Chapter 7

Impacts of Using Technology-Enhanced Language Learning in Second Language Academic Writing at a Vietnamese University

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Introduction

With our chapter, we contribute to this book, *Teaching and Learning Innovations in Higher Education*, as we show how we have used Technology-Enhanced Language Learning (TELL) in English academic writing classes at the University of Foreign Languages (UFL), Ho Chi Minh City, in order to motivate Vietnamese university students. The utilisation of TELL for teaching practice is innovative in its own right in a developing country, such as Vietnam, where the use of Information and Communication Technologies (ICT) is limited. The internet, in 1994, was undoubtedly known to only a dozen people in the country (Hoang-Giang, 1999). Since then, there has been slow and limited integration of both ICT and TELL into teaching practice, mainly due to ICT infrastructure shortage, lack of technical support, absence of digital confidence and educators' negative attitudes towards ICT (Peeraer & Van Petegem, 2010). In Vietnam, teachers and students tended not to be adequately trained as to how to integrate the use of digital technologies for effective teaching and learning. As Nguyen and van Rensburg (2016:156) state, the: *"Vietnamese educational philosophy regarding English learning is traditionally associated with memorising and that Vietnamese learners lack English language skills due to ineffective teaching methods"*.

Significant differences exist between different higher education institutions in Vietnam. UFL is one of the most prestigious private universities in the south of Vietnam, offering a wide range of undergraduate and

graduate second language courses such as English, Japanese, Korean, and Chinese. Unlike other universities in Vietnam, that use Vietnamese as a medium of instruction, in UFL, students in all majors from their first year, must participate in courses which are taught in English. Therefore, teaching first-year students English attracts the attention of many educational stakeholders, including the University Academic Board.

Although advancing proficiency in the four core English language skills (writing, reading, speaking and listening) is compulsory, reading and writing are essential for all students at UFL, because most learning resources and materials, reference books and assessments are written in English. Recognising the importance of the reading and writing skills, academic writing classes are specifically made available to the students. However, despite the significant need for academic writing skills in the UFL context, many students dislike the academic writing classes. In comparison with other core skills, the attendance records in the writing classes show that only 70% of students regularly participate in the writing classes; this number is the lowest of the four core skills. In addition, according to an unofficial (internal) survey, although more than 60% of students assume that academic writing is not their priority. Surprisingly, however, most students at UFL tend to gain very high scores in the vocabulary and grammar sections, which are two main factors determining students' academic writing success.

Referring to the learning-centred five-tier model of innovation in higher education (Dobozy & Nygaard, 2021, Chapter 2 in this book), our process innovation – the integration of TELL into academic writing classes – draws on a cognitivist perception of learning. Perceiving learning as a cognitivist, we primarily see our process innovation as a way to increase student motivation in academic writing though utilising TELL. Reading this chapter, you will gain the following three insights:

1. the initial difficulties first-year students encounter in English academic writing at UFL;

2. the practice of using computers and digital devices, and the benefits of integrating TELL into academic writing skills development; and

3. the impact of TELL on the motivation of first-year students in academic writing.

Overview of main sections

This chapter focuses specifically on TELL in second language learning practice, learners' attitude towards TELL, the advantages of TELL in teaching and learning practice (listening, speaking, reading and writing), the role of motivation in second language learning, and the effect of TELL on learning motivation in a South East Asian developing country – Vietnam.

The chapter has three main sections. In Section 1, we review the literature on the use of TELL in language teaching, that has informed our integration of TELL in to academic writing in English in the Vietnamese university. This is followed by Section 2, that outlines how we examined the effectiveness of using TELL in English academic writing classes. In Section 3, we discuss our findings referring back to the three insights above.

Section 1: The background

In general, studies have indicated that students tend to have a positive attitude toward using technology for second language learning, and their positive attitude toward computer-enhanced learning encourages them to approve of learning and teaching strategies, and therefore achieving better results (Teo, 2006). Smith (2011) examined the students' positive or negative response to using TELL as a part of language learning approaches, He concluded that there was a solid relationship between students' attitude towards the type of teaching and learning and their positive attitude toward certain TELL activities. It is crucial to determine students' attitudes towards TELL at different stages of their development. Attitude is regarded as the effective variable in implementing technology in the second language learning process and is a significant factor promoting success in initiative implementation. Ayres (2002) research on students' attitudes toward TELL showed that a significant majority of the students believed that TELL was applicable to their needs, provided beneficial sources of learning information, and a majority thought that TELL should be exploited much more in the language learning contexts. Lasagabaster and Sierra (2003) and Sangeetha (2016) investigated university students' attitude towards the effectiveness of TELL programs, also suggesting

that the students regarded TELL programs as supporting tools in their learning. These researchers also assumed that TELL programs created an enjoyable and relaxed learning environment; learners had a positive attitude toward using TELL.

