Exploratory Practice in an Intensive English Language Bridging Course for Foreign Nursing Students: Thinking in English



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Abstract This chapter presents the background and language learning experience in an intensive language program conducted for Asian students offered a scholarship to undertake their training in nursing before they begin their core nursing program in their School of Health Sciences in the institution. With the intensity of such programs, these classrooms are akin to living laboratories, and one can only gain insights and a greater understanding of the processes that the students undergo as they acquire their target language, their strategies, weaknesses and so forth. As the students will ultimately be working in the hospitals and health-related institutions, there is an urgency that the students' language learning experience is effective. This chapter proposes that students could work on a fifth skill, i.e. thinking in English, as they draw on the four skills in language acquisition, that is, listening, speaking, reading and writing. The chapter also covers the basic structure of the program in this class which immerses students in their target language where the four skills are integrated in a content-appropriate instruction. Data to date is drawn from an analysis of students' writing, observation of students in class and excerpts of their sharing of their personal experience with the language learning experience. Research here explores what is meant by thinking skills.

1 Introduction

In her article, 'Current Perspectives on Teaching the Four Skills', Hinkel (2006) discusses one development in the teaching of a second language (L2), that is, 'integrated and multiskill instruction' (110) which embraces the communicative approach but places a greater emphasis on the integrated instruction of what has traditionally been taught as discrete skills, such as L2 foundational skills, i.e. listening, speaking,

reading and writing (113–126).¹ However, this approach has to meet certain challenges such as improving accuracy in language production despite fluent communication (Hinkel, 2006, 2010). The issues of integrated instruction and its challenges resonate with the experiences of learners in a classroom conducted for Asian students offered a scholarship to pursue a nursing program. Lessons in this class had evolved over time into one that integrated instruction of L2 skills through the use of more content appropriate materials. This chapter explores if learners could harness a fifth skill, i.e. **thinking in English**, to facilitate language acquisition. It will describe the classroom's immersion experience where L2 skills were taught through the medium of content. It will explore what it means **to think in English**. The chapter also presents the research methodology from which data was drawn and a discussion of the findings.

1.1 Background

The English Language Bridging Course (ELBC) in this study is held once a year. It began first as an ESL program for the foreign Asian students who had been offered a scholarship in Singapore to undertake a 3-year Diploma in Health Sciences (Nursing) course at the institution. The objective was to prepare these students for their mainstream core program at the institution. All the students went through the same selection criteria when they were first offered a scholarship.

There are three to five classes each year with a maximum of 20 students in a class. Classes are conducted at the same period of time each year. The course is intensive and a class would run daily for 8 hours (6 days a week) for 14 weeks. These students come more specifically from mainland China, Myanmar, Vietnam and Indonesia, where English is a foreign language rather than a second language. Students attend this program before they begin their core program in the School of Health Sciences at the institution. Thus they move from an environment where English was taught as a foreign language (henceforth referred to as EFL) to a classroom where English is taught as a second language (ESL). Here they are prepared for a transition from an ESL environment to the mainstream core program in the educational system where English is the first language and the language of instruction.

In the ELBC for the nursing scholars, all the classes work with the same course materials and they have the same syllabus. In the course, there is an emphasis on verbal communicative skills as well as interpersonal skills. When the students begin their nursing program, they should be ready for lectures, group discussions, research assignments and class presentations. They are assessed on their assignments, presentations and examinations. Finally, the students begin their first clinical attachment

¹ For a more comprehensive discussion on how the four language skills came to be taught as separate skills, see Hinkel (2010).

8 weeks after they begin their core program where they are assigned to elder care centres and polyclinics. Eventually they will be attached to the hospital which sponsored them. Clinical attachments (between 2 and 4 weeks) take place during their vacation between academic semesters at the institution until they graduate.

1.2 Research Questions

- (a) What is meant by 'thinking in English'? What does thinking in the target language involve?
- (b) How does 'thinking in English' facilitate language learning?
- (c) How is 'thinking in English' reflected in students' communication?

2 The Theoretical Framework of the Study: The Classroom

This study was conducted in only one research-oriented class in the midst of three to five classes in the ELBC program in a year. Research in this class has been ongoing and the course in this class as such moved from an essentially ESL focus using mainly communicative language teaching to the current situation when the study integrated the foundational L2 skills in a content-appropriate environment. Apart from the course materials and common syllabus that all the classes in the ELBC program share, this research-oriented class was conducted first and foremost as an immersion program working with integrated L2 instruction in a content-oriented class. Thus this section will review the core principles of immersion and integrated L2 instruction in a content-appropriate language learning classroom. Finally, the proposed skill in 'thinking in English' will be explored.

2.1 An Immersion Experience

Amidst the multitude of theories in second language (L2) teaching and learning, the first decision in this program for the class was to create an environment where learners would be immersed² in the target language. The term 'immersion' was first used in bilingual education in Canada referring to a situation where the second language was used as a medium of instruction for learners who have the same linguistic and cultural background (Cummins & Swain, 1986, p. 8). Since then, however, the term 'immersion' has led to variations in the program, such as total immersion, partial

² See Genesee (1991, 1994) and Cummins and Swain (1986) for a more comprehensive discussion on immersion issues.

and dual language programs which vary in design and delivery. Found principally in Canada and the United States, these programs also provide education in second languages such as French, Japanese and Chinese immersion (Genesee, 1994; Snow, 2001).

