

# **Profiles of strategic expertise in second language reading**

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## **Abstract**

This article sets out to report the findings of a think aloud-based study of reading behaviour in second language English. The main aim of the study was to investigate strategic reading behaviour among subjects and use the results to construct profiles of relative expertise in second language reading. Such profiles not only provide valuable information for teaching and learning in their own right, they are also vital in helping to bring to realization tertiary-level educational initiatives to produce independent, life-long learners; initiatives which are likely to fail unless students develop effective strategic reading abilities. The subjects of the study were 60 first year students studying business-related subjects at the Hong Kong Polytechnic University (HKPU). Data were gathered by concurrent think aloud protocol and were recorded and transcribed. NUD\*IST software was used to analyse the data. Evidence from the study indicates that three broad but clearly differentiated reading strategy profiles may be described: the inexpert, the emerging expert and the expert. These are presented and discussed in relation to the literature and transcriptions from the think aloud sessions.

## **Background**

A highly developed set of reading skills enables students to process information efficiently and confidently and thus allows them to access and explore their chosen area of study in depth. In addition to the cognitive demands related to processing subject content, Hong Kong students are presented with the challenge of reading in English, which many are ill-prepared for. To overcome these challenges, it appears that students develop highly pragmatic coping strategies which reduce the reading they do to a minimum (Yang and Lau, 2003). Teachers respond to the challenges by summarizing subject content and presenting it as notes comprehensible for students. Taken together, these responses clearly restrict not only the potential for deep and independent learning of subject content, but also the opportunity to gain valuable exposure to writing in a range of genres and familiarity with the organizational, grammatical and lexical characteristics of such writing (Marton, Watkins and Tang, 1997). Since strategic reading abilities appear to constitute an entirely necessary set of conditions for autonomous learning, the

constraints just outlined frustrate the mission to produce independent, life-long learners.

While proficiency in terms of adequate knowledge of relevant vocabulary and language structures in a text is important for successful second language reading, comprehension of the messages in the text is crucial (but see Yang and Kuo, 2003, for an impressive analysis of the difficulties caused for some second language readers by the demands of lexical processing). Comprehension depends largely on knowledge and appropriate use of strategies that permit the reader to sort out, evaluate, and organize information in a text (Adamson, 1990, 1991, 1992). The term ‘strategy’, then, refers to a set of specific activities used by readers to solve comprehension-related problems.

As a result of ubiquitous English for Academic Purposes courses, university students know a great many reading strategies but appear to apply them in a spasmodic and unsystematic manner; few students it seems become truly strategic readers during their university careers (Allison, 1991; Brown, 1992; Allison and Ip, 1996; Feng and Mokhtari, 1998; Arden-Close, 1999). The expert consensus is that strategic reading is a flexible, adaptable and conscious use of knowledge about reading aimed at removing obstacles to comprehension, including the understanding of authorial viewpoint. Expert strategic second language readers are aware of both potential problems and of strategies that can be used to resolve the problems (Davis, 1993; Li and Munby, 1996).

There appears to be agreement among researchers that comprehension of a text results from a reader’s active attempt to construct meaning from it (Gardner, 1988; Grabe, 1991; Grabe and Stoller, 2001). In this view, reading is not seen solely as a precise application of decoding skills centred on lexical items or sentence structures. Rather, readers are seen to be processing information through schemata, organizing the information in relation to the schemata, predicting outcomes, and finally either confirming and integrating - or rejecting - the new information. Readers, then, do not merely uncover meaning in texts but actively help to construct it (Smith, 1988; Hammadou, 1991).

The main aim of this study was to investigate and profile the second language reading behaviour of a large sample of university students. Clearly, if expert strategic reading behaviour can be identified and investigated, then teachers and students will benefit from studying profiles of such behaviour. Understanding second language reading expertise is also vital in helping to realize tertiary-level educational initiatives to produce independent, life-long

learners; initiatives which are likely to fail unless students develop effective strategic reading abilities.