It has been argued that applying technology in second language learning has proven valuable. Smith (2011) claimed that computers both assist students' language learning and al help develop students' self-study ability, such as information analysis, critical thinking, and problem-solving skills; which have positive impacts on language learning skills. TELL has coined a direct bond with teaching methodology and their mutual relationship, especially by recognising benefits and taking advantage of TELL, which can determine learning success or failure inside the technology-enhanced language classrooms (Joshi, 2010). Levy (2009) defined TELL as the study and application of the computer in language teaching and learning practice (listening, speaking, reading and writing). According to Sangeetha (2016), TELL is not restricted to the area within the classroom setting. Students can learn at home and in class.

The focus of TELL research aimed to discover appropriate methods to use computers in language teaching and learning efficiently. Beatry (2003) suggested that TELL includes any process where a language learner uses a computer and, therefore, improves their language learning outcome. In other words, multimedia files, word processing, simulation or presentation-supported software, electronic guided drill and practice and World Wide Web applications, such as blogs, social networking sites, and e-mail are used for language learning purposes. Computer-based materials include computer courses, learning programs, computer games, SMS, YouTube, recording and translation tools, assessment tools, and software for teaching and learning, while Web-based materials include online teaching and learning materials (Sangeetha, 2016; Serdi-ukov, 2001; Tafazoli et al., 2018; Tsai, 2020). TELL software, online discussion boards and online conference tools such as text chat, white-board, audio, and video, offer opportunities for comprehensible input and output, and meaning negotiation (Chapelle, 2001). A: "TELL activity has processes, products, and actions that can be assessed. . . .in a way that matches the activity objectives and approach" (Sangeetha, 2016:1). Aikyo et al.

for multiple purposes". Yet only at the start of the 21st century, did lecturers at tertiary institutions in Vietnam begin to pay attention to the important advantages of TELL, in teaching and learning practice in assisting language learning activities with different definitions and approaches.

Listening comprehension can improve when the target language is simulated in authentic language contexts. Jones (2002) claimed that, through visual, aural or written input, computers could enhance language learners' listening skills. Jones (2008) argued that the existence of visual and aural material is indispensable to improving listening skills. Moreover, through websites, a great amount of authentic material, readily updated and applicable, could be used for improving language listening skills. Mosquera (2001) concluded that teachers and learners can use authentic listening internet resources for listening, teaching and learning. O'Bryan and Hegelheimer (2007) also claimed that podcasts could be exploited to enable listening instruction and result in positive attitudes of both teachers and learners towards computer-based multimedia. Podcasts, accessed through digital devices, could create more opportunities, sharpen learners' listening skills and encourage them to participate dynamically in the learning process.

TELL materials, well-developed software in discourse genres and topical areas, could increase accuracy and fluency in mechanical aspects of speech (Kataoka, 2000). In a TELL classroom, learners could experience and take risks in simulated conversations without feeling uncomfortable when making mistakes. Many learners can feel more self-confident and comfortable to speak without feeling embarrassed by their pronunciation errors when practising with computers providing visual aids, than in a face-to-face context (Delmonte, 2000). Other: "applications of computer aided language learning in the development of speaking skills include an electronic dictionary, verbal command recognition, the use of speech recognition and analysis for assessment purposes, and the integration of speaking with other language skills" (Hubbard & Siskin, 2004:450). The use of digital technology in second language classrooms creates opportunities which encourage learners' interest, allows discussion and conversation, improves creativity, nurtures a sense of personal confidence, enables learners' collaboration in group or pair work, rein-

TELL can help to increase learners' reading skills by multimodal programs that have embedded text, graphics, sound, video, or animation. Studies of computer-assisted reading instruction reported that students' comprehension and speed have increased significantly (Al Abdel Halim, 2009). According to Nomass (2013), using installed reading passages which are designed and arranged from a simplified 'version' to a complicated one, computers can encourage the learners' interest in reading. Ybarra and Green (2003) suggested that reading-based computer programs enable language learners to increase interaction with texts and improve their reading capacities through paying attention to individual needs. Digital technologies can execute many reading focused learning tasks simultaneously and can check learners' exercises submitted to evaluate learners' progress and recommend the next passage suitable for learner ability. In addition, the internet can enhance learners' second language reading comprehension. Newspapers, magazines, journals, electronic libraries, dictionaries, encyclopaedias and newsletters are also valuable learning resources (Kenworthy, 2004). Exploiting such learning resources can effectively boost reading ability.