When the immersion programs were first introduced, they introduced considerable changes in an effort to make bilingual education effective. Hence the initial description of the term 'immersion' needs to be revisited when it is used in the teaching of a second and foreign language, such as the context that learners have to have the same linguistic and cultural background. The idea of 'immersion' was appealing and the immersion model appeared in second and foreign language education as well with the principle idea that the second language was used as a medium of instruction in the classroom (Genesee, 1994; Luan & Guo, 2011, p. 152). The success of immersion programs was contagious as students in the immersion programs were known to be more functionally proficient in L2 compared to those students who were receiving L2 instruction in any other form, such as learning L2 as a separate language (Genesee, 1994). However, further intense assessments of the immersion programs also revealed that there were weaknesses in terms of the students' weak linguistic performance because the programs did not focus specifically on language skills, for example.³

Unlike the standard observations made of the drawbacks of the immersion program that language development is disregarded, there was a great effort in the classroom under study to focus on linguistic forms as well. Errors were allowed and corrected along the way. 'Errors in language production are not seen as bad ... the learner is seen as progressing through a series of interlanguage stages toward full target language proficiency' Genesee (1991, p. 185). Errors were highlighted to learners who corrected them and reproduced the written discourse again with the corrections.

According to Genesee (1991, 1994), implicit in the immersion model is the integration of L2 instruction with instruction in academic or other content matter. Research has shown that this is a more effective approach than teaching L2 as a subject on its own or in isolation. Thus L2 is a means to participate in academic discussions, for example, and to achieve academic goals. 'Proficiency in the target language is not seen as a prerequisite to communication or academic development but rather as a co-requisite. It is a means to an end' (Genesee, 1991, p. 185).

In a further example, Luan and Guo (2011) conducted a 1-year study in an institution of higher learning which used the traditional grammar-translation approach that eventually led to L1 being used as the working language in English lessons. The immersion model was applied in an experiment involving 70 EFL learners. Students in the experimental group were found to be highly motivated after the program ended and continued with reading extensively as well as using the English language

³ See extensive literature on form-focused instruction in L2 acquisition, e.g. Doughty, Catherine, and Williams, Jessica (eds) (1998) Focus on Form in Classroom Second Language Acquisition; Ellis, R. (2001) Form-Focused Instruction and Second Language Learning: Language Learning Monograph.

to communicate. They were more confident in their use of the English language and 'the English way of thinking' (155).

2.2 Integrating the Four Language Skills in a Content-Appropriate Class Instruction

The immersion model is often used synonymously with content-based teaching. Prior to the immersion approach, the word 'content' would have referred to the grammatical structures or vocabulary taught in the traditional EFL/ESL classroom, for example, or language learning activities in another language program. In this study, content in the immersion program refers to 'the use of subject matter for second/foreign language teaching purposes' (Snow, 2001, p. 303). This may include topics or themes in an EFL/ESL classroom. In a content-based program in school, math, science or social sciences for example, could be conducted through the medium of an L2 (Crandall & Tucker, 1990, p. 86). Hence the content-based approach is particularly popular in English for Specific Purposes (ESP)⁴ for occupational fields such as the health sciences, business and management studies, where the instructional goal to prepare students for the academic tasks they need is more clearly defined (Snow, 2001, p. 303).

There are several models of content-based instruction,⁵ but this study was conducted in a class using content as a vehicle to teach language. Mets (1999, p. 7 in Snow, 2001, p. 305; Howard, 2006, p. 70) suggests that content-based instruction could also be viewed as a continuum with 'content-driven' courses on one end and 'language driven' courses at the other extreme end with the other models indicating different levels of language and content-driven instruction located along the continuum. In line with the principles of this approach, this course was organised with a core subject matter, i.e. the health sciences. The class used a standard language course book for nurses which proposed 14 themes drawn from the medical field. Prepared as a standard ESL course book, the ESL activities supported the four L2 skills. This ensured that there was a standard framework in terms of medical expressions, specific language structures, vocabulary and issues that all the students in the ELBC had to cover.

The use of the course book took only about 10% of the overall class time in the class under study. Apart from the course book, a principal activity in this class that was content-oriented, for example, was the news presentation. Each learner had to select an article from the newspapers, read, summarise and present it in class. There were two sets of local newspapers, one of which was in simpler English. The articles

⁴See Grabe, W. & Stoller, F.L (1997, p. 17) on the success of content-based instruction in ESP programs. See Johns (1997, pp. 363–366) on the relationship between ESP and content-based instruction.

⁵ See Snow (2001, pp. 305–310, 2010, pp. 294–701) for a more comprehensive review of these models.

were on health/medical issues or the environment. Allowing the learners to select the article was an attempt to give them room to select an article of their interest and their language proficiency. A schedule was drawn up where three learners would present their news every day. Within this time slot, learners could choose their preferred date. The idea behind this was that the learner who needed more time would choose to present at a later date while those who were comparatively more proficient and up to the challenge of completing their assignment sooner could opt to present earlier. Preparation for the news presentation was done as homework to allow learners to work on their own time as much as possible. Reading takes time. This exercise ran throughout the program when the study was conducted.

This course, however, was content-oriented rather than content-based as other activities supporting the four language skills did not draw specifically from the health sciences for content, such as the field trips and the movies. Most of the materials used in the class were authentic and specific to the needs of the learners who were preparing to join the mainstream program in the health sciences. The ultimate goal was to keep a fine balance between acquiring language skills appropriate for their studies and at the same time acquiring communication skills so that they would be functional outside the environment of the school and workplace.

Thus in this study, content in the health sciences and medical issues was accessed and practised through the medium of the four skills as shown in the matrix below. Content provided a substantial platform which offered a meaningful discussion, motivation for learners to want to know more, meaningful vocabulary, relevant grammar and experiences that might be helpful to them in their near future. In the process of engaging with the content, learners exercised the four L2 skills.