## **Method**

The subjects of the study were 60 volunteer first year students studying business-related subjects (Business Studies, Management, and Accountancy) at the Hong Kong Polytechnic University (HKPU). The initial pool of volunteers numbered 115. An attempt was made to ensure that a homogenous sample was drawn from the pool of volunteers and that variance was controlled as far as possible. Subjects were selected on the basis of similarity of results in the reading paper of the school-leaving English examination (the Hong Kong Advanced Use of English examination). The sample was exactly balanced in terms of gender and subjects were all native speakers of Cantonese. All subjects were eighteen years of age and had been educated in English-medium secondary schools in Hong Kong. Initial interviews with students indicated that none had or were currently receiving specialist tuition in reading skills development.

Data were collected by concurrent think aloud procedures with individual students over a period of a year. In choosing this procedure, we had in mind its value in providing insights into the behaviour of expert, improving and novice second language readers (Strauss and Corbin, 1990; Kucan and Beck, 1997). It was decided to base the think aloud procedures around a 600-word excerpt from a text on Hong Kong business law that is required reading for all first year business students (Stott, 2001:2-4). It is important to note here that subjects participated in the think aloud procedure before they had read the text as part of the work for their major studies and so the think aloud sessions offered them their first exposure to the text. Since it was the intention of the study to learn as much as possible about the processes subjects use naturally when reading, no specific instructions were given on how the text might be tackled. However, (following Silven and Vauras, 1992; Whitney and Budd, 1996; Oster, 2001) subjects were briefed about the purpose of the study beforehand.

Subjects were asked to choose the language of verbalization that would allow them to feel most comfortable in the think aloud sessions and all chose to speak in Cantonese. Subjects were then given an individual copy of the reading material. A single initial question was used to open the dialogue in all sessions: "Can you tell me what you are doing now?" The sessions, which were all tape-recorded and transcribed into English, averaged 40 minutes.

## Data Analysis

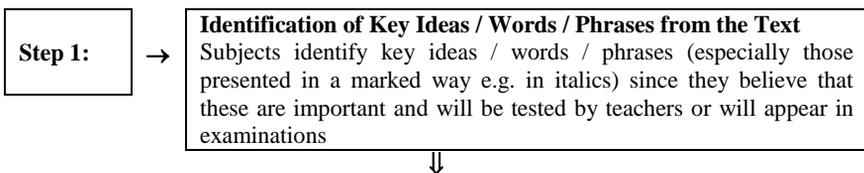
NUD\*IST (Non-numerical Unstructured Data \* Indexing Searching and Theorizing Version N5) software was used for coding and analyzing the data. This is a computer package designed to aid users in handling non-numerical and largely unstructured data. The program offers tools to assist coding, indexing, searching for patterns and theorizing about emerging patterns. Emergent themes were obtained from the think aloud sessions using the categories interpreted from the data. Researchers involved in the study read the transcriptions for possible categories relevant to the study using an agreed-upon, data-driven method of analysis. The data collected were analyzed using ‘open coding’; a process of breaking down, examining, comparing, conceptualizing and categorizing data (Strauss and Corbin, 1990).