The use of digital technology for writing classes includes software programs and word processing-oriented writing processes, supporting students' writing skills development, especially in more challenging tasks such as writing statements, paragraphs, and essays. An early study, Lichtenstein (1996) found an important difference between students who write their essays on computers and students who used paper and pen. Students using a computer in the writing process tended to write for longer periods of time with added detail; their scores were consequently higher than students using pen and paper. Ybarra and Green (2003) found that using computers with graphic-enhanced programs could make the writing more enjoyable, helping learners to express their ideas more clearly. In addition, with typing processors, the spelling and grammar can be checked automatically. TELL provides additional flexibility and caters to more learning styles in language learning compared to traditional styles of teaching (Sangeetha, 2016).

Technology provides learners with: *"automatic detection of grammatical errors, such as spell check among other auto corrections when writing in a foreign*

Technology used in writing classes provided opportunities allowing learners to collaborate at a higher level than before (Hoopingarner, 2009). When language learners used computer-assisted-communication to post target language writing, peer interaction promoted productive skills and encouraged peer correction (Zha, 2006). Writing on blogs or social sites, complemented by peer feedback, can be an interactive format, improving learner's motivation (Vurdien, 2013). Fellner and Apple (2006) implemented blog writing, in a computer assisted language learning program for low-proficiency and low-motivation university language students during a short course, and included computer-based tasks and traditional classroom tasks. Student writing outcomes were significantly different, in terms of both the word count and the proficiency levels in the students' blogs, at the start and at the end of the program.

A cross-cultural writing project, involving second language instructors in Ukraine, Russia and Saudi Arabia and their undergraduate students (Al-Jarf, 2006) found that when writing with computer network support, learners developed their ability to communicate and interact with students from other cultures- through the awareness of local and global cultural issues. Although the interaction between those instructors and students, who belonged to completely different cultures, political, linguistic and educational backgrounds, the students reported that they developed a wider cultural view, as well as their writing skills.

Motivation can be seen to play a crucial role in second language learning. Gardner's classic definition of motivation is a: *"complex of characteristics which may or may not be related to any particular orientation and these characteristics are attitudes toward learning the language, desire to learn the language, and motivational intensity"* (1985:10). He also described motivation as the most independent and influential factor in language learning practice. A motivated learner is always enthusiastic in language learning, eager to participate in any relevant learning activity, and has long term ability to maintain this status. Indeed, Gardner (1985) concluded that learner motivation, or the devoted nature of the motivated learners' participation, play an indispensable role and orientate both formal and informal contexts. Motivation is considered to be a mental process, starting with a need or requirement, leading to behaviours pushing a person towards attempting

this learning, and has a central impact on a learner's behaviour in the learning process (Dornyei, 2011; Erev & Barron, 2005; Barron & Harackiewicz, 2001; Nihan & Hüseyin, 2018; Busse & Walter, 2013); Sangeetha (2016:12) echoes this thus: "TELL improves motivation and develops better attitudes in students towards learning".

Motivation can be divided into two categories, intrinsic and extrinsic (Li & Tsai, 2017). Based on competence and autonomy, intrinsic motivation is where students are engaged with learning materials and it creates inside interest, enjoyment, and satisfaction. A typical example of this kind of motivation is that students enjoy language learning because there is the satisfaction that they felt when new knowledge is acquired or because of the happiness and natural interest involved in the learning process. Extrinsic motivation can help a student achieve goals separate from the activity in and of itself. For instance, a person who wants to master a second language if they believe that bilingualism is a competitive advantage in the labour market or this new language will make their journey or business more enjoyable. Activities: *"can be initiated extrinsically and later be internalised to become intrinsically motivated, or they can begin out of intrinsic interest"* (La Guardia, 2009:100) and be maintained in order to obtain other positive outcomes. Moreover, motivation creates successful second language communicators by letting students feel more confident (Ebata, 2008).

