



READING PRACTICES: POSTGRADUATE THAI STUDENT PERCEPTIONS

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Abstract

The importance of reading for academic study cannot be overemphasized. At the postgraduate level, students are faced with complex text interpretation processes. Yet, while concerns have been expressed regarding the English as a second language literacy (Fitzgerald, 1995), few international students have been asked for their views on their learning, specifically their reading approaches. This paper, part of a longitudinal study, using metacognitive and framing theories, explores aspects of framing and metacognition used by a cohort of Thai postgraduate students when reading at an Australian university. Through the use of individual interviews and pair think aloud protocols it was found that there were significant changes in the students' reading practices between first and third semesters. However, it was shown, too, that incongruent background knowledge could lead to misinterpretations. The participants' reflections provided some explanation for the differences in their cognitive and metacognitive strategy use.

Introduction

Effective reading relies on appropriate matching of expectations and skills on the part of students, with the requirements of curriculum and expectations of lecturers and supervisors. Furthermore, the reading process involves complex and multifaceted factors which interact in various combinations at various times as a dynamic, multidimensional process (Brown, 1980; Finkbeiner, 1998). These characteristics of the reading process, of course, apply to all readers, both local and international students. The international students, however, often arrive at Australian universities with diverse cultural, linguistic, religious and educational backgrounds (Ninnes et al., 1999) sometimes far removed from those of their host country. These differing backgrounds may lead to differing expectations and hence differing approaches to their learning and, in particular, their reading. This paper, part of a PhD study focuses on the following research questions:

What are the reading practices of Thai postgraduate students when studying in first semester at an Australian university?

What are the reading practices of Thai postgraduate students when studying in third semester at an Australian university?

How and to what extent do the students' home country and Australian experiences shape their reading practices while studying in Australia?

The data were derived from individual interviews, pair think-aloud protocols and retrospective interviews conducted in the first and third semesters of study of a Thai cohort of students. Four texts were used for the study, two discipline-specific academic texts (chosen by each participant) and two general-interest texts (chosen by the researcher). The participants were asked to read their own discipline-specific text prior to the interview in each semester and were advised that they would be asked questions relating to how they had approached the reading of their article. The general-interest texts for the pair think-aloud protocols were chosen from New Scientist, 'This Week' segment; they were read by pairs of participants who were asked to vocalize their thoughts as they were reading.

Profile of the Thai students

The six Thai participants were chosen for the study because they had only just arrived in Australia to embark on postgraduate study. They had all completed their undergraduate study at Thai universities and the main language they used at home was Thai. These common aspects enabled the researcher to investigate the Thai socio-cultural and educational influences which might impact on their reading practices on first taking up their study and later in third semester at an Australian university. The students came from a range of disciplines: Chemistry, Design, Computer, Public Health, Education, Art, Banking and Finance as it was not possible to find six participants from the same discipline. While not being able to compare the practices of Thai students reading texts from a particular discipline area, the fact that the participants were studying in different fields enabled the researcher to gain insights into the relationships between the differing educational and knowledge backgrounds of the participants and their reading practices. The students are referred to here as A1, A2, A2₂, (a substitute) B1, B2, B2₂ (a substitute), B2₃ (a substitute), C1, C2.

A1, aged 33 and female, as well as completing her studies in Thailand had also been a lecturer at a Thai university. She was enrolled in a PhD in chemistry in Australia. She had a secondary and tertiary background in chemistry. She explained that her reading experience in Thailand latterly consisted of reading textbooks related to teaching as she had had no time for research. The texts she read were in Thai or English.

A2, aged 25 and female, was a Thai Chinese enrolled in a graduate Diploma course in Design. In Thailand she had been a research assistant, a journalist, an assistant teacher in German and Thai languages and secondary school teacher of art. She withdrew from her course after the first pair think-aloud and was replaced by a male (A2₂) who had been a lecturer in computer science in Thailand at a Bangkok College. At the time of his interview, he was enrolled in a PhD in computing. During his last ten years of lecturing in Thailand he reported that he had not written in English and only spoke in English when an English speaking lecturer visited. Like A1 he had done little reading in Thailand due to lack of time. B1, female, was studying for a PhD in computer science; she had been a university lecturer in Thailand. Her experience in Thailand was similar to that of the other students. She said she only read to prepare for classes for her students and there had been no time for research. B2 was also a university lecturer in Thailand and he was enrolled in the Public Health field of study. He withdrew from the university shortly after his first pair think-aloud and was replaced with a postgraduate female student from the education faculty (B2₂) and, for one interview, B2₃, another education student.

C1, aged 30 and male, was a lecturer of art in Thailand. He was enrolled in a Masters in Visual Arts in Australia.

C2, aged 24 and female, was enrolled in a graduate Diploma in Banking and Finance.

Data were also gathered from postgraduate and undergraduate students in Thailand, known here as the Thailand-based cohort. These data helped to explain and better understand Thai

students' experiences and reflections on their reading practices during their first semester of study.