In second or foreign language instruction and learning, the teaching of the four L2 skills is the basis on which classroom curriculum, materials, activities and so forth are organised. When this study first began, there was an effort to integrate the instruction and use of the four language skills in language learning so that when there was a focus on one skill, one or two of the other skills were also in use. The teaching of integrated skills is defined as 'the teaching of the language skills of reading, writing, listening and speaking in conjunction with each other as when a lesson involves activities that relate listening and speaking to reading and writing' (*Longman Dictionary of Applied Linguistics*, 1988, p. 44, in Hinkel, 2010). The rationale behind this decision was that it was helpful to begin language instruction and learning with these four language skills which have been identified as foundational in the acquisition of L2 at the basic level, but in the longer term, 'language comprehension and production does not in fact take place in discrete "units" '(Hinkel, 2010). Hence these foundational skills needed to be integrated and not taught indefinitely as discrete skills.

⁶See Hinkel (2010) and Oxford (2001) for further discussion on how the four L2 skills were segregated in the first place.

2.3 Thinking Skills in L2 Teaching and Learning and from the Perspective of Cognitive Psychology and the Educational Sector

Marzano (1991, p. 3) proposes that 'learning involves the construction of meaning' particularly in the initial stages of acquiring information. This resonates with Jones, Tinzmann, Friedman, and Walker's (1987) study that learners construct meaning when they communicate, and it is part of the process of thinking. Vygotsky (1986, p. 7, 212) states that 'real communication requires meaning ... A word without meaning is an empty sound; meaning, therefore, is a criterion of 'word,' an indispensable component'. As the word 'meaning' is a 'phenomenon of thinking' (212), it is inevitable that language teaching and learning will lead learners to 'think' in a matter of time as they are being equipped with the tools to express themselves. However, the L2 language classroom has often stopped short of taking learners the one step further that they need to go to utilise fully the skills that they have been acquiring. Perhaps Hinkel's (2006, p. 110) comment that recent trends show a 'decline in methods' could be revisited, and if the material and classroom experience is made meaningful to the learner, these methods may be revisited.

At the very basic level, as learners acquire their L2, they attempt to articulate their target language, and listen, read and write as discrete skills. Each of these activities needs to be processed as the skill develops. At this point, 'thinking' starts. Thus when a learner is asked a question, such as 'How are you?', the response could be 'Fine'. The act of listening to the question in the target language, and responding in the target language, having listened to the question, requires some form of 'thinking'. The learner's response could also have been considered a learned automatic response that did not require any 'thinking' at the point of response, so this is not 'thinking' but a learned rote response. So when teachers request learners to 'think' in English, it is a request to generate a response in English or to plan a speech or a piece of writing in English. Thinking is a natural cognitive process or we would be machines that have been computed to respond to certain linguistic cues and so our response would have been mindless.

Looking beyond the foundational language skills, educational and cognitive psychology posit that language learning involves cognitive processes such as 'perceiving, reasoning, remembering, understanding, judging, problem solving and inferring ... Learning, producing, comprehending, and remembering language are cognitive processes' (Taylor, 1990, p. 19; Snow, 2001, p. 304). In Benjamin Bloom's well-known hierarchy of thinking skills, most of these cognitive processes just cited are considered lower order thinking skills and some reflect higher order thinking skills. Ideally, in the educational setting, students would move from the lower to the higher order thinking skills as part of their learning process.

⁷Taylor explains the term 'automaticity' as follows: "Rote does not involve analysis and is a quick and easy way to acquire linguistic items. Even patterned and rule-governed items, such as phrases and sentences, may be rote memorized by toddlers" (1990, p. 234).

Higher order thinking skills		
Creating	Making, designing, constructing, planning, producing, inventing	
Evaluating	Checking, hypothesising, experimenting, judging, testing, monitoring	
Analysing	Comparing, organising, outlining, finding, structuring, integrating	
Applying	Implementing, carrying out, using	
Understanding	Comparing, explaining, classifying, exemplifying, summarising	
Remembering	Recognising, listing, describing, identifying, retrieving, naming, finding,	
	defining	
Lower order thi	inking skills	

Table 1 Bloom's revised taxonomy

From Brewster (2009) Thinking Skills for CLIL, Onestopenglish

Kendall et al. (2008, p. 4) identify the thinking and learning skills that 'students should know and be able to do by the time they graduate from high school and what they need to accomplish along the way to meet these goals'. Examples of these skills have been tabulated below (Kendall et al., 2008, p. 2). These skills are comparable to Bloom's hierarchy of cognitive skills listed in Table 1.

In another context, for example, the revised National Curriculum (DfEE, 1999) in England, 'includes thinking skills in its rationale, stating that thinking skills are essential in learning how to learn. The list of thinking skills contains: **information-processing, reasoning, enquiring, creative thinking and evaluating'** (Klimova, 2009, p. 98). Thus in the educational field, thinking is a result of learning processes that have been activated.

The cognitive skills cited in Tables 1 and 2 resonate with the skills learnt in the L2 classroom, '[T]he development of language and content knowledge, practice in using this knowledge and strategy training to promote independent learning' (Snow, 2001, p. 304). As the foundational language skills are taught and used in class, they would naturally enhance the cognitive processes in learning. Learning the foundational language skills is not the goal of the learners. The language skills are tools of communication. If learners would begin to 'think' about the content they are engaged in in their class activities and assignments, they would be encouraged to move into higher order thinking as a natural process of learning.