The expansion of TELL has positive impacts on learners' motivation in various aspects. The use of computers and the combination of multimedia, such as soundtrack, graphics or video can promote learners' interaction, and stimulate learning attitudes which influence motivation (Tsou et al., 2002). Hartoyo (2010) found computers to be indispensable, and integrating computers into second language classrooms can be an effective solution for individualising learning. Ayres (2002) showed that learners appreciated and valued the learning involving technology and saw TELL as a vital part of the course and suitable for their needs. Moreover, using pre-writing activities, supported by graphic-enhanced software such as flow-charting tools or search engines, students are motivated to work with pictures, video, audio, and voice recordings to brainstorm ideas on the topic (Castellani & Jeffs, 2001).

context, teachers established an email exchange program between learners in English classes to improve their knowledge and skills in writing and encourage the engagement in learning activities. Based on the data collected from this program, Fedderholdt (2001) found that such electronic mail exchange programs could inspire students in learning writing. Similarly, studies have investigated the effect of a computer supported collaborative learning environment on students' writing performance. In such studies, the experimental group was supported by word processor software, search engines, and internet connections, and the control group used only pen and paper. Many such studies found that the experimental group had substantial gains and were more motivated than the control group (Preacher & Hayes, 2008; Truax, 2017; Teng & Zhang, 2018). This issue of motivation is further explored, along with other variables, in the study which follows.

Section 2: The Study

Sixty first-year students majoring in English language, enrolled in the 10-week period academic writing course at UFL participated in this study. Most of the students were unfamiliar with writing and studying writing skills with the use of digital technologies, especially taking advantage of the features and functions of the software. They were in two separate classes (experimental and control group) and instructed by the same lecturer, following the same basic teaching and learning methodologies, and were using the same prescribed course book. In the experimental group, the students used a digital device of their choice, such as laptops, desktop computers, tablets and smartphones, and were encouraged to use learning software and other applications of their choice, such as the online Cambridge or Oxford Advanced Learner's Dictionary, word processing software (e.g. Microsoft Word and Add-on Grammarly Premium supporting spelling, grammar and word choices), and social media (e.g. Facebook). The students were required to write their paragraphs and essays on their digital devices and to check the language components, by way of fully utilising the spelling and grammar check functions prior to submission.

control group just followed the normal study schedule using only the course book, without assistance of technology-based devices, such as laptops or mobile phones. The mainly urban students in this study were nineteen or twenty years of age, with a 30:70 male to female ratio. Each student (in both classes) completed an anonymous, paper-based questionnaire, using pseudonyms at the beginning and end of the course; the educator was also interviewed at the end of the course. It took students about 30 minutes to complete each questionnaire. Data was collected over 10 weeks (this included the course duration, 30 sessions, 3 times a week) in 2017 as part of the practice to help validation of the outcome. The questionnaires were completed at the beginning (week 1), and the end of the course after the final marks of the students had been released. The final mark was also regarded as important information for this study. The students and educator could respond in either Vietnamese or English. One author is a native Vietnamese speaker and translated questionnaires as needed.

Section 3: The findings

3a: Data analysis

We used a mixed methods approach. The quantitative element incorporated counting and synthesising the students' responses; Nvivo and Microsoft Excel 2010 were used for the synthesis process. The qualitative element included evaluating, comparing, and making implications from the data collected. The data was also coded, categorised and grouped as patterns emerged. In addition, the recorded interview with the educator was transcribed and used as qualitative data. The 20 questions in the questionnaire were generated to collect the data in order to answer the three questions (relevant to the three insights regarding the first-year students at UFL as mentioned earlier in the Introduction).

The first group of questions intentionally confirmed whether the UFL first-year students encountered academic writing as difficult, as well as the levels of difficulty. Around 75% of students studied writing at high school and writing was not new to the majority of them. A similar

a difficult language skill. Nearly half of students stated that a lack of vocabulary was the main reason for their poor writing skills, and just over a third said that a lack of grammar caused writing difficulties. Although there were various other ways (45%), reading books (31%) and learning vocabulary and grammar (24%) were two methods students used for improving their writing performance.

The second group of questions attempted to collect the data for evaluating students' familiarity with using digital technologies in their personal life and language learning. In the Vietnamese educational context, receiving a computer proficiency certificate, evidencing their study is vital, yet most students had not attempted to get a computer proficiency certificate. Over 90% of students use devices such as smartphones, laptops or desktops daily, yet the data collected revealed that only 24% used them for study or educational purposes.