The research was underpinned by a framework incorporating theories of metacognition and framing. Metacognitive theory as such emerged in the 1970s with the work of Flavell who defined metacognition as knowledge which focuses on or regulates any part of cognitive activity. With regard to reading, the study of metacognition – what readers know about themselves, the task of reading, and various reading strategies – has proven to be a fruitful area of investigation (Flavell, 1985; Jimenez et al., 1996). Armbruster et al. (1982) and other researchers discuss reading to learn from a metacognitive perspective as it relates to four specific variables: Knowledge of tasks, Knowledge of text structures, Knowledge of strategies and their applications, and Knowledge of own learner characteristics – knowledge of self. Metacognitive theory enabled the researcher to examine readers' metacognitive processes, their knowledge of, and thinking about, these processes and their selection of processes to aid interpretation.

Framing theory, while not widely used for reading research, has been used in the sociolinguistic research of Tannen (1993). Sociologists of education such as Bernstein (1971) have also used framing theory, as have linguists such as Lakoff and Johnson (1980) and Gumperz (1982a, 1982b). More recently Reid et al. (1998) carried out a study 'Framing Student Literacy', specifically 'Framing Reading' which was shaped by a theory of framing. Framing theory enabled the researcher to identify the types of framing used by readers. For example, the use of extratextual framing highlights the cultural and educational backgrounds which readers invoke to help them interpret text. In addition, framing theory helps identify any mismatches in expectations of readers studying in a different educational setting. Extratextual framing, the focus of this paper along with the metacognitive aspect, Self Knowledge, is when a reader uses his background knowledge and experience to assist in interpreting the text.

First semester reading practices

Extratextual framing/knowledge of self

The six Thai participants, early in first semester, appeared generally aware of their reading abilities and they had assessed them in relation to their expectations of study at an Australian university. They demonstrated an awareness of a mismatch between their reading practices and what they thought was expected of them at an Australian university. For example, they were aware that they had not done enough reading during their undergraduate studies in Thailand to enable them to manage the reading requirements for their graduate and postgraduate studies in Australia with ease. They were also aware that the Australian teaching methods were different from those they had been accustomed to in Thailand.

Influence of Thai educational system

The differences in educational systems which the Thai participants soon realized existed were difficult to discuss with their supervisors or fellow students due to their lack of fluency in their oral English. Coupled with this difficulty was the feeling that one ought not to discuss difficulties, even with texts, with supervisors. As A2 explained:

There is not much interaction [with Thai teachers]; we cannot ask about passage – that is the way of life – respect for teacher; we do not argue; we read for information.

Respect for supervisors was evident in Thailand. There was also considerable awareness of status. The researcher spent some time at a Thai campus and observed that students wore a

uniform, and in first year, white ankle socks for the females, to differentiate them from more senior years. Staff wore a uniform on special occasions with various insignia denoting length of service and status. Such is the status of university staff, they were not required to wear black and white as secondary school staff had to for seven months following the death of the King's mother.

The quote above also highlights a difference in reading expectations. The participants were used to reading for facts in Thailand and so in first semester they were still reading to 'get ideas' rather than to critique or discuss the texts.

So despite being aware of the expectation to critique texts at an Australian university the participants were still reticent in engaging with text to this extent.

The participants mentioned, also, that they would have been pleased to discuss texts with fellow students but several reasons were cited for not doing this: their pronunciation, their practice of translation and their lack of confidence in their oral abilities. A1 explained that she not only translated when taking down notes at lectures but while trying to speak with her supervisor even though she was aware that translating was making her discussions a slow and difficult process:

Translating from Thai into English makes me feel confused about putting words together in the right order.

While using this strategy, though, A1 said she was, at the same time, memorizing technical terms in English, thus demonstrating a partial shift in strategy use to accommodate the learning of new terms.

It was observed also that the Thai-based students seemed to always read quietly out loud when presented with a text pointing to a sound-system of learning. Pronunciation difficulties could disrupt this system of learning. In answer to the question, 'what helps you to improve your reading?', one Thailand-based student responded:

Practise more a [nd] lear[n] more

It was observed, as in the response above, that many students did not pronounce two consonants without inserting another vowel and often missed out the second consonant – hence 'I can't go' and 'I can go' often sound the same. Pronunciation could then lead to difficulties with interpretation of text as well as discussion.

Another difficulty can relate to a supervisor's approach. A2₂ reported that he would not ask his supervisor to assist with the interpretation of a text as 'it would take him a long time to explain'. A2₂ has an Indian supervisor and has encountered the more descriptive literary style of many Indian academics.

C1, the art student, had also noted that staff and authors expressed the same concepts differently; this utterance demonstrates his awareness of multicultural perspectives:

Maybe the people of the world are the same, same ideas, same meaning of beauty, the same meaning of aesthetics but different culture ...

Participating in groups to analyse text could be a useful strategy. However, citing educational and cultural background again as being a reason for not participating in seminars, A2 reported:

The lecturer is the leader and the students are followers. The Western students speak more and some of the mature age students who are older than the lecturer, speak most of all because they believe their experiences are more worthwhile... The oriental students speak little because the talk is too fast and because of the special terms in the text.

While wishing to participate, their inhibitions and cultural expectations that the lecturer should 'lead' were preventing them.