3 Research Methodology

This research is qualitative as it seems the best way to explore a phenomenon that is as yet difficult to define, and it involves describing or observing a process. Drawing from Allwright's description of an 'exploratory practice', the study arose in the effort to understand language learning and processing in the midst of integrating L2 foundational skills in a content-oriented language learning environment. It did not begin with the intention of a research study on thinking skills per se. Class activities became 'investigative tools', for example, and later data collection emerged from

Cognitive skills	Includes	
Retrieval	Recognising and recalling facts, executing simple procedures	
Comprehension	Integrating information or symbolising relationships	
Analysis	Identifying similarities, classifying, forming generalisations, making predictions, identifying errors	
Knowledge utilisation	Decision making, problem solving, experimenting, investigating	

Table 2 Some levels of cognition required for post-secondary work

Extracted and tabulated from Kendall et al. (2008, p. 2)

the participants' output and the teacher's observations. The participants themselves became 'generators of understanding not just consumers of it' (Allwright, 2000).

Next this is a case study bounded first and foremost by the fact that the study was carried out in one class out of between three and four classes each year in an educational institution over a period of 4 years. This case study created a privileged experience where time and space allowed the participants to be observed closely, and they 'generated' information that contributed to the study (Bromley, 1986, in Merriam, 1998, p. 32). Thus the phenomenon is studied in 'its real-life context ... when the boundaries between phenomenon and context are not clearly evident' (Yin, 1989, in van Lier, 2005, p. 196).

Finally, this case study is phenomenological research as it draws its data from the learners' 'lived experiences' in the intensive language learning program (Cresswell, 2009, p. 13). Themes and patterns emerged from the data, and these are explored and discussed.

3.1 The Site

This study was conducted in only one classroom where research in second language acquisition has been continuous. This analysis/observation is a culmination of teaching in this program over a period of 9 years though the data for this study was only drawn much later from 2013 to 2017. Data was drawn from one class comprising a different group of participants each year over 4 years from 2013, 2014, 2016, and 2017. Data came from different class activities comprising recordings of participants' language learning experience in 2014, journal reflections, post-test essays; observation during class interaction and participants' personal remarks during class conversation/discussion. Observations of participants and their statements made ad hoc during class, an intense environment, provided data which would have otherwise been unavailable. This was a unique opportunity in time and space. Finally stakeholders' feedback was also included in the data display. This is an attempt to triangulate the data collected in terms of the data being collected from different sets of participants over a number of years. Data also came from the observation of the researcher in her interaction with the class and the comments of stakeholders.

The class was learner-centred, and learners were encouraged to take responsibility for their own learning. For example, in their newspaper presentations, each person chose an article that s/he would like to present in class. The weaker learners could choose simpler, more accessible articles while the more proficient learners would select longer, more challenging or more complex articles. In extensive reading, learners picked a novel initially from a library of books ranging from graded readers to full text novels. These books had been preselected to assist learners at varying levels of reading ability. At a later stage when they were ready, they helped themselves to the library at the institution.

3.2 Participants

3.2.1 General Student Profile over 9 Years from 2009 to 2018

The participants in this study came from mainland China, Myanmar, Vietnam and Indonesia. They were between 16 and 24 years of age. They would have completed either high school or the university or were attending the first or second year medical college in their home country. In terms of English proficiency, they were generally classified as being at pre-intermediate level though lately over the last few years, their English language (EL) proficiency when they joined the intensive EL program could range from a more elementary to pre-intermediate level.

3.3 Matrix of the Program in the Classroom in a Week

A cross-section of the program in the classroom is presented in the matrix below. This matrix serves to highlight that the language skills were taught and learnt within the theories of L2 teaching and learning. Building on the 'stepping-stones' of preceding theories, such as natural acquisition vs instruction/form-focused learning, some learners grew at an exponential rate while others struggled initially in the intensive EL environment. New insights surfaced in this pressurised setting of activities and assignments working within L2 teaching and learning theories sharing a common goal that learners communicate in the target language. This matrix highlights that the acquisition of the foundational skills were not achieved through methods alone but were supported by the theories of L2 teaching and learning and the dichotomous nature of some of these theories, e.g. implicit or explicit learning. Hence there was a need to keep a balance between content-based and form-focussed instruction, for example, so that opportunities for learning are enhanced.

Four skills	Methods + course book	Underlying theories	Outcome
Listening	Teacher talk; stories read aloud; news/ project presentation/ class discussion; listening to recording; news; songs; field trips; movie worksheets	 Immersion → create the environment Learner-centred approach Input/output → Comprehensible → Meaningful input 	Distinguishing phonemes; decoding texts; comprehension of words; interact and discuss; listening comprehension → to understand; respond when spoken to/spontaneous response
Speaking	Reading aloud; asking questions after news presentation/research project presentation; practise dialogues from transcripts in coursebook; role play; class discussion + movie worksheets; field trips; surveys/interviews; closing ceremony performance	Intentional focus on output (Swain, 1995) Natural acquisition vs	To be understood/to communicate/clear speech/ coherence/delivery of discourse/ response when spoken to
Reading	Books (abridged → full novels); news articles; research; reading aloud; field trips		Words → in a sentence for its sense; comprehension of extended text; show their understanding, vocabulary; sentence structures; extended texts; variety of structures; figures of speech
Writing	Journals; reflective essays (field trips); expository essays; assignments; reports		spelling, words → sentences → expository texts, narratives → to write an extended text; sentence structures; grammar exercises; paragraphs; coherence; cohesion
Culture	Content/background; idioms, figurative speech		
Time	DIY: building habits/ practice in the long term		

As the program progressed through the day, the learners would be using all the four L2 skills at some point or other. These skills **overlapped** and in fact supported the learners' acquisition of grammar and vocabulary. Time was also set aside for the teaching of selected forms of grammar, sentence structures and so forth. This emphasis was a necessity as learners would need to read their specialist training materials and write academic assignments and research papers.