The quantitative questions aimed to examine the benefits of digital technologies on learning English academic writing. The questionnaires were delivered to both the control and experimental groups at the end of the course when the final marks were released. In the UFL context, all students in the Department of Foreign Languages have to write the compulsory final examination in all courses. Slightly under half of control group students agreed that digital technologies can support their learning in general, whereas over 90% in the experimental group confirmed the assistance of digital technologies in language learning. However, there was a noticeable difference in the reasons between the two groups. While experimental group students indicated that their reasons were looking up words, brainstorming for ideas, and writing samples (35%) and using the dictionary (33%); control group students confirmed that using the dictionary (37%) was the main single benefit of an internet connection. Without teachers' instruction in applying the internet for learning, the power of the internet appeared fairly limited to students' learning.

Regarding the students' attitude towards the usefulness of installed software on the digital technologies, over 27% in the control group answered 'Yes', as opposed to 65% in the experimental group. The collected data also revealed that the reasons behind this were noticeably different. While control group students mainly focused on dictionary

and dictionary use (33%). Data input choices and writing options were not even mentioned by the experimental group students. While 81% of the control group students stated that Microsoft Word was the most preferred software, the experimental group students stated that Microsoft Word (22%), the dictionary (20%), and Internet Explorer (22%) were popular. This difference partly demonstrated the potential of using software for writing with teachers' facilitating and teaching the writing process.

The students' final mark at the end of the writing course was considered as particularly important quantitative data, directly demonstrating the impact of TELL on the process of English teaching and learning at UFL. According to the collected data, the average Grade Point Average (GPA) of control group students was 6.00, while experimental group students averaged a GPA of 7.04 in the final writing paper test. In detail, it could be seen that in the marking/grading scale, the students who gained 9 (8%), 8 (24%), or 7 (39%) in the experimental group, were higher than those in the control group. In brief, the performance of the students in the experimental group was higher than in the control group.

The final and last group of questions in the questionnaire, collected after the course, was designed to collect data for examining whether TELL had an influence on the students' motivation when studying academic writing skills at UFL. There was a prominent contrast between two groups. While 35% of control group students studied academic writing after class, over 62% of experimental group students spent time improving their writing skills. The main reason for this was completing their assignments (48% in the experimental group and 18% in the control group). The students' interest in academic writing in the experimental group was higher (77%) than in the control group (56%). The experimental group was interested in 'spelling correction' (17%), a popular feature of Microsoft Word.

The data collected stated that over 74% of experimental group students preferred using digital technologies such as desktops or laptops for writing activities. Both groups stated that improving their writing skills and obtaining higher marks were the main expectations. The control group asked for 'more interesting' classes, while the students in the experimental group asked for

3b: Discussion of our findings

In this sub-section, we discuss the three insights stated in the Introduction, based on our analyses of the collected data. In so doing, we refer to relevant theories and practice of teaching and learning English academic writing in other educational contexts.

The initial difficulties first-year students encounter in an English academic writing course

The collected quantitative data based on questions 1 – 6 in the questionnaire have provided an overview on the first-year students' main difficulties in an English academic writing course context at UFL. Although there was not a direct question in the questionnaire confirming students' difficulties in academic writing, it seemed noticeable that the first-year students' difficulties in English academic writing correlated with current teaching practices at UFL. It is clear that the effectiveness of English language teaching and learning and the students' outcome in Vietnam General Education (from Grade 6 to 12) did not match.

The data claims a conflict between the practice of teaching and learning English academic writing, and the practice of English teaching and learning writing skills in Vietnam second language education at school level. The problem seems to lie with the learning outcome of UFL first-year English-major students and their GPA in English subjects in high schools. While up to 90% of students received 'distinction' and 'high distinction' grades at high school, they still underestimated their general English language proficiency. This may be surprising when we examine the Vietnam second language education policy. In the Vietnam general education system, students have to study English from Grade 6 (secondary school) to grade 12 (high school) and during this period, they take at least 945 hours of class study during the seven academic years (Ministry of Education and Training, 2007).

Furthermore, nearly 75% of students studied writing in high school, which demonstrated that writing was not a new skill to them. The 'Academic writing: the paragraph' course, was the second writing course taken when students study at UFL. The first writing course mainly

English language teaching and learning in the Vietnam general education system, as well as the UFL context, which results in students' experiencing difficulties in English academic writing. The poor learning outcome at high school and teaching at UFL can be considered as the main causal contributors linked to the students' writing difficulties.