Observations by the researcher on a Thai campus showed, too, that postgraduate students were used to discussing text in class among themselves. Before offering comment on a text, they first consulted with other students in the class. This, it seems, also helped them to frame their response as the difficulty with responding orally was put in the following charming way by one of the Thai-based students:

I don't speaking English but I smile!

The influence of Thai teaching methods was cited as another difficulty when reading. In Thailand, according to B1, notes and overheads were usually prepared to help students understand the concepts. This level of assistance, she had found, was not always provided at an Australian university, possibly because a certain amount of knowledge was assumed and/or students were expected to find information for themselves. A2₂, a lecturer himself in Thailand, demonstrated his awareness of the differing expectations at an Australian university and a Thai university:

*In Thailand, lecturers **give** ideas but now in Australia I have to **get** idea by myself.*

Extratextual framing

The influence of differing cultural experiences

Readers are always able to frame extratextually, using whatever background knowledge and experiences they may possess (Reid et al 1998). Not all background experiences can be drawn on to expedite understandings of new content, however. One of our participants, C2, for example, had to read Australian Law. She could invoke background knowledge of Thai law which is based on British banking law. The regulations, however, she explained, were the major point of difference between Australian and Thai law. The law in Australia, she said, laughing, is used to solve dispute:

Straight to court, different culture.

In Thailand, she explained, because companies wished to avoid sullyng their reputation by going to court, they always tried to negotiate a resolution first.

B1 had no background knowledge to assist with multimedia studies; she only had some background in computing to draw on. As she explained:

If I have to read a book about the engineering, cannot imagine well, you cannot imagine knowledge

This points to the benefits of experiential learning. Asking students to simply read further may not assist in building conceptual knowledge.

Lack of background knowledge, as explained by B1, can also inhibit the reading of additional texts because further reading was too difficult without a strong background in the field.

The participants were able, though, to demonstrate extratextual framing when reading the general-interest text as knowledge and experiences from their life in Thailand could be drawn on. The text discussed how a human parasite could have begun to resist the main drug, Praziquantel, according to British scientists; other researchers and the WHO discounted this claim. A2 related the text to the situation in north east Thailand:

A2: they have this problem in the north east of Thailand and it is a problem of the poor; they do not know about it – they do not know how to treat this parasite – how to prevent it getting into the body.

Going beyond the text and trying to find solutions for their own country, A2 discussed with A1 the role the media could play:

A2: in my opinion, in the case of Thailand or in the case of the undeveloped areas or poor locations, I think it is, umm, media should have a role in this problem because of, every day these people can know about the information from the media ... giving information by the media is the best way – educators must give the results from this problem to this kind of people.

A2 also wished to know further details not explained in the text such as the life cycles of the parasite. She was clearly interested in the topic and was not satisfied with the level of information given in the text or her wish for further information could indicate that she was not aware of the arguments presented in the text.

C1 and C2 could also frame extratextually, using their experiences with snails in Thailand after heavy rainfalls to discuss the dam's contribution to the increased snail population in Senegal.

During first semester the six Thai participants displayed an awareness that their home country reading experiences and background knowledge had not fully prepared them for their graduate and postgraduate studies in the Australian environment. In particular, the participants found that the Thai teaching methods, reading practices, purposes and expectations influenced their reading in a way which was not necessarily appropriate in the Australian university environment. They soon became aware, moreover, that many of the reading strategies they brought with them from Thailand were not effective for the amount and type of reading they had to tackle at the postgraduate level. How a second language is acquired can have a bearing on the level of comprehension; more direct learning leads to less confusion of concepts (Downing, 1973). C1 explained in his retrospective interview how there had been little opportunity to acquire effective reading strategies. Reading to children in Thailand was not a common practice, he said. Children were often asked to read to a grandmother, especially if her eyesight was failing or she was old. He himself, he said, used to read books about plants to his grandmother. Although this practice may have been good in some ways, it did not allow children to acquire effective reading strategies because, he said:

It is very boring for children and then they cannot understand what they read

The Thailand-based students described a range of difficulties they had with reading in English: lack of vocabulary, knowledge of meaning, grammar, structure and lack of time. One poignant comment said it all:

I can reading but I no meanings

The strategy of translation was reflected upon in the retrospective interviews. Because of the large amounts of reading, the difficulty of finding appropriate meanings and the time it took to translate, meant this was no longer a satisfactory strategy. According to O'Malley et al. (1985), as second language proficiency improves, translation declines over time. The participants in this study were indeed already making transitions by trying to read and think in English through taking notes in English when possible, using English/English dictionaries instead of English/Thai dictionaries and asking non Thai speakers for assistance. General knowledge, A1 reported, was derived from reading local Australian newspapers although they were difficult for her to read but they helped her to 'think in English'.

It was found, too, that the participants, apart from A2₂, were still content to read single, simple texts rather than try to compare texts, author views or question the material presented, tasks necessary in postgraduate study.

At this stage in their study, the participants' perception of reading at an Australian university was that it was a solitary activity as opposed to the group consultative method of reading in Thailand, as discussed earlier. B2 described it this way:

No-one going to tell you how to do that; no-one care; you have to do it [the reading] yourself – quite private.