4 Findings

4.1 The Interrelationship of Skills

Over the history of L2 teaching, the four foundational skills have often been referred to as discrete skills to the extent that they are taught as distinct skills. In the past, some approaches such as the grammar-translation approach or the audio-lingual approach used only one or two of these skills and dispensed with the others. However, these skills overlap in the outcome expected for each specific skill. For example, learners may speak well but they need to be understood. This means the listener needs to understand what has been said to him/her.

An example of this disconnect in the four L2 skills was seen in some EFL learners who first joined the ELBC. They might speak, but they could not understand when they were spoken to. They might write an essay, but they could not understand a piece of text that they read. Reading comprehension was their weakest skill after speaking. So the question of teaching skills as discrete components would have only limitations for the acquisition of the L2. As Nord stated, '...reception should precede production because reception enables production. While it is possible to learn to understand without speaking, it is not possible to learn to speak without understanding' (1981, in Peterson, 2001, p. 88).

In the quiet of reading a text, learners focused completely on words held together by grammar, sentence structures and punctuation in order to access meaning. They needed to work through the idiomatic and figurative language beyond the basic level of reading a simple text as well. Thus while reading for content, learners were exposed to vocabulary, grammar and sentence structures **repeatedly** in order for them to access meaning. The same vocabulary, grammar and sentence structures might reappear in their listening activities and learners might be required to use them when they spoke or wrote on another occasion. In this sense, this chapter proposes that this continued exposure reinforced the learning experience in the target language, not just vocabulary, but in the way information was presented in the sentence structures. Not only did learners broaden their vocabulary and remembered simple sentence structures, they were also exposed to a variety of structures and samples of writing and hence built a repertoire in their writing skills from which they could draw to produce a more varied and enriching text.

Furthermore, access to reading widened their horizon and exposure to issues in their specialised field as well as to world issues. It built up their knowledge base in their specialised field, in the health sciences, for example. Class discussions developed around these issues. As learners were entering an academic institution, they needed to learn to develop higher order thinking.

In the research on literacy development, Jones et al. (1987, p. 10) proposes that there are 'parallel concepts shared by research on reading, writing, listening, and speaking'. In both reading and writing, learners seek 'to construct meaningful messages'. Learners would seek to 'construct meaning from the text' while reading and would be constructing meaningful messages in the process of composing and

writing. Thus the integration of the four skills in language learning each day, intentionally, supported and reinforced learners' acquisition of L2.

4.2 The Common Interface of Skills: Grammar, Sentence Structures and Vocabulary

Though the immersion program in principle places the acquisition of content over language acquisition and focused instruction does not take priority in the program, overlap in the areas of grammar, vocabulary and sentence structures in these foundational skills, for example, serves as repetition which occurs in natural authentic ways. It reinforces the new word, phrase and so forth and exposes the learners to the varying contexts in which they appear. In this sense, they both facilitate the acquisition of grammar, sentence structures and vocabulary apart from form-focused instruction (Fig. 1).

Thus in this study, learners had ample practice at the end of the day. Besides their excitement in achieving communication, e.g. being understood when they gave a presentation and they were able to respond to the questions the class asked, they also found that they needed to work on sentence structures to access the complete meaning or content of what they were listening to or reading about. They also needed these structures to communicate well when they spoke and when they wrote even if they managed to achieve communication in error-ridden discourse. It was on this linguistic platform that they worked through their knowledge of form to enable them to access and express themselves in higher order thinking. Finally, they might not produce a form perfect piece of discourse at this stage, but communication was achieved. They needed more time to allow the formal linguistic structures to settle in the acquisition process.

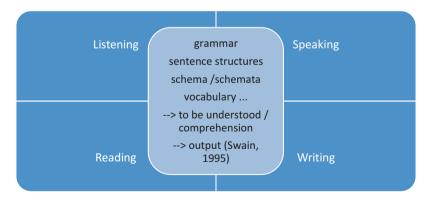


Fig. 1 The four L2 skills interface on grammar, sentence structures and vocabulary

4.3 Thinking in English

In the intense environment in the ELBC classroom, learners listened and spoke not as two discrete skills, but they communicated to acquire information. They read to prepare a presentation of the news and to prepare for questions that they would be asked after the presentation. In another activity, they wrote reflections for example, on a field trip. On these occasions, inevitably, they would be drawing on thinking processes. All these activities moved towards getting learners to speak and write in extended discourse. In the table below are some examples of learners' experience in their engagement with the English language.

4.3.1 Data Display

Data was drawn from a class of between 15 and 20 participants each year. Samples of extracts have been selected from recordings of 13 participants' language learning experience in 2014. The next display consists of observation during class interaction and participants' personal remarks during class conversation/discussion and an extract from a post-test essay. The final display comprises the stakeholders' unofficial feedback.

