiliyah, OMAN cecilegabarre@gmail.com

Serge Gabarre Department of Foreign Languages, College of Arts and Sciences, University of Nizwa, Birkat Al Mouz, P.O. Box 33, PC 616, Ad Dakhiliyah, OMAN sergegabarre@unizwa.edu.com

Rosseni Din Personalized Education Research Group, Faculty of Education, Universiti Kebangsaan Malaysia, 43600, UKM Bangi, Selangor, MALAYSIA rosseni@ukm.edu.com

ABSTRACT

In foreign language learning, opportunities to practice the language are often confined to the classroom. Therefore, there is a need to allocate time during contact hours for communicative language tasks. Active learning challenges the students in meaningful activities in a socio-constructivist approach. In Malaysia, peer learning combined with technology mediated learning were observed successfully in engaging learners. Peer network as well as access to reference tools supported learning by increasing the learners' confidence and motivation. A two-cycle action research was conducted over one semester to explore the implementation of active learning with a cohort of 24 beginner undergraduate students. The implementation of active learning was scheduled twice weekly in a computer laboratory. However, due to technical complications, the course was transferred once weekly to a lecture classroom. The lack of computers prompted the introduction of five additional iPads which were shared among learners. This article cyclically reflects upon the pedagogical and technological implementations of active learning and attempts to define the ideal settings to support classroom personalised and meaningful learning with an emphasis on the contributions of adopting tablet mobile assisted language learning (t-MALL).

Keywords: Second language learning; Active learning; Learner engagement; Classroom environment; iPads

INTRODUCTION

As French as a foreign language lecturer, I have witnessed the benefits of student-centred and active learning pedagogies in the language acquisition process. What distinguishes foreign language learning from second language learning is the lack of exposure to the target language (Arnold, 2006). Therefore, foreign language instruction needs to allocate more time for practice sessions during contact hours because the classroom often represents the only occasion to interact in the target language. I have been teaching French in Malaysia for fourteen years and this experience taught me that in the Malaysian context, student participation did not occur spontaneously and that it could only be fostered within a comfort zone. Nurturing engagement became my quest because I also realised that once the learners had overcome their anxiety they became more motivated and thus more engaged and more proficient (Dörnyei, 2001, 2003; MacIntyre, Dörnyei, Clément, & Noels, 1998).

I have been committed to improving the learning environment in search of the ideal comfort zone. Findings from past research conducted on the site revealed that the association of peer and technological support

To cite this document:

Gabarre, C., & Gabarre, S. (2016). Personalising engagement with ipads: "first time having my french class using ipads~!! woohoo!!<3". Journal of Personalized Learning, 2(1), 26-39.

created a safe environment which successfully contributed to the learners' engagement (Ali AbuSeileek & Awatif Abualsha'r, 2014; Hew & Cheung, 2010; Yang, 2010). The bachelor program lasts three years. As a native French lecturer, I am usually assigned second and third year courses. However, a year ago, I was offered to teach first year learners in their second semester. This represented a change in my routine as I had never implemented active learning with beginners in this institution. The novelty was exciting. This article relates this challenging and rewarding experience as it attempts to retrace the active learning journey towards the learners' engagement through the lecturer's and learners' narratives.

In the Malaysian context, French lecturers are faced with two inhibiting factors when it comes to integrating communicative pedagogies. First, French is a foreign language in Malaysia. As described by Arnold (2006), foreign language learning differs from second language learning because of the differences existing not only between the source and target languages but also between both cultures. Consequently, the learning process is slower as it takes more time to master a foreign language. Furthermore, opportunities to practice are often limited to the classroom which disconnects the target language from the reality. Technology mediated learning like computer/mobile assisted language learning, have greatly contributed to foreign language learning. In Malaysia, Internet is particularly crucial to foreign language learning as it represents an affordable and easy access to the media in French to shared learning resources and to networked communities (Tan, 2013). Mobile technologies provide learning support during lessons with references such as digital dictionaries and automated translators. Mobile assisted collaborative and peer learning in the context of the foreign language classroom enable the learners to discover linguistic and cultural aspects, to manipulate the language, to discuss and to create in the target language. As described in Godwin-Jones (2012), Barbour (2012), Churchill, Fox and King (2012), Diemer et al. (2013) as well as Jahnke and Kumar (2014), personal mobile devices such as iPads have contributed to foreign language learning by facilitating access to authentic materials and to meaningful ways to practice the language for example through gaming, blogging, social networking, instant messaging and video conferencing. Furthermore, access to recording and editing tools can engage the students in creative tasks embedding textual and audio-visual content (Mango, 2015).

The second factor is related to the language diversity of Malaysia which results in most Malaysian learners being bilinguals. They have learnt nationally spoken languages at school but also through immersion by watching television and talking with friends. Thus, constant exposure in natural situation of communication facilitates the acquisition process because it is meaningful, useful and thus motivating (Wharton, 2000). By comparison, formally learning a foreign language is viewed as learning the hard way. The implementation of active learning emphasizes communicative activities with meaningful and authentic language tasks to increase the learners' confidence, motivation and acquisition process. Active learning is situated within a socio-constructivist perspective where learning occurs through the social interactions involved in the completion of real-task based activities (Bowman, 2011). The language tasks are designed so as to introduce the right amount of complexity to challenge the learners while sustaining their motivation in line with Vygotsky's (1934/1962) cognitive theory. This method seeks to keep the learners engaged in order to sustain their motivation and to build their skills as well as their confidence. The lecturer scaffolds the tasks based on the learners' levels and then guides the learning process through peer interactions. The learners are challenged through various scenarios designed to match real situations. This approach is learner-centred because the lecturer needs to be familiar with the students' proficiency level and learning styles in order to design tasks within their reach.

In a prior investigation, it was observed that the on-site implementation of technology supported active learning increased the learners' motivation and subsequently increased their participation (Gabarre, Gabarre, & Rosseni Din, 2015). Moreover, the combination of peer, technological and instructor support associated with active learning contributed in sustaining the learners' engagement in the Malaysian context (Gabarre, Gabarre, Rosseni Din, Parilah Mohd Shah, & Aidah A Karim, 2016). Peer activities and assistance provided a culturally accepted environment to voice questions on learning material. This set-up encouraged interactions in the target language by alleviating the risks of making mistakes. Technological support in the classroom added to the benefits of peer learning as the learners could search for answers autonomously, thus reducing their anxiety when asking questions to the lecturers. Online technological support either from peers or from the lecturers was also found beneficial because questions and comments posted online were no longer considered as interfering with the course progression. On the contrary, they were viewed as a commitment to learning.