Third semester reading practices

This segment discusses the adaptations and changes in reading practices the Thai participants had made since first semester. This part of the study addressed the following research questions:

What are the reading practices of Thai postgraduate students in third semester at an Australian university?

What are the influences which may have led to changes in their reading practices by third semester at an Australian university?

As in first semester the analysis was based on two sources of data – individual interviews and pair think-alouds. Once again, for the individual interview, each participant chose a discipline-specific text and read it prior to the interview. The analysis was also based on the researcher's observations and students' self reports when reading a general-interest text in a pair think-aloud setting followed by a retrospective interview. The general-interest text was once again taken from New Scientist, 'This Week' segment. Thus, the article was of a similar structure and style to the one used in first semester to enable comparison. It was considered to be of general interest, not too lengthy and incorporated a picture and a table that could be used as an intratextual cue.

Extratextual framing will be discussed before Self Knowledge because the Self Knowledge data includes participants' reflections on their changing reading abilities and practices. Extratextual framing was still used in third semester only to a limited extent, and at times, hindered understanding. Nevertheless, some of the participants demonstrated how they

attempted to use background knowledge to guess vocabulary items, to evaluate texts, to generate inferences and to make moral judgements.

Guessing using background knowledge

The general-interest text used for the pair think-alouds in second semester discussed a public health scandal in France. It was alleged that two former officials at the Central Pharmacy of Hospitals in Paris released doses of growth hormone that had not been treated to inactivate the rogue ‘prion’ thought to cause Creutzfeldt-Jakob disease.

One of the vocabulary items in this text illustrated how background knowledge could confuse. The item was ‘urea’. B1 and B2₂ decided ‘urea’ meant acid and left it at that. A1 thought ‘urea’ was a substance that could be used to test the effect of the hormone rather than as a decontaminant and A2₂ further misinterpreted:

You mean that we got growth hormone from urea?

To add to his confusion, A2₂ recalled a case from Thailand where a doctor cured himself of a disease by ‘drinking the urea from a famous monk’. The recollection of this event led to his confusion over two issues and he asked A1:

This hormone extract from urea or not?

Does it mean that drink urea or not?

Even when A1 and A2₂ read in the last paragraph that experiments showed that urea could not completely remove the CJD agent from the heavily contaminated sample, they were still not sure if a patient had to drink urea to remove the contamination.

A1, on the other hand, did not think ‘urea’ simply meant ‘urine’. Her chemical background informed her that it is a chemical substance that has a specific formula and can be prepared from urine. However, this knowledge was not sufficient to help her determine the usage of urea either.

An interesting point made by A1 was that she could use background knowledge from her undergraduate studies to help her with her academic reading during first semester, but could no longer do so as her topics were now completely new. She explained, referring to her studies in crystallography, why lecturers should not presume knowledge:

This area is, like not popular in Thailand at the moment.

Filling knowledge gaps

Attending lectures can help to fill in knowledge gaps. However, A1 and the others stated that they found it difficult to follow lectures and ‘catch the words’. She spoke of how she felt:

... we are not sure that we learn anything from some classes like ... management, she just talk and talk and talk and we watch each other – ‘you know anything, no!’

Evaluating texts

Despite the struggles to understand texts and acquire more knowledge, there were signs of evaluation of text segments such as the conclusion as well as text content in first semester. In third semester, B2₃, (an education student substitute only for the individual interview) looked at another aspect, cultural differences in the content of texts. She found that the

fundamental cultural differences in material described in her compulsory readings in Australia were unsuitable for her work in Thailand. One text, *The new meaning of education change* discussed management with ‘vision’ drawing on staff initiatives. While, she said, the text was ‘very interesting’, she said she could not apply the concepts to her work in a government office in Thailand because there was no way to survive ‘vision’ in a situation where personnel left every year through retirement, rotation and promotion. Her office, she explained, focused on staff development. This meant, she said:

Giving information to staff, not giving opportunities to initiate change.

Relevancy of text certainly should be considered when designing courses. Another aspect of extratextual framing, besides guessing and evaluating using background knowledge, is inferencing. There were many examples of inferencing in connection with the general-interest text in third semester. In the following example, statements of uncertainty were followed by an inference using the table in the text.

CJD cases linked to growth hormone treatment

France	50
Britain	22
US	15
New Zealand	3
Others	4

New Scientist, 4 (1997).

A1, having confirmed that nearly 50% of the people contracting the disease, CJD, were from France, stated she was confused. She referred to the table, ‘from this table I am not sure I understand clearly – 50 person from France suffer from CJD, then A2₂ inferred a link between the growth hormone and CJD. The extract from the text under discussion is as follows:

France’s health minister, Herve Gaymard, said last week that families of children injected with the suspect batches would be notified. According to the Pasteur Institute, 50 of the 90-plus people worldwide who have contracted CJD from growth hormone are French. But whether the untreated batches released after 14 May 1985 were to blame for any of these cases is unknown, as all the affected children began their treatment before this date.