The students encountered various difficulties. Lack of vocabulary, as well as grammar and looking for ideas were three examples of difficulties, which account for over 96%. In productive skills, for example writing and speaking, lack of linguistic components, such as words and grammatical patterns were direct causes resulting in second language learners' obstacles (Smith, 2011). Learners often mentioned these factors when explaining learning barriers that they experienced. However, in the Vietnam English teaching and learning context, these linguistic barriers seem 'unreasonable'. The Vietnam second language education context had a reputation for focusing on the tests of grammar and vocabulary for many years, and since the wave of second language teaching and learning started in 1986, grammar-translation has been the most widely used teaching method in schools from primary schools to tertiary institutions (Quang, 1993).

In brief, the data demonstrated that there was no close relationship between high school teaching, and learning vocabulary and grammar, as well as the improvement of UFL first-year English major students' writing skills in the context. Moreover, in comparison to students' typical difficulties in writing in other learning contexts, UFL first-year students' difficulties seemed different. Discussing the difficulties in academic writing, both Kobayashi and Rinnert (2008) and Elfatah and Ahmed (2016) claimed that various factors impact students' second language writing, such as first language writing ability, second language proficiency, and writing experiences in both languages. Eckstein and Ferris (2017) believe that writers from different first language backgrounds often write differently, depending on how they learn writing styles in their first culture. Many linguistic researchers suggest that second language learners' first language writing capacity is the main element that determines their second language writing performance (Petric & Czarl, 2003; Bamanger & Alhassan, 2015). Obviously, there is a transfer

second language studies. From this perspective, we assumed that the difficulties the students experienced, may partly be from the weakness in their Vietnamese first language teaching and learning. Moreover, when comparing the difficulties experienced by students, with other academic writing difficulties of students in other contexts, we concluded that UFL first-year students were in the low level of learning academic writing skills, both in the terms of linguistic factors (as mentioned earlier), and in understanding the principles, as well as elements necessary for successful academic writing learning.

Studying the problems students encountered in ESL academic writing classes at West East Institute, Al Badi (2015) stated that students encounter several major problems: paraphrasing, referencing, and citation; language coherence, and cohesion; expressing own voice; significant topic and relevant reference. These problems, rather than being linguistic factors, concentrate on culturally determined composition skills of constructing the whole paragraph or essay. While 75% of our students declared that they encountered problems in organising ideas and had insufficient vocabulary for good writing, 80% stated that the main reasons causing these difficulties were a lack of reading and writing practice, and a lack of courses on academic writing skills in their mother tongue.

The UFL first-year students used different methods to improve their writing. Reading books (31%), and learning vocabulary and grammar (24%) were the main methods used. As mentioned above, lack of vocabulary, grammar and ideas were three kinds of difficulties in students' academic writing in this context. The methods that students used seemed (for them) appropriate for their academic writing improvement. However, in comparison with specific methods, that some other students in Yuen and Mussa's (2015:139) research used, *"reading more academic articles, and having more writing practices"*; the methods implemented in UFL context were too general and inadequate. We believe that improvement of any specific language skill requires the direct practice of this skill. For example, progress in writing mainly requires the writing practice; TELL can be used together with the textbook for a much more in-depth learning experience (Sangeetha, 2016). Similarly, with other skills, such as listening, the students could only enhance this receptive skill through

Finally, based on the discussion of the causes and difficulties above, we suggested some contextually innovative solutions for those problems in academic writing that UFL first-year students encounter. The first solution was that the UFL Department of Foreign Languages should implement introductory courses in writing focusing on the improvement of linguistic components, such as vocabulary and grammar, which are highly practical and should support the following course in academic writing. These should also be courses (both in English and Vietnamese) in the principles of academic writing, providing students with an overview on this important skill. Secondly, students' self-study writing should be given more attention – the students needed more post-class writing practice therefore, teachers in charge of these courses should ask students to finish more assignments, observe their progress and offer support when needed. The final practical solution was for the school to create a specific learning resource for multi-level writing skills. This resource should include materials such as books, relevant articles and guidelines, designed to assist writing courses at UFL.