The lecturers who had taught this group from the first semester were concerned with the students' difficulties in adjusting to the programme. Overall, the learners were reported as weaker than previous

cohorts in terms of participation and proficiency. Grades illustrated this statement with a third of the group barely above 39 out of 100, the passing mark for the course. Tentative explanations for this previously unseen situation blamed the size of the group and their lower English proficiency levels. The size of this group was indeed bigger than previous cohorts with an intake of 24 students whereas past enrolments never totalled more than 20 students. Regarding the English proficiency level, it was recorded that previous cohorts had an average bandwidth of 3. However, many learners from this batch were below this level. French is linguistically closer to English; therefore, a good English foundation facilitates the French language acquisition process. Moreover, the learners below this bandwidth are required to attend an additional English course which inevitably increases their study load. This factor can be further destabilising, especially for learners in their first semester who also need to tackle organisational and affective issues. However, hope remained. The evaluation for the first semester was behaviourist with a strong focus on grammar exercises. Communicative skills accounted for 40% of the tests with one short essay (20%) and a reading comprehension (20%). However, grammar was also evaluated in the essay which would have aggravated the marks of the learners with structural difficulties. Above all, habitually, learners who obtain lower grades request to change their major program. However, the online registration system revealed that not only did all the learners from this group chose to continue but they had also registered early. This was heartening because it showed motivation.

Hence, attempting to raise engagement in the course with an active approach aimed to tackle both participation and proficiency issues (Crick, 2012). Thus, the first challenge consisted in planning the implementation of active learning in a beginner language course. With the course synopsis, the textbook and the expected number of students in hand, course planning could begin. As usual, active learning would need to be introduced progressively and as smoothly as possible in order to build the learners' confidence and motivation. In this case, the learners' might need a special boost to regain their self-esteem. Therefore, the in-class participation had to be carefully monitored according to a student-centred perspective in order to determine their proficiency levels and to understand their learning preferences and strategies. Participation was also expected to reveal the learners' usage of instructor, peer and technological support. The tasks were designed based on the course learning outcomes and on the textbook content and progression. They involved the instructor as a facilitator and peer learning in a social constructivist approach.

The second challenge consisted in building the technological support framework because the learners' equipment remained unknown. All the learners probably owned a laptop and most of them smartphones while only a few of them were expected to own tablet computers. However, it was necessary to provide equal opportunities regarding ubiquitous access to course content and learning community as well as to references, creative and sharing tools during in-class activities. This motivated the creation of a Facebook group for the course as teaching using this social network resulted in reduced signs of learners' anxiety symptoms and raising participation levels in this institutional context (Gabarre, Gabarre, Rosseni Din, Parilah Mohd Shah, & Aidah Abdul Karim, 2016).

The first two cycles reported in this article sought to explore how Malaysian language learners adapted to the implementation of mobile assisted active learning in their beginner course. The research questions were formulated to reflect both pedagogical and technological aspects of the implementation. As such, the first question addressed the learners' reactions, perceptions and adaptations to the active learning approach while the second question dealt with the learners' usage, perceptions and strategies when adopting mobile technologies for learning French. The investigation of mobile assisted active learning in the French bachelor programme was part of a two-year longitudinal research.

METHODOLOGY

Cyclical Research Design

This article relates the first phase of a longitudinal qualitative study exploring mobile assisted active learning implemented with the same cohort of 24 undergraduate students majoring in French during four semesters in a Malaysian public university. The research was planned and conducted according to the cyclical framework guiding action research (Mills, 2011). A grounded theory approach to data collection and analysis was adopted to monitor and refine the implementation of active learning within an instructor, peer and technological support framework (Charmaz, 2006; Corbin & Strauss, 2008). Based on Creswell (2005, 2007), a grounded theory method of data collection and analysis contributed to refining existing knowledge on foreign language learning with mobile devices and provided an analytical framework reflecting the populations, contexts and settings. This was consistent with the purpose of action research which aimed to

develop a deep understanding of a particular phenomenon in a specific context in order to improve teaching and learning based on Mills (2011).

Intervention

This article reports the results from the first two cycles of implementation conducted over one semester in a beginner intensive proficiency course with students totalling 140 hours of French tuition which situated them above the "Breakthrough" level labelled A1 in the Common European Framework of References (CEFR) for languages (Council of Europe, 2001, p. 135). The active learning interventions were carried out over 14 weeks. In the first cycle, active learning was implemented solely in a multimedia computer laboratory specifically designed for languages while the second cycle was carried out alternatively in a multimedia computer laboratory as well as in classroom settings. In the second cycle, iPads were lent to the students on a voluntary basis during the lessons. Each cycle lasted 7 weeks.

The textbook used Connexions, niveau 1 (Mérieux & Loiseau 2004) was situated within a pragmatic and intercultural task-based approach. The units were oriented towards instilling communicative skills. Therefore, in addition to grammar and vocabulary building content and exercises, each unit comprised activities designed to develop the four language skills through practice. This was achieved through information seeking in textual and audio documents, role plays and written interactions. Each unit comprised a discovery section followed by form-focused exercises and concluded with practice tasks. The textbook sections concurred with the warm-up, core and final sequences designed for the implementation based on the three-lesson chart recommendations from Acosta-Tello and Shepherd (Acosta-Tello & Shepherd, 2014).

As such, in the current study each lesson comprised two micro-tasks guiding the learners towards the final production task where the students were challenged to put what they had learnt in real practice. The timeframe for each lesson was planned based on the courses' weekly schedules allocating two hours per session. The task-based learning approach was introduced from the first week of the semester with the objective of increasing the students' speaking interactions during classroom's activities.

In order to foster seamless engagement within and outside the classroom, a Facebook group was created in lieu of an LMS enabling access from multiple devices. All the documents, lecture notes, tasks' description, rationale, support, material and links to resources were made available in the group ahead of each class according to a flipped classroom approach. The document files were also converted to PDF and JPEG formats then posted in the group in order to be accessed from mobile devices. Audio files were inserted in videos or in presentation in order to be shared on Facebook. Wi-Fi access was provided in both computer laboratories and classrooms enabling the students to access and use references and support tools either located in their books, computers and their personal mobile devices.