A1: nearly 50% are France, oh, confused, 50 are France, another 40 are other nations

A2₂: this one according to the ... 50 of the 90 plus people are French so the most of this lot sent to France

A1: more than 50%

A2₂: yes, French people contract so the main problem is in France; is there any record for another country? Yes, it is France, 50, Britain, 22, another is 3, another is 4; CJD is linked to growth hormone treatment so this is...

A1: from this table I am not sure I understand clearly – 50 persons from France suffer from CJD

A2₂: yes

A1: it mean people in France, there are many people got sick, more than other countries

A2₂: yes, so many people, there one, two, three, four, five country, France, Britain, United States, New Zealand and others; total is 94, 50 person who contracted CJD were in France so the main problem is in France

A1: so from this table we think the investigator thinks CJD caused by the growth hormone, I think maybe

So after many statements of uncertainty, an inference is produced based on the evidence presented in the text. There is still some uncertainty, though, shown in A1's final sentence of this dialogue, 'I think maybe'.

In first semester, it was noted, that respect for lecturers' status prevented argument or in-depth analysis of a text. It was also noted how this was transposed to the reading of a text. In semester three all the participants once again displayed their respect for a well-known organization mentioned in the general-interest text, the Pasteur Institute. A1 was concerned, for example, that the Institute was involved with 'something bad'. She questioned, along with A2₂, after looking at the figures for the two countries, why Britain and the USA did not check before using the hormone. A2₂ inferred that doctors probably did not know about the contamination at first and only after occurrences of CJD did they know to check. Also alluding to the prestige of the Pasteur Institute, he judged doctors felt they could trust the product because the Institute was famous.

Making moral judgements

In addition to inferencing and evaluating, moral judgements were made by the participants, based on their own experiences and cultural views. The following dialogue demonstrates how C1 and C2 assisted each other through question and answer, during their pair think-aloud, to make meaning of the first paragraph in the general-interest text, ending with C1 making a moral judgement on the situation. The first paragraph is as follows: France is reeling from another public health scandal that could see senior officials sent to jail. Two former officials at the Central Pharmacy of Hospitals in Paris were last week charged with poisoning. It is alleged that they released doses of growth hormone that had not been treated to inactivate the rogue "prion" protein that is thought to cause Creutzfeldt-Jakob disease.

C2: I don't understand what is the 'prion protein'

C1: is some growth hormone affect the body to affect the prion, the proteins, something like that because this disease very wrong so cause mistake of the doctor so they should be sent to jail

C2: so it mean this kind of hormone is not rightly treated before release to the public and this important to the body of the people?

C1: yea, because growth hormone is, I think, it is a side effect of growth hormone which doctor should care but they don't; they ignorant so it cause this disease

The use of evaluative language, ‘this disease very wrong’ shows that C1 is aware that this is not the normal course of events.

C1 demonstrated, moreover, a strong reaction to the general-interest text when discussing the use of natural growth hormone in the retrospective interview:

I don't think they have right to do something like that

In Thailand, he explained, relatives had to sign for the release of organs for transplanting after the death of a relative. Nevertheless, possibly because he had heard of cases where this had not happened, C1 thought perhaps permission had not been given to extract growth hormone (although this was never even hinted at in the text):

In hospital, they [staff] can go into the room and just extract it [growth hormone] from the dead body; no-one knows, just the officials.

C1 surmised in the retrospective interview that the untreated growth hormone had either been used because the pharmacists ‘do not care about this’ or maybe because of ‘high demand’. She explained the Thai cultural expectation that growth hormone would be in ‘high demand’ because, in Thailand, high demand was created due to the wish of many Thais to be as tall as Europeans. The demand meant the hormone was very expensive. It was suggested during the reading of the first semester text on drug resistance to certain parasites that money may take precedence over safe practices.

It might have been expected that B1 and B2 could have invoked background knowledge as A1, A2, C1 and C2 did. They stated that there was little research done in the field of growth hormone use in Thailand because of lack of funds and, in any case, ‘no-one care to talk about it’. Either Thais would rather not discuss such medical practices, even if they know of them, or there is little interest, as B2 suggested:

Thai people are more interested in politics because they know the politicians.

This illustrates once again the issue of ‘feeling safe’, the wish to only discuss topics they are acquainted with, mentioned by one of the participants in first semester.

It can be seen from these few examples that most of the Thai participants were willing to draw on whatever background knowledge that they had to help them interpret the general-interest text. Through their background knowledge and experiences, they demonstrated that they could generate inferences, evaluate texts and make moral judgements. Although most of the participants had limited specific background knowledge, they showed that, with sufficient interest and motivation, they could still frame extratextually.

Student reflections on their reading practices

Despite the challenges, the participants were experiencing increased confidence which they expressed in a variety of ways. A major influence on the changes in reading practices appears to have been substantially increased self-efficacy. At the same time, increasing self-efficacy was a consequence of the more successful reading practices now being used by the participants. They could all report they were reading faster and with more understanding. Mentioned earlier was the use of lectures for increasing background knowledge. A1 reported that, in contrast to first semester, she could understand ‘more and longer sentences’ although, she said, she still needed a break between sentences to think about the meaning. She might occasionally, she said, still translate overhead transparencies into Thai to assist in acquiring the needed knowledge.