DD 1: Extracts of transcripts taken from participants' description of their language learning experience in class

Participant	Extracts of transcript of recording
A	I remember the first time I came here, I couldn't listen, I couldn't speak. When my classmates talked to me, I was really surprised, 'What, what are they talking about? Were they speaking English?' I couldn't understand. But now I can. They were speaking English I think the other important point is group discussions . We share our ideas and listen to others . Sometimes we have to argue with others but I think arguments are necessary and also interesting. When we argue with others, we have to speak
	more, we have to explain our ideas clearly to make others understand us. I
	think it is a good choice to practise us. We can't find any situation like this to speak so much
B	I also improved in thinking skills we need to present health news or science news every day. Our news time is totally different from others' news time because it is not just reading the article from the newspaper. We need to think beyond the news . For example, if my topic is 'Why are Singaporeans faced with hearing loss?' This time I cannot just read the article. I need to do research everything about the hearing loss. Because at the end of my news time, there is a Question and Answer session . In this session, everybody needs to ask at least one question and mostly they ask very difficult questions. For example, if I said there is no cure for Alzheimer's disease, sometimes they ask 'Why there is no cure?' Sometimes we cannot answer the question . At this time, Ms T asked us to do more research and then next time we need to get back the answer. So, in this way my thinking skills improved

Participant	Extracts of transcript of recording
С	I would like to share about my reflection journal every day. Every day we write reflection journal but I try to write my reflection journals in a very very good way. I
	try to use higher thinking skills, not only write description but also try to express my feelings and emotions about the field trip, about everything we did

DD 1: Discussion

Participants saw an improvement in their language ability from the time they first began the course and at the end of the course. In their self-assessment, they identified these as their ability to speak more easily and achieve some form of communication and their ability to comprehend others often enough to get excited, to be motivated and to further communicate for an indefinite length of time. Moreover, participants had gained confidence and were highly motivated to move on to their core program where they would be meeting the regular students with whom they needed to interact and work with in group and class discussions and assignments and so forth.

The reference to group discussion where they had to share ideas, listen to others and sometimes 'argue' and put forward their ideas called for interaction that required thought and engagement beyond a simple question and one-word/phrase/sentence answer response. In the class presentation, the speaker needed to be prepared to respond to questions on the subject that she had presented and do further research if she did not have an answer to give. Finally, the thought put into writing a reflective journal to describe and to express feelings requires interaction and a thought process. These engagements reflect Bloom's and Kendall et al.'s thinking skills in Tables 1 and 2 (p. 15 and 16). Participants made an extraordinary effort to express and describe their language learning experiences from having to remember and retrieve content in the target language, understanding/comprehending their audience to analyse how they could respond to their situation and predicament. The complete process was done in the target language.

DD 2: Observations from class activities: conversation, presentation and an extract from an essay in the post-test

Participant	Extracts from conversation, activities and reflective journals in class
D (conversation before class started, in the eighth week)	8–9 weeks into the program (14 weeks): D recounted how she called home and her family couldn't understand her. She was worried that she might lose her L1
E (during a presentation in class)	She stopped her speech mid-sentence to restructure , stopped again, and restructured (3 times)

Participant	Extracts from conversation, activities and reflective journals in class
F (from a post-test)	1. In China when we studied in class, we only listened what teacher say and know how to do exam
post tosy	2 [Teacher] has a very good time arrange ability I remember the start of the class. We also complained with our friends. We met such a crazy teacher. We admire your freedom. But now we do not think like that at all, because we have seen our improvement. We know we cannot arrive here without my teacher, even here is not enough. Now, everytime, we talk about teachers, they always say they want to go to our class because we have realized the importance of English speaking gradually. I know I have not made a big progress. My English is still poor, but I can feel the difference that I do not know where it is. I am getting used to the English environment and I like it. I want to join it. Even now, I still confused in structure when I talk, but I still want to talk. Another thing is my poor
	vocabulary. Not only poor in Medical field but also in daily life. Everytime, I listen to others speaking, how wonderful it is, if I can also speak like this! My life must be more colorful and full of laughing
G (sharing her experiences in her nursing program after the ELBC ended)	She struggled with speaking at the beginning of the program but looked like she was trying hard to listen and understand In one incident where the class celebrated a student's birthday if the day fell during the period of the program, we 'missed' a birthday. When the class tried to make amends a few days later, a classmate commented that we 'had forgotten' the birthday. G replied immediately that we had not forgotten the birthday but there was a misunderstanding! — Observation: I was amazed that she understood the remark and was able to reply spontaneously!

DD 2: Discussion

This observation from a conversation with the participant is one example of an experience that some of the participants go through. Ongoing research in this class-room is on language processing and, in more visible terms, sentence structures. In the first few weeks, many of the participants could not communicate well. Often sentence structures presented one of the most difficult problems to correct. Structures often reveal L1 interference or transfer which appear in their writing when they first arrived. Much of the time involved restructuring sentences to render a text coherent. When Participant D shared that her family could not understand her when she called home, she clarified that she was beginning to speak Burmese using English sentence structures. Hence she was worried that she might forget her L1.

In the particular incident cited, Participant E was stopping short and actually reorganising her sentence structure till she felt she got the structure right. This attempt to 'self-correct' (Wigglesworth, 2005, p. 104) showed an engagement with the target language. In this instance the focus was on sentence structure. This was not an episode where a learner was talking about language per se but was in the midst of communicating her topic but realised that she needed to 'correct' how she was going to say what she was going to say or she would not be understood.

Participant F was one of 20 participants. She wrote an essay for the post-test which finally provided the data for this study. Her experience was similar to the first three participants, A, B and C, reflecting a positive language learning experience. She was highly motivated, even exuberant, and confident even if her discourse was error-ridden. There was an awareness of errors in her written discourse, but she was able to communicate how she felt.

In another instance, participant G's spontaneous response displayed language development after the initial period where she showed little improvement in her listening and speaking skills. The spontaneous response was in context to the situation. She heard, understood and responded in context. The answer could not be attributed to an automatic response because the speaker had to understand what was being said to her.

These are just three examples showing that participants in class engaged with language in what would be considered as a 'language-related episode' (Wigglesworth, 2005, p. 104). The immersion program generated an environment where participants received input in the target language, described in this study, which would also lead them to reflect and take 'notice' of the language that was serving as a vehicle to understand content. There was ample opportunity for interaction and output where 'language mediates cognitive development as well as reflects the processes taking place' (Wigglesworth, 2005, p. 103).