Data Collection and Analysis

All the learners consented and were associated to the research as member participants. The 24 participants agreed to being observed, photographed and filmed during the teaching sessions as well as to their usage, participation, posts and artefacts' contributions to being monitored on the Facebook groups. They also consented to surveys, focus-group interviews and reflexive questionnaires. The data from the learners was collected through 1) classroom observations consisting of notes, pictures, video recordings, 2) artefacts produced and recorded in-class and out-of class posted on the Facebook group and 3) open-ended self-reflexive questionnaires of 5 items distributed at the end of each session. The participants' data was subsequently triangulated with the researchers' field notes, pictures and video recordings of lessons, focus-group interviews as well as with the lecturers' memos before being analysed and coded using ATLAS.ti (Friese, 2012).

The unified triangulation protocol (Gabarre, Gabarre, & Rosseni Din, 2017) used across the data collection and analysis included the students' behavioural, affective and cognitive signs of engagement descriptors from Skinner and Pitzer (2012)'s social constructivist engagement model, Huang, Lin and Chuang (2007)'s mobile user behaviour, and Schmidt et al. (2009)'s technological pedagogical content knowledge questionnaire.

FINDINGS AND DISCUSSION

Cycle 1: Active Learning In Computer Language Laboratories

The implementation of active learning took place from the first week of the semester. The course was conducted biweekly over two-hour sessions. The classes were scheduled in multimedia computer laboratories with Internet access. The computers were networked and controlled from the lecturer's station. Each classroom was equipped with an interactive white board projected to all stations' screens. The learner's stations were arranged in tables of four computers. The settings ensured an equal access to technological support. Active learning was introduced throughout the cycle, in every sessions and aspects of the course whether the tasks focused on practicing communication skills or on building grammar and vocabulary. This section relates how the implementation of active learning took place by selecting a sample unit reflecting the overall course. First, the language unit were recalled from the lecturer's thoughts were confronted with the learners' views of the same events revealed in the analysis of the focus-group interviews.

The most challenging part of the intervention consisted in increasing the volume of interactions in French throughout the lessons. This intervention was the toughest for the learners who had to surpass their cultural and personal assumptions about their role in the classroom and about what was expected from them in order to be able to adjust to the approach. For that reason, the lecturer needed to proceed carefully and within the learners' abilities. The first lessons were therefore of an utmost importance because they set the mood from the beginning. As usual, these sessions were planned with language tasks aimed at encouraging the learners to speak and interact with others in the target language. They encompassed all the communication channels from one to all, one to one, within groups, group to groups as well as learning with the instructor, with peers and with technology.

Cycle 1: Adapting to Active Learning

The unit which best reflected the cultural and linguistic dimensions of the intervention were taught in the first week of the cycle. The learning outcomes were for the learners to be able to introduce themselves as well as others. This unit comprised five tasks divided between two sessions. Pedagogically, self-introduction revisited basics lessons since the textbook featured this topic in the first units. Therefore, the learners were familiar with the structures and vocabulary. In the first task, the lecturer needed to set the scene and to provide a rationale. Hence, the lecturer began with introducing herself using basics structures from the textbook. This provided an opportunity to introduce French as a teaching channel in the course as the learners were used to being taught in Malay and in English. Active learning is about increasing practice in the classroom and it is easier to implement if the target language becomes the medium for interactions. This creates a sense of community and belonging. It also increases motivation and confidence when the learners realise that they can manage. It was also an opportunity for the learners to get used to the lecturers' patterns of speech. The learners were encouraged to work in teams, to seek support either from the instructor, peers and additional tools such as books or technology. Finally, the students were able to introduce themselves in front of the class. The three-sequence lesson plan of revising, consolidating and performing (Acosta-Tello & Shepherd, 2014) was maintained during the implementation of active learning as it facilitated and supported engagement in speaking interactions.

During her self-introduction, the lecturer focused her attention on the learners to detect their reactions, adjusting to their level by repeating and reformulating as well as by adding words on the interactive whiteboard. The lecturer kept moving while speaking, going from one table to another, and walking back and forth to the board to write words. Throughout the activity the learners had moved their chairs so as to always face the lecturer and so as to be close to their friends in compacted groups. They were attentive, captivated. Moments of confusion were replaced with gratification when they caught the meaning. A network of peer support worked on deciphering sentences. The lecturer reformulated and initiated some collaborative guessing games between groups. This created a rewarding effect to the groups which had understood, and to the learners' within the groups who had contributed. The lecturer also strategically went to the board to write words. This gave the learners the privacy to consult each other and their reference tools without fear of being disrespectful or of disrupting the course. The following extract from the interview highlights the peer learning strategy to comprehend the lesson when the medium of instruction is in the target language. It confirms that asking the lecturer is the last resort but that the learners have gained sufficient confidence to do so. This method was repeated in subsequent lessons as the feedback from the students was very encouraging in terms of engagement through the development of peer learning coping strategies.

Laetitia: When I don't understand I ask a friend. Léa: Ask other friends. Mélissa: The lecturer says "ça ne va pas". So not sure so we pass to each other Sarah: Sometimes, if nobody understood then I ask the lecturer. Katia: If no one knows, I ask again the lecturer to repeat.

For the second task, the learners were invited to shortly introduce themselves one by one starting from the front row with their names, and to mention things they liked or disliked. Once again, they could seek help from the lecturer, their peers and support tools. The task added a speaking dimension to the activity. Some learners were more comfortable than others but the peer network provided help and encouragement. The learners grew rather excited and seemed to enjoy themselves. They used paper dictionaries, offline dictionaries on their phones, online dictionaries and translators from their smartphones or the computers. They consulted their notes and discussed their search results. The act of speaking was like submitting an answer to a television game. It was exciting although remained the uncertainty of the sentences' correctness. The whole class was attentive to whether the lecturer would accept the performance. However, they were also listening to each other, actively engaged. If the lecturer followed through with a statement or a question, the learners quickly processed the information among themselves. Then the activity continued until the last student had introduced himself and the session was over. Even though the tasks were perceived as listening and speaking, the learners also studied grammar and extended their vocabulary. They noted new linguistic elements. Some also updated their notes from the previous semester. Most of them noted down their presentation and worked on their writing skills.

Mélissa: Present... present... it can make me feel ... better, can remember.