With increased understanding came increased attempts to evaluate text content. Not all the participants, however, felt they had the ability to evaluate an author's work. C2, for example, explained the dual aspects of respect for the author (authority figure) and her own lack of background knowledge:

I don't think I can disagree because I assume the author know; also I don't have basic knowledge about this before.

The participants demonstrated awareness not only of their own increasing abilities, but also of where they lacked efficient strategies. A1, for example, knew she still had difficulties talking with her supervisor because of lack of background knowledge:

I only answer the questions that supervisor ask me; I don't dare to tell, to ask him first or to argue some points, you know.

She explained, too, how the different Thai teaching style also still inhibited her. Her purpose in reading academic texts, she reported, was to gain knowledge of crystallography and, specifically, to find an appropriate method for her own experiments. Her supervisor, however, felt it was important for her 'to read and learn by error'. This approach did not feel 'safe' to A1 and Thai people generally like to feel 'safe', she said.

It may be that being forced to step outside her comfort zone will challenge her further; too much discomfort, on the other hand, could upset her newly-found confidence and be detrimental to her academic progress.

Forming a good relationship with a supervisor was clearly important to the participants. A2₂, showing signs of considerably increased self-efficacy, was not only evaluating text, he was discussing his opinions with his supervisor while maintaining the Thai conventions of respect for authority and harmony. For example, when A2₂ judged that the algorithm mentioned in his current academic text was suitable only for a small problem, he felt able to discuss this with his supervisor. He said he and his supervisor initially may differ in their opinions but, after discussion, would agree.

It could be assumed that the increased self-efficacy was partly a consequence of being able to discuss reading materials and research with supervisors. Even discussion of text with partners, as in the pair think-alouds, helped the participants. As A1 explained, discussion can jolt the memory:

Can get the answer and remind me [of] something.

The main reason, though, for the increased self-efficacy, according to the participants, was a safe, non-threatening study environment.

The emotional level of reading

Another interesting aspect of reading was mentioned by C1. Texts, especially literary texts, can generate strong emotions. C1 increasingly self-aware, realized this dimension of his reading was missing – he could not feel the emotion in an English text as he could with a Thai text:

...when I speak English, it is something like pretending; it is not my word, it is something like unreal but when speaking Thai I can put any emotion...when I read about Picasso work, Picasso's work about the Korean massacre, the queuing group of people, something like that,

I got the feeling of why horrible but when I read in Thai word it mean more strong, the feeling is different.

This is an aspect of reading that requires further investigation for 'feeling the emotion' in a text may lead to greater understanding of a text.

Self-efficacy, part of the Self knowledge component of metacognition (Paris and Winograd 1990), came to the fore through the participants' accounts. Their accounts, moreover, revealed the significance and congruence between self-efficacy and strategy use. Being able to read and understand more had, in turn, led to increased reading. Their increased knowledge of their own abilities and increased understandings had, moreover, led to several other benefits. Several of the participants stated that they now felt able to discuss their research with their supervisors. They stated also that they could write and speak better. There was evidence, too, of attempts to critically evaluate texts.

Extratextual framing, however, as in first semester, was applied more to the general-interest text than to the academic texts. When the participants had background knowledge relevant to a text, as was demonstrated with the general-interest texts, they used strategies they could not use with their academic texts: making analogies, recalling events from their background knowledge and experience, making connections between these events and the text, extending the text by suggesting solutions to problems in their own countries or discussing peripheral issues or future possibilities such as government officials apologizing for past mistakes (with reference to the misuse of some drugs). It is possible that, with some background experience, postgraduate students could more easily and quickly transfer these strategies to their academic reading for improved understanding of the material. As mentioned by one participant, this would be better given in the form of some experiential course (ideally pre-semester) than from just readings, although the increased reading did contribute to better understandings.

A major factor in the increased self efficacy was having an encouraging, supportive supervisor. This is in line with a research study by Kiley (1999) at the postgraduate level that showed that receiving positive feedback on work proved to be 'a crucial factor in students' sense of well-being and self-esteem' (p.218).

The participants also made considerable adjustments to become more self regulated in their learning by the end of first semester. This could relate to their bilingualism (Cook 1992; Jimenez et al., 1996); being able to communicate in two or more languages, may have resulted in enhanced cognitive and metacognitive developments in a relatively short space of time.

One important strategy, translation, especially useful to the participants in first semester was relied on less in third semester but was still required, not only for conceptual understanding but also for discussion of cultural differences. Connected to translation is dictionary use; the responses, from the retrospective interviews, revealed less reliance on English/Thai dictionaries because the participants were aware that often the most appropriate meaning could not be found in a dictionary. This was especially the case with discipline-specific terms. More reading of English texts, discussion with supervisors and Thai friends and sourcing of the Internet were strategies which were gradually taking the place of translation; dictionary use (English/English), was still being used for technical terms and for compound terms such as 'risk exposure' because, they reported, it was easier to memorise in their own language. The process, however, was very slow. They explained that translating from English to Thai and back again required first of all the appropriate meaning of a word, then knowledge of the correct word order in English. Again, as in first semester, they said they could not think in English, as they had learnt English in Thailand through a grammar-based system and could not, therefore, understand the 'deep meaning' of words.