The practice of using digital technologies and digital devices at UFL

Our findings revealed that digital technologies had been popular with students at UFL with over 90% of students using digital devices in their daily lives, and a similar number using computers or other electronic devices for studying at home. This practice was positive, as it was a prerequisite for integrating information technology into classrooms that the (Vietnamese) Ministry of Education and Training (2008) had already launched in 2008. According to an earlier unofficial survey at UFL, over 75% of students originated from urban areas, such as Ho Chi Minh City or central cities in the Mekong Delta provinces. In these areas, more than 50% of citizens had access to the internet, and 90% of the population used digital devices in their daily lives. This practice indirectly brought advantages for education in general, and second language teaching and learning in particular.

However, the findings about students' use of digital technology in general, do not support language learning in general. Although the Vietnam

invaded the Vietnamese market. Despite Vietnam being one of the developing South East Asian countries that experienced this digital boom, the individual use of digital devices, especially smartphones and computers, has not yet been fully integrated into the education environment.

More than 61% of our students mainly used digital technologies for finding learning materials, and nearly 21% used digital technologies for completing their assignments. The main use of digital technologies by the students, related to the use of an internet search engine, such as Google, a globally used search engine. The responses did not mention the combination of various e-learning tools and learning resources to support their study. This combination was the target for application of information technology in education (Ministry of Education and Training, 2008).

The solution for improving the use of computers and digital devices at UFL lies mainly in innovative lecturer practice, and instruction and learning orientation that include e-learning trends. All UFL lecturers, not only those teaching academic writing courses, should pay more attention to teach students how utilise the benefits of computers and other digital devices. These guidelines need to be included in the UFL teaching syllabi. In addition, the school should provide extra computer-based short courses for all students. The peremptory implementation is necessary in this situation to improve the quality of language teaching and learning in general.

The support for digital technology use in English academic writing for experimental group students (90%) was much higher than for the control group students (48%). The experimental group students studied academic writing in a computer laboratory with internet connection, while their control group counterparts studied writing in a traditional classroom with a white board; with no digital technology use in the formal teaching sessions during the 10-week semester. However, post-class, the use of digital technologies was not observed in either group. As noted in Section 3, 'the students' familiarity with digital technologies' and the data reflecting the percentage of students' 'use at home' (92%), we could not confirm that there was no use of digital technologies at home amongst students in the control group.

After 10 academic weeks, results indicated that students who had

Investigating the reasons behind this comment, we identified some differences. The control group students in the control group paid more attention to the use of dictionary software (21%), and only 17% stated that they use the internet to search for writing related ideas. However, 36% of experimental group students confirmed the use of e-dictionaries; 38 % considered using a search engine as the main factor that promoted the use of digital technologies. The significant contrast in these percentages between the two groups concluded that the integration of digital technologies benefited the students' during their academic writing course at UFL.

According to the data, the students' attitudes to the internet benefited their learning. While around 60% of the control group students believed in the benefits of the internet on their writing, over 74% of experimental group students confirmed this trend. Although our focus was not on the technical aspects of the digital technologies or the use of the installed software during the course, the researchers also aimed to gain an overview of the trend of software usage amongst the students, as well as their preference. The analysed data indicated that around 65% of students, who experienced the digital technology integration in formal learning sessions, recognised that installed software was useful to their study. The combination of these results indirectly indicated that the formal, blended classroom instruction positively influenced students' awareness about the benefits of software usage.

The final discussion in this section reports on the practical effectiveness of computer use on students' writing outcome, through their final mark. The students' average GPA in the control group was 6.00 while, in the experimental group, students averaged 7.04. In addition, the percentage of students' mark in the experimental group was in levels of nine (8%), eight (24%), and seven (39%) and was higher than those of the control group. In summary, the use of digital technologies in classrooms at UFL had a positive impact on students' learning outcome, especially in improving their GPA marks.

through the questionnaires, ample data was collected. The first impact of TELL on students' motivation shows through the percentage of students who actively studied after class. Such findings align with Aikyo et al. (2018:15), who stated that the *"use of technology has shifted the role of the teacher/educator from instructor to facilitator, and the role of the students from passive learners to active learners"*. Locke and Lathem's (1994) goal-setting theory claims that human action is caused by internal and/or external purpose(s) and, based on this theory, we inferred that students' writing after class could be influenced by teachers' demands or their own goal setting.