In the following session, the third task in the unit involved listening comprehension with the trailers from an animation film. The film was an adaptation from a famous Belgian comic book series. The first trailer was the American version with French subtitles and the second the French version without subtitles. Both trailers presented different aspects from the film. The subtitles in French helped the learners connect the scenes with the French sentences, such as with interactive reading. The time spent for each sentence was timed by the video. This activity was helpful to train learners to skim through while reading. It also enabled them to associate words with visuals. The learners who were familiar with the film explained it to their peers. The film was being projected on the locked computer screens so the learners could neither control the video, nor gain access to the Internet. The second trailer was in French and challenged their listening comprehension. The previous video had introduced the context and also some of the words that were in the French extract. This engaged the learners with associating the spoken words with their spelling. Once again, the learners appeared to enjoy themselves. The trailers were authentic videos and the learners were engaged and looked interested. As noted from learners, associating words with visuals and audio helped them memorize the vocabulary.

Mathilda: I remember not just from writing. For example, I learnt the "Comment allez-vous?" from hearing and listening to the sentence then after I just wrote it down. I need to listen, and then write, and then I remember.

The fourth task involved information seeking and note taking with the ultimate goal to create a slide presentation. The learners were directed to the Belgian comic book official website and asked to choose one character. They naturally started working in groups. They browsed through the descriptions of the characters and selected one. They then wrote a simplified description of the character and illustrated it with a picture within one slide. For this task, the learners were observed walking to other groups, moving their chairs so they could share a computer, checking words either from their dictionaries or from Google Search. They also relied on Google Translate to understand the descriptions. Some stayed on the indicated website while others navigated to other websites, browsing in English or in Mandarin. The Malaysian Chinese resorted to English and to Mandarin both to comprehend and to write. However, they seemed to rely mostly on Mandarin to select between definitions. They appeared to be competent with the use of search engines and automated translators since they entered keywords and chunked sentences.

Mélissa: Translator does not help with the writing but maybe then we do understand what it means ... and we can learn all these sentences.

The Malay learners predominantly used Malay with Google Translate. However as the database for Malay is not as furnished as the English one, the results showed greater errors. They also tended to enter whole paragraphs which increased the risk of errors from the machine. Learners entering large extracts in a translator generally have a weaker understanding and control over the structure of the original text. If this tendency is observed in both the source and the target languages, it may hint that these learners have low reading skills in both languages. Very seldom is the information available in Malay due to the cultural distance. Therefore, the Malay learners lack support information in their language. Subsequently, it constitutes an additional difficulty for the learners with a low English proficiency level. For example, whenever the lesson's theme relates to a cultural aspect, most websites were mainly in French and in English. Often there were also several websites in Mandarin because there is a strong interest from the Chinese for the French culture. The learners worked on their slides. The lecturer could monitor their progress from the lecturer's station since the system allowed her to view each computer's activity. The lecturer also went from one group to the other to offer help. Some groups spontaneously called for help. Requests consisted in checking the structure and confirming the choice of vocabulary. All the groups managed to send their presentation to the lecturer's email at the end of the lesson.

The fifth task consisted in presenting their character to the whole class. Even though, the learners were slightly nervous about speaking in public in the target language, they were confident about their slides which had been checked and corrected. They had also practiced the pronunciation by listening to the words in various websites such as Wiktionary. Some had practiced reading with the lecturer. The learners were still relying on reading most of the textual information from the slides when presenting. This was still a beginning. As time would come they would become more spontaneous. The hardest part was done. They had managed their first presentation in French and they looked relieved and most importantly proud. The learners' presentations were posted on the course's Facebook group.

Katia: To prepare for the speaking, translate, translate. Léa: and then we hear the pronunciation Laetitia: Write down and just reading. Thomas: We learn how to spell, to speak in French, the confidence. Like the past tense, we also do the revision unconsciously.

Cycle 1: Impeding Classroom Facilities

The learners adapted well to active learning. In addition to peer support, the technological framework was essential in assisting the learners in the transition. They searched the Internet and brainstormed faster. Online resources gave them confidence and the computers enabled the creation of dynamic and colourful presentations which the learners could share with the class in the Facebook group. They could also access the day's lecture notes before and during the lessons. Learning became authentic and engaging. French became meaningful and motivating. In terms of active learning and student engagement, the implementation was a success. Overall, the learners had gained confidence. However, the computer laboratories were not convenient for lectures. Whenever the instructor needed to address the whole class for example to focus on a particular language point, the learners with their stations facing the classroom back wall had to move their chairs. Moreover, with the noise from the server covering the lecturer's voice, all students shifted to the front which resulted in two rows of chairs. The microphone was fixed on the lectern too far away from the board and from the computer station to be useful.

Another inconvenience of the computer laboratories stemmed from the computer stations themselves. During collaborative work, the computer screens stood in the way. The students could be networked in groups and communicate using headsets, however, the learners could bear the headsets no more than ten to fifteen minutes. Also, they felt uncomfortable because the lecturer could surreptitiously view their stations. This loss of intimacy was intimidating during the preparation phase of role plays when the learners used English or Malay. Furthermore, although role plays with headsets were perfect for phone simulations, they rapidly became a burden in other situations. Overall, interactive activities supported with the system's collaborative functions resulted in less engagement with the learners becoming idle more quickly.

Foreign language learning requires some degree of flexibility in the delivery of instruction allowing for unexpected adjustments based on the learners' progress and requests. Just-in-time learning in face-to-face settings translates into responding to the learners' needs as they arise. Subsequently, it implies being able to swiftly shift from one learning configuration to another. Currently, neither lecture classrooms nor computer labs offer optimal solutions to address this issue. However, since the sole advantage of computer labs relies in their technological support, an interesting solution was to combine the flexibility of lecture classroom with mobile technologies.

For the learners, using their phones and the computers was as natural as using a paper dictionary, the textbook and their notes. At all times, these tools were scattered on their tables. The keyboard and their notebook were right in front of them, the mouse and their pen were located on the right side, their dictionary, their phone on their textbook on the left side. The headsets were always pushed away. To them Internet access was reassuring. The computer laboratories were their favourite classrooms. However, they had never experienced learning French in another type of setting since they had been taught in computer laboratories from the first semester. Nevertheless, the technological set-up was not pedagogically perfect in terms of role plays, presentations and language explanations. The continuous noise from the server in particular was tiring. The lecturer had to raise her voice to be audible. The learners at the back would be distracted because they could not follow the lesson properly. As a result, they would start talking which would generate even more noise to such an extent that it became unbearable for everyone. All interactions were inaudible and the learners showed signs of frustrations.