There was little increase in third semester in the use of extratextual framing for academic texts. This was due to participants' lack of experience of their academic disciplines. Despite the encouraging changes which had taken place, the participants stated they were anxious to improve further and would continue to read more to increase understanding, showing their awareness of the need to not only be acquainted with the research in their field but to also be able to make connections between the various research activities.

As expected, the educational and socio-cultural experiences of the Thai cohort impacted on their reading practices. Much of the general knowledge had come from the reading of newspapers in their home country. In addition, the Thai students mentioned their great liking for Japanese cartoons; their knowledge of snails which assisted them with the reading of the general-interest text, came from such cartoons. They liked Japanese cartoons, they said, because 'the writers have sound scientific knowledge'. Also, they said, these cartoons 'make students have imagination' as opposed to American cartoons which, they explained, were 'too fixed', leaving little room for personal projection and construction. Perhaps this is why the Thai students could so readily invoke knowledge read from such cartoons and apply it to their general-interest reading.

The educational system also had an impact. The Thai participants described the step-by-step style of teaching with much support through handouts and translation of English texts into Thai by lecturers. Also, while all the Thai participants had attended English medium universities in their home country, their accounts showed that much of the discussion related to their undergraduate study was in their own languages. The English language, moreover, was seldom taught by a native English speaker and hence the participants used a modern indigenized variety of English. As a result they reported their unfamiliarity with general English vocabulary and with word order in texts. There was a considerable degree of tentativeness displayed by the Thai participants when reading academic text. Being aware of uncertainty, however, can be viewed as part of the self-monitoring process (Otero 1998) and subsequent problem solving and therefore students should not be deemed inadequate because they voice their uncertainties.

The relationship between background knowledge and reading is well known (Carrell 1983b; Otero 1998; Reid et al. 1998). It seemed from the research that supervisors had the expectation that these international students would have relevant academic background knowledge and would have read discipline-specific texts. If students did not have sufficient background, the participants' accounts showed that it was presumed that they could access the library or the Internet to fill the gaps in their knowledge. The results have shown that many students had difficulty accessing information during their first semester. There were several reasons offered by the participants for this situation. Some of the participants, for example, were moving into different fields for which they only had general academic knowledge, perhaps a general science background. Most of the participants came from a background where seeking assistance from a supervisor was frowned upon; at the same time, they had been used to carefully structured lectures with many handouts and hence they had, at the same time as trying to meet their study requirements, to acculturate to a new teaching/learning system which required them to be more self-regulated.

There was, moreover, the additional problem of incongruent background knowledge and the research revealed several instances of misinterpretation due to the cultural background knowledge which did not 'fit'. Students may need to re-conceptualise their knowledge to make it match current contexts. Volet and Ang (1998) indeed suggest that tertiary institutions need to be proactive, too, by designing learning and teaching environments which 'foster students' development of intercultural adaptability' (p.21).

In line with research by Flowerdew (2000) and Reid et al. (1998) with students from non-English speaking backgrounds, the participants in this study seemed to display little reading

criticality in first semester although it is acknowledged that their reading criticality may only differ in nature (Biggs 1996a).

The participants demonstrated determination to improve their reading practices but they still felt many anxieties. C1, in his final comment gave insights into his own, and possibly the other participants' lingering anxieties. He reported he was still 'riding on the tiger's back'. It was dangerous, he explained, to try and stay on the tiger's back and equally dangerous to fall off!

Two major pedagogical inferences can be drawn from the study:

Inaccurate assumptions of students' knowledge and expertise on the part of supervisors and frequent mismatch of expectations of academic reading requirements on the part of the students;

Postgraduate students' reading practices can be adapted or changed to accommodate to their new academic environment through increased metacognitive awareness.

These two inferences lead to three major implications:

Pre-semester support

This could involve a supervisor-guided project. In addition, there could be supervised discussion of texts; this is important as students are often unaware of competing discourses and hence find it difficult to understand that there may be alternative interpretations to a text they are studying (Smith 1999). Through group discussion, students are hence given the opportunity to 'rebuild theories', to share their cultural background knowledge and to make sense of new information (Hacker 1998; Morris and Stewart-Dore 1989).

Curriculum development

More culturally appropriate content or at least familiar content inserted into courses would help international students to develop a greater interest. As Volet (1996) states, the benefits of including an intercultural dimension to the curriculum should not be underestimated as 'it may be one of the most crucial factors of success in the internationalization of higher education' (p.4).

Supervisory role

The research has highlighted the importance for supervisors working with international students to have a good understanding of the teaching systems and socio-cultural backgrounds of the students. The supervisor may have to take on a more supportive role, at least initially until the students have made the transition to a more independent style of learning. This could include sending discipline-related texts to the students before they arrive at university in Australia, discussing readings with students and guiding a critical approach to their readings through helping them identify differences in argument and theoretical positions displayed in other texts, highlighting some of the academic writing conventions to be found in English authored, discipline-related texts, adding home country references to their suggested reading lists, and stimulating group examination and interpretation of a variety of discipline-related texts from differing cultural backgrounds. Specially designed projects, providing experiential learning could also be valuable.