DD 3: Comments from institutional stakeholders

Commentators	Remarks
The director of the School of Health Sciences in her speech to the foreign students when they first arrived (2013)	Some doctors in the hospitals were surprised that these students asked very good questions!
A lecturer from the School of Health Sciences made an unofficial visit and observed the class (2015)	She said, 'No wonder they asked such questions! I wondered how they knew what I was going to teach, if they had reviewed the lecture notes before they came to class but how could they know what questions to ask? How could they have prepared these questions They started in this class!'
A lecturer's comment in G's class (after the ELBC ended) (2017)	Students in a class for a Health Sciences module had to present in small groups on the subject given to them. The lecturer's comment for the particular group of ELBC students: 'For the last 20 mins I've been listening to the BBC News'

DD 3: Discussion

These comments made were noted as unofficial feedback after the ELBC ended, and they would have referred to the participants of the preceding year. The comment about 'questions asked' implied that the participants could focus on what the speaker

(either the doctor or lecturer) was saying. A lecture and possibly even a doctor's discourse is seldom short so the fact that the participants were able to concentrate on their speech, process what had been said and respond was a good indication of language development. This was positive feedback on how the participants' L2 was helping them in their studies.

The final example is a follow-up on G's experience in her core program. The lecturer could have said that she had not understood a word of what they had been saying or that she was unintelligible. She was encouraged that she could communicate to a wider audience outside her language learning class.

4.3.2 No Translation in Class

Thus in the ELBC class, where participants would have varying language proficiency from a low pre-intermediate to intermediate, they were encouraged to engage in English every day. Whether they spoke in casual conversation or discussion groups or gave presentations, they would need to engage for an extended period of time. This would involve thinking in English. Inevitably, many of these participants would translate from L1 to L2 and vice versa initially. However, they were not encouraged to do so in the longer term to reduce L1 interference. L1 interference here is defined as 'the dynamic phenomena which are elements of the other language which slip into the output of the language being spoken (or written) and hence interfere with it' (Grosjean, 2011, p. 15). Resorting to L1 may help the language learner 'outperform his competence' (Krashen, 1995, p. 27) to solve his/her immediate problem in completing an L2 task because an L1 rule may seem to substitute for an L2 rule and even if it does not make a perfect substitution, communication is still achieved (Krashen, 1995, p. 28). However, this is like playing a game of chance. In this study, those participants who opted initially to translate underwent a period of confusion till they decided that they needed to commit themselves fully to the study of the target language as it was prescribed in the immersion program. This meant only the target language was used all the time during class. Of course, there were the occasional lapses when participants slipped into L1.

L1 interference appeared most often in the participants' construction of sentences. A sentence could be put together in English, but the words and the sense were actually L1. Not only did L1 interference produced incoherence in a participant's sentence construction, but it also slowed down his/her reception and response as s/he translated from L1 to L2 and then L2 to L1. Errors accrued in sentences that could not be translated literally. Encouraging participants to use only L2 would lead them in a matter of time to think in English as they began to develop their spoken and written discourse. Falling back on L1 'may temporarily enhance production, but may not be real progress in the second language. The real cure for "interference" ... is real language acquisition' (Krashen, 1995, p. 29).

4.3.3 Public Perception of 'Thinking in English'

'Thinking in English' has been a term that has appeared increasingly in discussions on public blogs, for example, as some teachers use the term spontaneously and unconsciously with their students while others refute the idea as being 'impossible' when language learners are still at an elementary stage or preliminary stage of learning the second language. Perhaps one difficulty with this idea is where do we begin with the idea of 'thinking'? In an average L2 class, if a teacher encourages learners to 'think in English', it would probably be simply to begin to communicate more often in the target English, to use the target language so that the learners 'think' in the language. At any point when a learner uses the receptive skills, e.g. listening or reading, s/he would need to process the information. When s/he is speaking or writing, the information needs to be thought through before it is produced.

An investigation of public websites revealed some general but insightful comments about thinking in English. Even commercial websites offer attractive headings, such as:

- 'How to Develop Your Ability to THINK in English' (http://englishharmony.com/think-in-english/)
- 'Learn How to Think in English—Espresso English' (https://www.espressoenglish. net/learn-how-to-think-in-english/)
- '3 Ways to Start 'Thinking' in English' (http://www.englishandculture.com/blog/bid/98152/3-Ways-to-Start-Thinking-in-English)
- 'How to THINK in English EASILY!—How to Get Fluent in English Faster' (https://www.youtube.com/watch?v=CIgUDORjwvA)
- 'Quick Tip—Thinking in English' (http://www.ecenglish.com/learnenglish/lessons/quick-tip-thinking-english)

On Blog Posts

- What does it mean 'thinking in English?'
- How can anyone think in English if s/he can't even string a sentence together?
- ... How are they going to think in a language that you don't know? I believe that translation is an unconscious process of the mind, and unless they have a repertoire of utterances in the second language they won't be able to 'think in English'. *Juan Hernandez* (2016)

Comments

'I'm not a native speaker but I think in English. English has just become a part of my life: I wake up listening to CBC Radio, I read Metro News, I use English every day at work, I chat with my friends and my boyfriend in English, I watch English movies, and I even *dream* in English.