Computer laboratories are perfect for listening comprehension because the audio files can be played directly in the headsets. They can also be transferred to the learners' computer stations so that the students can play and control the files as well as record themselves to work on their pronunciation. Unfortunately, the site's computer laboratories could not perform these functions due to frequent network failures. Consequently, the audio files were played from the class speakers. For beginner learners, listening comprehension requires a quiet atmosphere in order to limit interferences. In our situation, the background noises created an additional difficulty for the learners. In addition, the interactive whiteboard in one of the computer laboratories started malfunctioning after the third week which impeded projecting the lecturer's and the students' screens to the whole class. On the fifth week, the technicians announced that they could not restore the network nor fix the interactive whiteboard. Therefore, the lecturer consulted the learners on the issue. The lecturer proposed to keep using the computer laboratory whose interactive whiteboard was still operating but to transfer the other session to a lecture classroom. The learners agreed with the conclusion that the computer laboratories were noisy and that they would gain some benefits in being taught in a lecture classroom. Some learners were concerned about the lack of access to the Internet but they also admitted that they preferred the lecture notes to be projected. Due to the interactive whiteboard failure, this could not be performed without denying the learners' control over the computers thus over their access to Internet. It was thus mutually agreed that a change of classroom would be beneficial.

Cycle 2: Enhancing Classroom Facilities with iPads

The second cycle was therefore implemented in one computer laboratory and one lecture classroom. The classroom was equipped with an LCD projector as well as speakers connected to the lecturer's computer. In addition, the lecturer's station allowed an external device to be easily connected to the LCD projector as well as to the classroom speakers. To compensate for the lack of computers which had been beneficial as a support tool which increased engagement in the first cycle, we opted to introduce tablet computers in the classroom. The tablet computers would provide flexible as well as ubiquitous support in both the computer laboratory and the lecture classroom. In addition, tablet computers provide larger and more confortable screen sizes and yet remain light and small enough to provide ubiquitous and flexible learning (Alvarez, Brown, & Nussbaum, 2011). Their powerful hardware and tools associated to the choice of language learning applications are also promising in terms of student-centred and learner-controlled learning (Enriquez, 2010). Recent sources have shown that tablet computers can perform as interactive whiteboards, transform into mobile computer laboratories while catering for ubiquitous, individualised and collaborative learning (Dhir, Gahwaji, & Nyman, 2013; Meurant, 2010).

This research received a university grant which enabled the purchase of five iPads. The technological action plan was first implemented during the second cycle in the second half of the semester. The course content was adapted and designed for teaching and learning with tablet computers with permission from the Editions Didier for "Connexions, niveau 1" (Mérieux & Loiseau, 2004). The lecturer charged and preloaded the iPads with selected applications as well as with course material before each lesson. The intervention consisted in equally distributing the iPads to groups of learners for a collaborative use during each lesson.

Similarly with the first cycle, field notes were supported with classroom observations, pictures and videos. In addition, self-reflexive logs distributed after each session enabled the collection of immediate learners' feedback on the ease-of-use and usefulness of the technology mediated pedagogical set-up. Artefacts were also collected from the iPads. For each task, the lecturer wrote memos detailing the preparation and the

implementation phases. The preparation section described the pedagogical objectives and the lesson plan along with the technological design. The implementation section chronologically detailed the learning session. Both sections included the reflections of the lecturer on teaching using iPads regarding the transferability of course material and the device's potential for active learning. The memos were further triangulated with the learners' perception from the self-reflexive logs and with the transcripts from focusgroup interviews. The interviews were conducted in the eight week of the semester with all the participants. They aimed to understand the students' language learning history, their motivation and inhibitions related to learning French, their preferred language tasks and learning strategies as well as learning tools. They were encouraged to give opinions and suggestions to improve the course and the pedagogical approach.

Cycle 2: Personalising Classroom Learning for Meaningful Learning

Previous observations revealed that the learners would always sit within the same groups. Therefore, at the beginning of each lesson, the lecturer offered one iPad to each group by placing an iPad in the centre. The lecturer's smartphone was turned into a Wi-Fi hotspot in the computer laboratory as no public network was available. The lecture classroom featured several free networks. The learners had therefore access to the Internet in all settings for mobile learning. Collaborative tasks ensured the sharing of the iPads between each group members. Consequently, all learners were exposed to learning French with tablet computers in tasks encompassing the four language skills. This section describes and analyses the contribution of the iPads to the initial action plan within the implementation of a sample unit over two sessions.

The tasks were planned based on the learning outcomes. This unit focused on the future tense. The first session was conducted in the computer laboratory. The first task introduced the future tense with a song. The learners discovered the tense by listening to the audio file while reading the lyrics from the textbook. The song was played over the class speakers as the audio file could not be transferred to the learners' stations. The iPads were preloaded with the song and were circulated among the learners usually in groups of two. They reported the iPad music player as easy to control, allowing them to select the segments of the audio track they needed to replay. Some groups listened from the iPad speakers. Others shared earphones. Although the task could be completed without listening to the song, the learners reported that they found additional benefits in associating audio and textual information. In addition, the students reported added flexibility in using the iPads such as being able to control their learning pace.

Emilia: It is clearer than the class' speakers. I can replay the song. Patricia: I use the iPad to search verbs online and to replay the songs. Léa: We can Google translate, we can find the words. Barbara: It's like it's our choice whether we want to repeat or not. So we have the ability to ... repeat, repeat again and again if we didn't get it at the first time. So it is fun and I get very excited like. "Oh! Oh! I heard that word I heard that word".

Their attention was guided towards understanding the story from the song. From the narrative, they recognised which part described the past, the present and the future. They associated the linguistic markers such as the tenses and time expressions for each section. With this task, the learners had to recall the present and past tenses which they had previously studied and learnt how to construct the future tense. They used all the tools at their disposal to search the meaning of words: paper dictionaries, offline dictionaries installed on their phones and on the iPads as well as online dictionaries from the computers and the iPads. Regarding the performances of paper and offline dictionaries for vocabulary inquiries, the mobile phones and tablets allowed for a faster search from the devices' databases due to the predictive text-input function. However, the search results from the pocket and tablet dictionaries were described as more detailed and helpful than from the smartphones. This limitation is inherent to the limitations caused by the smartphones' smaller screen sizes and storage capacity. Online websites offered similar information as applications installed on the iPads and paper dictionaries. However, the learners explained that they could listen to the word's pronunciation on the computer and mobile devices. The learners also referred to the verbs tables from their textbook as well as consulted online reference sites on French verbs and tenses from the computers and the iPads. Again they seldom used their smartphones particularly for grammar explanations when navigation and reading was impaired by the devices' smaller screen sizes.