The percentage of students writing post-class in the experimental group (62%) was much higher than the percentage from the control group (35%). Examining the reasons behind this data, we found that finishing an assignment was the main force in both groups. This data alone cannot help to confirm the impact of digital technologies on motivation. However, through qualitative data collected in the interview session with the teacher, question 3:'Do you often use computers in your classes?', the response was as follows: *"I use computers frequently for my teaching. ... that there is a computer with available software is very convenient for teaching because I do not need to bring my laptop. I just store my stuff on the cloud and open when I come. There will be time for me to ask students to practice writing as well as have opportunities to give more exercise for their home study..."* (sic). From this qualitative data, we concluded that although TELL did not directly affect students' learning motivation, their appearance in the classroom could support teachers' instruction, which indirectly could improve teaching quality. In other words, TELL in the classroom could help the teacher to improve students' extrinsic motivation, which refers to doing something because it leads to a separable outcome (Deci & Ryan, 1985).

Another significant finding was students' preference in writing using digital technologies. Interest in writing is extremely important to the writers in any situation. This interest was considered to be a type of intrinsic motivation, which refers to doing something because it is fundamentally interesting or enjoyable (Deci & Ryan, 1985). With intrinsic motivation, the learners maximise their potential to complete the task. This kind of motivation originates from internal factors, one of them

the collected data, 74% of experimental group students confirmed their interest in academic writing while, compared with 48% in the control group. In addition to this data, the reasons behind the statement of both groups were completely different. The students indicated three factors: easy correction (30%), dictionary (26%), and assistance in searching ideas (22%) whereas, students in the control group offered a simple explanation, which was mainly on the use of the dictionary (53%). From, the combination of this analysis, as well as the theory of motivation mentioned above, we briefly conclude that TELL did impact on students' intrinsic motivation in academic writing.

The last discussion concluded with students' interest in academic writing. The impact of TELL on the students' learning interest in the experimental group (77%) was much higher than of students in the control group (54%). While students in the control group thought that the use of the dictionary (38%) and benefits of tools for searching ideas (32%) were the main causes of their learning interest, the students in the experimental group added 'spelling correction' (17%) as a reason. 'Spelling correction' is a convenient and usable feature in the writing process. It generally promoted writing quality and created a comfortable learning feeling, indirectly improving writers' interest in their work. In brief, to some extent, digital technologies with useful software inside could have motivated second language learners.

Section 4: Moving forward

Any research has its own limitations; our first limitation relates to the methodology. As planned, both qualitative and quantitative methods were used for research data collection via the questionnaires and interview sessions. However, during data analysis, we realised that we had a greater reliance on quantitative data (the questionnaires) rather than qualitative interview data. Although synthesis and analysis of quantitative data may be more convenient and concrete than that of qualitative data (Cohen et al., 2011), this imbalance might have negatively affected our findings. Secondly, another limitation was the number of students- two student groups with 30 students per group. Such small numbers

analysing students' difficulties and suggesting practical solutions. Bearing in mind our findings and limitations, a follow-up study in this area could adopt a mixed methodology, with a qualitative and quantitative method balance to assure validity.

Conclusion

Through our findings, this chapter has shown the significant impact of utilising TELL for enhancing students' motivation in developing their academic writing skills in the Vietnamese higher education context. Referring back to the three insights (outlined in the Introduction), we conclude this chapter by summarising our key findings confirming that "technology is an ever-increasing part of the English language classroom" (Sangeetha, 2016:1).

Firstly, we found that students' difficulties in academic writing at UFL mainly originated from the limitations of second language teaching and learning inherent in the Vietnamese general education system (from middle to high school), as well as the UFL-specific context. In addition, the first-year students' understanding in relation to the principles of academic writing was also limited. However, such lack of understanding can be mitigated by way of organising courses for improving students' linguistic skills, digital literacy and skills, and paying more attention to students' independent learning skills outside classes.

Secondly, we found that, although computers or digital devices were popular amongst the students, their educational use of these devices for was often ineffective. We see a clear need for new courses that designed to effectively develop students' digital literacy and skills training. Such courses would help develop students' academic writing skills more effectively.

Thirdly, we also found the benefits of utilising TELL for developing English academic writing skills, by comparing the two student groups' final marks, and analysing students' questionnaire responses. Some benefits were also found when the internet was used effectively in digitally equipped classrooms. In addition, we found that the role of the educators in a digital classroom was important, because it can determine the success

in learning, in that students can learn at home independently outside the classroom, whilst also ensuring a much more in-depth learning experience when used alongside the course book.

With a specific university context situated in a non-English speaking, developing country – Vietnam, where the use of ICT is limited, we have portrayed the positive impact of TELL on the students' English academic writing skills, enhancing intrinsic and extrinsic motivation to learn and promoting positive attitudes towards learning in students.

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