Thinking in a foreign language is essential. It *increases fluency* and allows you to connect with people from different cultural backgrounds. You don't necessarily need to move to an English-speaking country like I did but *putting your brain in "English only"* mode will definitely help'. *Alena Khabibullina* (24.9.2016)

'When I started university I started practicing more English than ever on my own. After a while I even dreamt in English. People told me I was speaking in English at night...'. *Merry Barrios* (2015)

'The technique does work though it encounters a lot of psychological resistance simply because few think it's possible to think in another language. The students who do give it a try tend to see improvements in *fluency and spontaneity*—they can react faster because they are not translating every single word'. *Alex Roe, English teacher in Italy (2013)*

'Thinking in a foreign language is an important step in the long road that is *fluency* in a foreign language ... thinking in a new language is a **decision** that you can make, and that you should make from Day 1'. *Lingholic* (accessed 24 September 2016)

'Thinking in English' is almost the next natural stage that learners and teachers would be considering. Though the comments on the public blog posts cannot be considered data, but they resonate with data acquired in the study. Terms such 'fluency and spontaneity' and dreams are associated with 'thinking'. Commercial language schools are maximising the use of this skill as a teaching tool.

4.4 Meaningful Practice

Learners in this ELBC classroom have given feedback that they found their lessons meaningful. They could have struggled when they first began their core nursing program but they were functional in a matter of time. Each year, the 'senior' students would advise the newcomers to the program to do as they were told in this class because everything 'is meaningful' and they would understand when they began the core program. Learners were highly motivated by content that contributed to their longer term goals and helped them acquire the skills that they needed to achieve these goals. Furthermore, they felt more secure that they were learning what they needed to know to prepare them for their choice career. In this sense, English for Specific Purposes (ESP) has much in its favour as compared to the more general English classes.

Research of the past two decades has often called for practice that is meaningful (Ortega, 2007, pp. 183–185; Genesee, 1991, p. 186). According to Ortega, research has shown that meaningfulness is essential in L2 learning and is the 'optimal condition for learning' in the educational sector for example (Ortega, 2007, p. 184). Thus this study would like to reiterate that learners respond most to a meaningful language learning experience and to meaningful content.

However, the L2 language classroom has often stopped short of taking learners the one step further that they need to go to utilise fully the skills that they have been acquiring. Perhaps Hinkel's (2006, p. 110) comment that recent trends show a 'decline in methods' could be revisited, and if the material and classroom experience are made meaningful to the learner, these methods may be refreshing change.

4.5 The Element of Time: Time Management

Though the ELBC was conducted for 14 weeks, this may seem excessive as many L2 and EFL programs do not seem to have the luxury of time. Some programs preparing foreign students for the mainstream program in the university may conduct half a day courses running 5 days a week for 6–12 months, for example. Overall the learners in this study spent a little more than half the time with the researcher. However, they have the benefit of spending time with other teachers of English and so will be exposed to more varied listening and learning experiences. Yet is this enough? As we all know, 'language development takes place over time' (Genesee, 1991, p. 194; Taylor, 1990, p. 323). When the ELBC first began, a huge effort was made to hurry the process of acquisition as often the stakeholders would be saying 'They [the learners] should have achieved this level of competence yesterday!' Research to date has indicated that learners would need at least 6 months to 2 years to achieve communicative competence and 5–7 years to communicate in an academic setting.⁸

Thus taking into account that language development takes time, this class managed the use of time in two ways. Learners used all four skills in integrated instruction every day. In the initial stages, reading took up considerable time and reading is a process that cannot be hurried. So learners would do their intensive and extensive reading as homework where they could work on their own time and at their own pace. Their reading period was also a time to work on vocabulary and eventually on idiomatic expressions and figures of speech.

Next, learners built habits: habits of picking up a newspaper and reading it every day, speaking to their classmates in English, watching a movie in English with subtitles in English (subtitles would be put aside when they were confident), listening to the news in English and any other available listening activity, vocabulary

⁸ In the Army Specialised Training Program (ASTP) in the US conducted during WW2, successful learners were able to achieve competence (even native speaker proficiency) in a year with an average of 25 hours per week (Spolsky, 1995).

building, and so forth. Learners were reminded that they needed to practise every day, that is, they should be speaking, listening, reading or writing in the English language in some way or other. Furthermore, they learnt how they could and needed to help themselves (DIY as in Do It Yourself) when the ELBC ended. These activities were used in the integrated instruction of the four skills and had been particularly selected as they were 'doable' when the learners would have a very tight schedule with the core nursing program at the institution. This would be considered language learning practice in the long term for at least 2 years. This component of building language learning habits was introduced intentionally with the view that language development needed time, and individual learners achieve language proficiency at different rates. Some learners in this study showed a sudden steep learning curve during the period of the ELBC and others took a while. An informal follow-up on some learners 2 or 3 years later showed that they were able to speak fluently and they were able to communicate well, confidently and comfortably.

5 Conclusion

This chapter has attempted to share a language learning experience in an intensive EL bridging program where an immersion environment had been created for the integrated instruction of the four skills in a content-oriented course. This study attempted to explore if language learning can be optimised through the integrated teaching of the four skills in a content-oriented class which would facilitate thinking in English. Thinking in English is a natural consequence in the language learning process but currently, this term seems elusive and vague in the EFL/ESL class. If this skill can be harnessed and the L2 learning experience made meaningful, learners' acquisition of L2 is exponential in terms of speed and time. The activities conducted in the study to integrate the instruction of the four skills in a content appropriate class elicited the thinking process in the participants seen in their ability to understand, respond and act on the information they received in the target language. Thus this study found that the foundational language skills interrelate and they activate the 'thinking' process. If this can be capitalised on, it will facilitate the acquisition of L2. Finally this study proposes that there is an urgent need to reconsider the element of time in language development. Learners need time to acquire L2 so the learning of the five skills, for example, needs to work around the time factor. None of these factors should be dispensed with to fit into a time-tight program.

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