Emilia: Some words we don't know, we can use Google translate or a dictionary in iPad. And we can learn more in French.

Raphaela: I think it is useful hum... because uh... we can use the Google translate uh... it is faster than check a dictionary. Anna: I think it is useful because the iPad has some applications we can use. Charles: So when we use iPad in our classroom it makes the learning much easier and more fun.

The lecturer circulated in the computer laboratory offering guidance and assistance whenever requested or when the learners appeared to be confused. Tutorial mainly consisted in advising the learners about search methods and tools (i.e. translators and dictionaries). The lecturer also provided the learners with additional websites' addresses. The learners often asked to be corrected within their groups. They also inquired about the vocabulary and grammar rules in private. This configuration allowed for learner-centred learning. The learners sought for answers autonomously and collectively. Consequently, they would only ask the lecturer about a particular aspect. Therefore, the tutorial was focused and matching each learner's needs. At the end of the task, the lecturer projected the exercise on the interactive whiteboard and all the groups contributed by coming to the board to write their answers. The learners appeared confident, probably because their answers had been previously confirmed either by their peers, their reference tools or the lecturer.

The second task introduced a role-play based on the song. The lady singer was desperate to find the lover she had lost and went to consult a fortune teller. At the beginner level, this sequence is usually organised in two phases: preparation and performance. Therefore, role plays can take as much as an hour. However, the main issue for the lecturer is for the learners to spend more time acting than preparing since this is a speaking activity. There are two options for the preparation phase. In the first option, the learners work in groups of four to note down their ideas, write the script and then have it checked by the lecturer prior to performing the role play two by two within their group. This combination is less communicative but enables the learners to build their confidence. The second option consists in dividing the whole class in two groups, each group preparing for one role through brainstorming sessions. The acting sequence consists of several rounds each time with different learners from each group performing with the help of their group members for support. Group members can support their team members by ushering or by displaying key words on a piece of paper. This configuration is more active because every learner is engaged during the role plays either as a main actor or as a support member.

The learners from this group were used to the first option. This time, the lecturer had planned to use instant messaging for the preparation phase. This technological set-up was believed to create a hybrid environment, bridging the benefits of both synchronous and asynchronous discussions which could encourage the learners towards spontaneously expressing themselves. As opposed to synchronous conversations such as with phone calls and videoconferencing, chatting is instant but still allows some buffering time giving learners the possibilities to check for words. The learners could either join their preferred website from the computers or launch Messages, Apple's instant messaging application installed on the iPads to perform the chat. The learners had never chatted in French before. The theme for the role play was not particularly meaningful to them as they seldom consulted fortune tellers. However, they seemed thrilled at the idea of communicating live with their classmates. As it happened, all the learners circled around the iPads and proceeded to invite the others to their chat rooms. They made contact in the target language and initiated conversations. They discussed live and consulted each other among groups about the content, structures and vocabulary of messages. They used their paper dictionaries, their handwritten notes, and their phones' digital dictionaries as reference tools. They seldom used the computers because the stations lacked flexibility. The activity managed to engage the learners into writing messages almost spontaneously. Therefore, the groups practiced their role plays actively during the preparation with iPad stations assuming either role while conversing with the others across the room. This saved considerable preparation time because the groups formed naturally around each iPad.

Camélia: The iPad is compact and I can bring it around the class and show the messages to others. Katia: It can carry here out there computer you cannot carry Laetitia: Computer very heavy

Instant messaging transformed the role play into a game thus motivating and engaging the whole class. For the performance phase, four groups were constituted over four iPads networked two-by-two across the room. The acting took place over Facetime, a videoconferencing application. In each group, the learners took turn to perform the role play in from of the camera. This configuration allowed more learners to act in twice the time. The learners volunteered to participate in the role play whereas they were hesitant when the activity was staged in front of the class. The videoconferencing tool gave intimacy to introverted learners. They were facing a camera not their peers and lecturer. The latter became part of the support system and was no longer solely viewed as an assessor. The learners completed this task among themselves which increased their satisfaction and pride.

Angela: iPad is like using the phone. Also, when typing in Message, the application can directly correct my word when I typed wrongly.
Katia: it's a new method for teaching then we would feel more interested in when teaching and also we think kind of funny, can play.
Mathias: Challenging for the student and then fun and once it becomes fun and challenging the students at the same time will try hard to do their best while where it is not so difficult and not so easy and still fun and still using writing and speaking and listening at the same time.
Mélissa: When speaking like this in Facetime, I am very proud.

The third task took advantage of the lecture classroom. The learning outcomes were to revise the previously studied future tense and to introduce the preposition system applied for countries. The theme of the lesson was the weather forecast which demanded commands of the future tense and lexical terms related to weather conditions, numbers for temperatures and of geography to locate cities and countries. In French, the name of countries differs from English. Moreover, as with every noun in French, countries obey gender and number rules and are either masculine, feminine singular or masculine, feminine plural. Therefore, the learners needed to understand the gender and number rules for countries in order to be able to select the correct articles and prepositions.

The lesson was planned in two sequences. The unit's third task consisted in progressively introducing the French name of countries, their gender and number, then in learning the respective location prepositions (i.e. "in/to" and "from"). The task was adapted from "Connexions, niveau 1" (Mérieux & Loiseau, 2004) which introduced the gender of countries in one exercise and the location prepositions in another. Grammar boxes were located next to each exercise to guide the learners. The lecturer had preloaded the iPads with a slide presentation in PageSend, an interactive whiteboard application. PageSend enables importing document files into the application. The files appear in the application and can be edited and projected live. The lecturer used one iPad to project on the screen and distributed the other four randomly. The learners could read and write either in the iPads or in their textbooks or both. The main difference was that the exercise in the textbook gave all the information at once whereas the presentation introduced the lesson step by step. Therefore, the learners were guided by the slides into the various sequences: observation, grammar deduction, practice, verification. The learners completed the exercise in their textbook as well as in the iPads. Then, they went to the projecting iPad to write their answers as they were used to on the interactive whiteboard in the computer laboratory. The learners circled indicators of gender and number. Then they added articles and prepositions. Text could either be typed with the keyboard or handwritten. All the learners choose to handwrite their answers using multiple colours. They saved their work in PDF and exported it to their emails. When the lecturer collected the iPads after the lesson, she noticed that the learners had drawn colourful illustration on each slides similarly to when they were first introduced to the interactive whiteboard in the computer laboratory. This implied that they had mastered the application tools. Furthermore the iPads were reported as enhancing the course delivery as the slides presented small chunks of information which guided the students towards mastering complex structures. Being able to follow explanations enhanced the development of the students' self-regulated learning strategies.