These suggestions may help to enhance the international postgraduate student's learning experience in Australia.

References

- Bernstein, B. (1971) On the classification and framing of educational knowledge. In B. Bernstein, *Class, codes and control (Vol.1): Theoretical studies towards a sociology of language* (pp. 202-230). London: Routledge & Kegan Paul.
- Biggs, J.B. (1996a) Western misconceptions of the Confucian-heritage learning culture. In D.A. Watkins & J.B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 450-68). Hong Kong: CERC & ACER.
- Brown, A.L. (1998) Metacognitive development and reading. In R.J. Spiro, B.C. Bruce and W.F. Brewer (Eds.), *Theoretical issues in reading comprehension* (pp. 453-482). Hillsdale, NJ: Lawrence Erlbaum.
- Cook, V.J. (1992) Evidence for multicompetence. *Language Learning* 42 (4) December, 557-591.
- Downing, J. (Ed.) (1973) *Comparative reading: Cross-national studies of behaviour and processes in reading and writing. Comparisons of reading achievement*. New York: Macmillan.
- Finkbeiner, C. (1998) Language awareness and interest: How they interact in the foreign language reading process. Paper presented at the *Fourth International Conference of the Association for Language Awareness*, Quebec City.
- Fitzgerald, J. (1995). English as-a-second-language learners' cognitive reading processes: A review of research in the United States. *Review of Educational Research*. 65 (2), 145-190.
- Flavel, H.H. (1985) *Cognitive development*. (2nd edition). Englewood Cliffs, NJ: Prentice Hall.
- Flowerdew, J. (2000) Discourse community, legitimate peripheral participation, and the nonnative-English-speaking scholar. *TESOL Quarterly*, 34 (1), 127-150.
- Gumperz, J. (1982a) *Discourse strategies*. Cambridge: Cambridge University Press.
- Gumperz, J. (1982b) *Language and social identity*. Cambridge: Cambridge University Press.
- Hacker, D.J. (1998) Definitions and empirical foundations. In D.J. Hacker, J. Dunlosky & A.C. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 1-24). London: Lawrence Erlbaum.
- Jimenez, R.T., Garcia, G.E. & Pearson, P.D. (1996) The reading strategies of bilingual Latina/O students who are successful English readers: Opportunities and obstacles. *Reading Research Quarterly*. 31 (1), 90-112.

- Kiley, M. (1999) *Expectations and experiences of Indonesian postgraduate students studying in Australia: A longitudinal study*. PhD thesis. University of Adelaide.
- Lakoff, G. & Johnson, M. (1980) *Metaphors we live by*. Chicago, IL: University of Chicago Press.
- Morris, A. & Stewart-Dore, N. (1989) *Learning to learn from text*. North Ryde, NSW: Addison-Wesley.
- Ninnes, P. (1999) Acculturation of international students in higher education: Australia. *Education and Society*. 17(1), 73-101.
- Moag, R. (1982) English as a foreign, second, native, and basal language: A new taxonomy of English-using societies. In J.B. Pride (Ed.), *New Englishes* (pp.11-50). Rowley, Massachusetts: Newbury House Publishers.
- O'Malley, J.M., Chamot, A.U., Stewner-Manzanares, G., Russo, R.P. & Kupper, L. (1985) Learning strategy applications with students of English as a second language. *TESOL Quarterly* 19 (3), 557-584.
- Otero, J. (1998) Influence of knowledge activation and context on comprehension monitoring of science texts. In D.J. Hacker, J. Dunlosky & A.C. Graesser (Eds.), *Metacognition in educational theory and practice*. (pp.145-164). Mahwah, NJ: Lawrence Erlbaum Assocs.
- Paris, S.G. & Winograd, P. (1990) How metacognition can promote academic learning and instruction. In B.F. Jones & L. Idol (Eds.), *Dimensions of thinking and cognitive instruction* (pp. 15-51). Hillsdale, NJ: Lawrence Erlbaum Assocs.
- Reid, I., Kirkpatrick, A. & Mulligan, D. (1998) *Framing student literacy: Cross-cultural aspects of communication skills in Australian university settings*. Perth: Curtin University Press and Centre for Literacy, Culture and Language Pedagogy.
- Smith, D. (1999) Supervising NESB students from Confucian educational cultures. In Y. Ryan & O. Zuber-Skerritt (Eds.) *Supervising postgraduates from non-English speaking backgrounds*. (pp.146-156). Buckingham: The Society for Research into Higher Education & Open University Press.
- Tannen, D. (Ed.) (1993) *Framing in discourse*. Oxford: Oxford University Press.
- Volet, S. & Renshaw, P. (1996) Chinese students at an Australian University: Adaptability and continuity. In D.A. Watkins & J.B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences*. (pp. 2105-220). Hong Kong: CERC & ACER.
- Volet, S. & Ang, G. (1998) Culturally mixed groups on international campuses: An opportunity for inter-cultural learning. *Higher Education Research and Development*, 17 (1), 5-23.

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