Sarah: If compared with the exercise in the book, in iPads we use our finger to write the answer. Also, the exercises are prepared in slides so after we do it we can find out the answers. In comparison, in the textbook there are too many words and exercises on the same page so we find difficult to know what to do. Charles: It creates a more fun environment first and then it attracts us not to use the iPad itself but to use the iPad in purpose of learning a language.

The final task aimed for the learners to interactively practice the weather forecast. For this activity, the lecturer prepared a presentation with the Prezi website and preloaded it in two iPads using the Prezi application. Prezi enables dynamic non-linear presentations where the slides are displayed with an impression of movements. The textbook featured a sample weather map along with a lexical box which the learners could refer to. The lecturer had designed the activity in interactive steps: vocabulary building, reading comprehension, vocabulary practice, live editing, and spontaneous speaking. The initial slides featured icons representing various weather conditions with corresponding weather descriptions. This task

was conceived as a vocabulary building and reading exercise. The learners performed the activity by looking at the projection screen and guessing the weather conditions from the pictures. The learners were in turn asked to read the descriptions while their peers worked on the meaning. The next step required a second iPad along with an Internet access. The projecting iPad invited the second iPad to view and edit the presentation. The lecturer handed the second iPad to the first learner in the first row and explained how each learner would edit the slides. A live demonstration was conducted. Each learner wrote a short weather description. The learners helped each other in groups of two. The projecting iPad received the changes and displayed the edition simultaneously. Therefore, all learners followed the activity on screen and verified their own answers live. Feedback and support were given by peers and by the lecturer who remained either in the vicinity of the iPad or next to the screen in order to answer questions privately or collectively. Live editing raised the students' participation in class activities. The students could work individually or collectively in preparing and submitting their answer which personalised their learning experience. In addition, learning became meaningful from receiving immediate feedback.

Emilia: Just tap and hold then we can edit the words. Raphaela: We can really learn more with this activity.

The final activity for this task scheduled a spontaneous television weather bulletin. The learners had practiced the vocabulary and the structures. They were ready to present the weather forecast. The learners were asked to form two teams in front of the screen. Weather bulletin maps were projected first featuring France then regions of the world. The teams were allocated 2 minutes to look at each map. Then the game consisted in asking the opposite team the weather conditions and the temperature in one city. Anyone in the team could volunteer to give the answer. Support from team members was authorised. The person who volunteered selected the next city for the adverse team. A person could not contribute twice unless all the team members had already presented. The game revised the weather forecast, the numbers, the future tense, the countries and their prepositions. The fact that the learners could select their turn and beneficiate from their peer support contributed to engage the whole class in the activity. The learners were caught in the game and actively practiced all the content from the unit. The levels of enjoyment and participation were high. The activity was meaningful.

Mathilda: It's like a competition. We're excited to play. Katia: It can make us speak and memorize the weather.

Cycle 2: Reflecting On Personalising Engagement with t-MALL

Throughout the unit, the learners practiced all the language skills. They were also introduced to cultural aspects as they discovered a French rock singer, world and French geography in French. They also learnt the importance of the weather forecast in France. Live gaming increased the learners' enjoyment a strong vector of meaningful learning as the students can benchmark their language learning and acquisition processes. Technology and peer learning mediated pedagogy placed the learners at the centre of the language acquisition process. The learners were in charge of their own learning as they could decide on the best way to achieve a task based on their preferences and needs. Observations and interviews revealed their favoured collaborative activities which gave each individual the freedom to choose among learning tools and configuration. They worked as a team while learning individually. They brainstormed together, divided search between group members, compiled their results collectively and discussed their answers. They questioned their responses, verified with their references and called the lecturer for assistance.

Regarding reference tools, the learners found technological support efficient in providing them with immediate and learner-controlled assistance. Interviews highlighted the learners' preferences for lecture classrooms over computer laboratories. Lecture classrooms were more flexible as they could host various learning configuration. The learners also mentioned being more focused in traditional classrooms. The learners admitted that online tools such as Google Search and Google translate facilitated the language learning process by providing instant access to definitions in their own languages such as in Mandarin and Malay. They also explained that they compared their search results with their answers, a strategy which helped them understand grammar structures. However, they argued that the number of iPads was insufficient. They recommended that only two or three learners share an iPad as it would enable everyone to view the screen comfortably. It would also allow them to cover the activities faster and more efficiently, particularly during tasks were the iPads were passed around team members such as listening comprehensions and games. Wi-Fi access was also noted as a necessity in order to bring the full potential of mobile learning.

CONCLUSION

Results showed that the implementation of active learning within a peer, technological and instructor support framework were beneficial in terms of exposure to the target language, motivation and confidence. A meaningful task based approach placed the learners in situations where they could assess their progresses through challenges they could handle in a socio-constructivist perspective. Games were often reported as promoting learning. Technology and peer learning mediated pedagogy placed the learners at the centre of the language acquisition process. The tasks stimulated several cognitive channels with textual, audio, visual and kinaesthetic information processing thus catering to various learning styles. Active learning was viewed as rewarding. Positive statements were recorded from introverted learners as well as from weaker learners. It seems that learning through real practice consolidate learning through contextual acquisition. By involving all cognitive channels, active learning benefits students with various learning styles. Perfectionist learners with a good foundation have the opportunity to work on spontaneity, pronunciation and communicative strategies. Active learning also helped learners acquire structures by facilitating audio-visual recognition and recall. Just-in time and multimedia technological scaffolding was found to support immersive and meaningful task-based learning. Flexible and immediate scaffolding generated flow learning which enhanced the students' perceived enjoyment during the lessons. In addition, the analysis confirmed the relation between task completion and perceived enjoyment as a learning catalyst. As such enjoyment became a contributing factor to the t-MALL engagement model.

References

- Acosta-Tello, E., & Shepherd, C. (2014). Equal access for all learners: Differentiation simplified. *Journal of Innovative Teaching*, 7(1), 51-57.
- Ali AbuSeileek, & Awatif Abualsha'r. (2014). Using peer computer-mediated corrected feedback to support EFL learners' writing. *Language Learning and Technology*, 18(1), 76-95.
- Alvarez, C., Brown, C., & Nussbaum, M. (2011). Comparative study of netbooks and tablet PCs for fostering face-to-face collaborative learning. *Computers in Human Behavior*, 27(2), 834-844. doi: 10.1016/j.chb.2010.11.008
- Arnold, J. (2006). Comment les facteurs affectifs influencent-ils l'apprentissage d'une langue étrangère? [How affect factors influence foreign language learning]. *Ela*, *144*(4), 407-425.
- Barbour, M. K. (2012). Teachers' perceptions of iPads in the classroom. MACUL Journal, 32(4), 25-26.
- Bowman, R. (2011). Rethinking what motivates and inspires students. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 84*(6), 264-269. doi: 10.1080/00098655.2011.592164
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. London, United Kingdom: Sage Publications.
- Churchill, D., Fox, B., & King, M. (2012). Study of affordances of iPads and teacher's private theories. International Journal of Information and Education Technology, 2(3), 251-254. doi: 10.7763/IJIET.2012.V2.122
- Corbin, J., & Strauss, A. L. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: Sage Publications.
- Council of Europe (Ed.). (2001). Common European framework of reference for languages: Learning, teaching, assessment. Cambridge, United Kingdom: Cambridge University Press.
- Creswell, J. W. (2005). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Pearson Education.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.
- Crick, R. D. (2012). Deep engagement as a complex system: Identity, learning power and authentic enquiry In S. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of Research on Student Engagement*. New York, NY: Springer.
- Dhir, A., Gahwaji, N. M., & Nyman, G. (2013). The Role of the iPad in the Hands of the Learner. *Journal of Universal Computer Science*, 19(5), 706-727.
- Diemer, T. T., Fernandez, E., & Streepey, J. W. (2013). Student perceptions of classroom engagement and learning using iPads. *Journal of Teaching and Learning with Technology*, 1(2), 13-25.
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge, United Kingdom: Cambridge University Press.
- Dörnyei, Z. (2003). Attitudes, orientation, and motivations in language learning: Advances in theory, research, and applications. *Language Learning*, 53, 3-32.

- Enriquez, A. G. (2010). Enhancing student performance using tablet computers. *College Teaching*, 58(3), 77-84. doi: 10.1080/87567550903263859
- Friese, S. (2012). Qualitative data analysis with ATLAS.ti. London, United Kingdom: Sage Publications.
- Gabarre, C., Gabarre, S., & Rosseni Din. (2015). Engaging learners with personalised t-MALL: Designing the action plan. *Journal of Personalized Learning*, 1(1), 1-12.
- Gabarre, C., Gabarre, S., & Rosseni Din. (2017). t-MALL integrated model of engagement for student driven learning. In Nor Aziah Alias & Johan Eddy Luaran (Eds.), *Student-Driven Learning Strategies for the 21st Century Classroom* (pp. 239-254). Hershey, PA: IGI Global.
- Gabarre, C., Gabarre, S., Rosseni Din, Parilah Mohd Shah, & Aidah A Karim. (2016). Scaffolding engagement in the immersive t-MALL classroom. *Creative Education*, 7, 349-363. doi: 10.4236/ce.2016.72035
- Gabarre, S., Gabarre, C., Rosseni Din, Parilah Mohd Shah, & Aidah Abdul Karim. (2016). Addressing foreign language learning anxiety with Facebook. *Creative Education*, 7(1), 93-104. doi: 10.4236/ce.2016.71010
- Godwin-Jones, R. (2012). Digital video revisited: Storytelling, conferencing, remixing. Language Learning & Technology, 16(1), 1-9.
- Hew, K. F., & Cheung, W. S. (2010). Possible factors influencing Asian students' degree of participation in peer-facilitated online discussion forums: A case study. *Asia Pacific Journal of Education*, 30(1), 85-104. doi:110.1080/02188790903503619.
- Huang, J.-H., Lin, Y.-R., & Chuang, S.-T. (2007). Elucidating user behavior of mobile learning: A perspective of the extended technology acceptance model. *The Electronic Library*, 25(5), 585-598. doi: 10.1108/02640470710829569
- Jahnke, I., & Kumar, S. (2014). Digital didactical designs: Teachers' integration of iPads for learningcentered processes. *Journal of Digital Learning in Teacher Education*, 30(3), 81-88. doi: 10.1080/21532974.2014.891876
- MacIntyre, P. D., Dörnyei, Z., Clément, R., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545-562. doi: 10.1111/j.1540-4781.1998.tb05543.x
- Mango, O. (2015). Ipad use and student engagement in the classroom. *Turkish Online Journal of Educational Technology*, 14(1), 53-57.
- Mérieux, R., & Loiseau, Y. (2004). Connexions, niveau 1. Paris, France: Editions Didier.
- Meurant, R. C. (2010). iPad tablet computing to foster Korean EFL digital literacy. *International Journal of u-and e-Service, Science and Technology*, *3*(4), 49-62.
- Mills, G. E. (2011). Action research: A guide for the teacher researcher. Upper Saddle River, NJ: Pearson.
- Schmidt, D. A., Baran, E., Thompson, A. D., Mishra, P., Koehler, M. J., & Shin, T. S. (2009). Technological pedagogical content knowledge (TPACK): The development and validation of an assessment instrument for preservice teachers. *Journal of Research on Technology in Education*, 42(2), 123-149.
- Skinner, E. A., & Pitzer, J. R. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of Research* on Student Engagement (pp. 21-44). New York, NY: Springer.
- Tan, E. (2013). Informal learning on YouTube: exploring digital literacy in independent online learning. Learning, Media and Technology, 38(4), 463-477. doi: 10.1080/17439884.2013.783594
- Vygotsky, L. S. (1934/1962). Thought and language. Cambridge, MA: MIT Press.
- Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. Language Learning, 50(2), 203-243.
- Yang, Y.-F. (2010). Students' reflection on online self-correction and peer review to improve writing. Computers & Education, 55(3), 1202-1210. doi: http://dx.doi.org/10.1016/j.compedu.2010.05.017