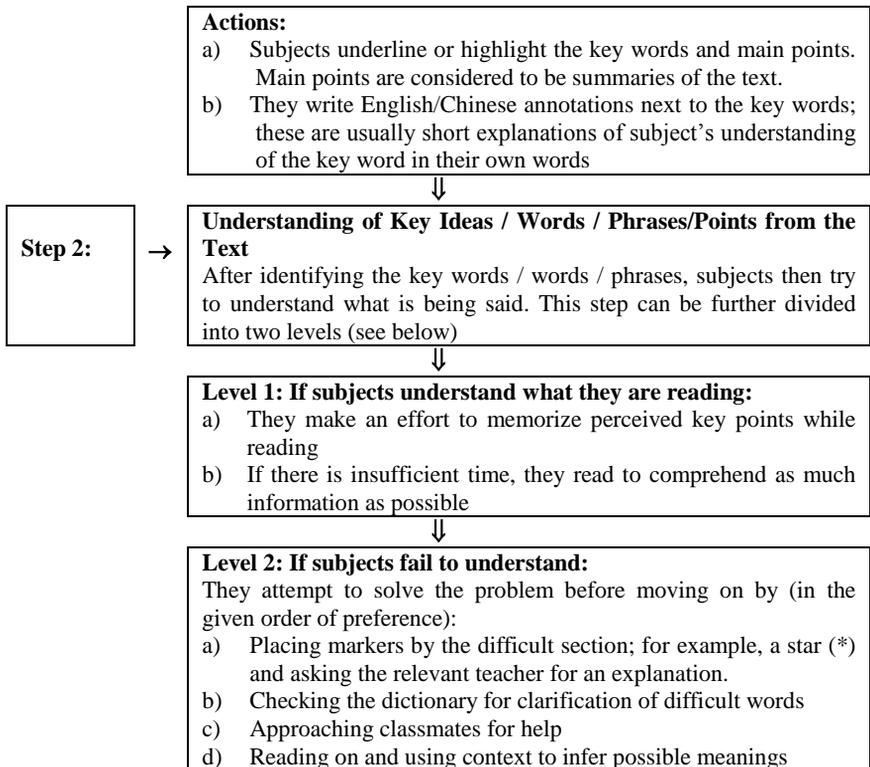
Initially, several conceptual labels emerged from the think aloud protocols. These concepts were then grouped into general reading strategies i.e. grouped according to strategies most frequently mentioned by the students. The groupings were found to be consistent with those established independently by other researchers; for example, the use of background knowledge, translation (from English to Chinese and vice versa), self-questioning, summarisation, prediction, identification of key lexis and so on (Block, 1986; Taillefer and Pugh, 1998; Janzen and Stoller, 1998). The categorized strategies were then arranged according to procedural sequence i.e. the steps involved in the reading process. In general, a relatively high degree of agreement was reached with respect to the types of strategies identified.

## Results from the think aloud sessions

Analysis of the transcriptions of the think aloud sessions suggests that in terms of the reading strategies they adopt, subjects may be classified in broad developmental terms as inexperienced readers, emerging expert readers and expert readers. The three classifications are displayed and discussed below.

### 1. *The inexperienced reader*





The inexpert reader is characterized by the relative simplicity, indeed naiveté, of their approach to reading. There is, initially, a great deal of work done on the surface of the text. This bottom-up labour commences with searching for and flagging in various ways key ideas, words and phrases considered essential to the understanding of the text. There then follows a process of annotating the key terms, usually in Chinese. This extract from the transcribed recording (F = facilitator and S = subject) states the process unambiguously:

F: So what do you do first when you begin to read?

S: It is easier for me to read the passage if I highlight the important points. It helps in my comprehension of the passage. I also like to circle key words, especially if I don't understand them. I can write Chinese characters by the words.

F: What else is going on when you read the passage?

S: I will also remember and memorise what is being said in the passage. At least if the lecturer asks me, then I can tell her what I understood about the passage.

F: So you attempt to understand the concepts and then memorise them?

S: Yes.

There is a concern among this category of reader to understand the main points embodied in each paragraph and the main motivation for this appears to be the possibility of being quizzed on the content by teachers. These concerns inevitably mean that the text is read in a drawn out and fragmented manner. This transcription extract reveals the thinking behind the linear strategy:

F: How do you normally read a whole text?

S: I tend to stop in every paragraph. When I read the first paragraph, I will make sure that I understand it before I move on to the next one. And usually I read and re-read the paragraph again and again. Once I understand, then I will proceed to the next one. I don't like to read the whole passage, and then repeat reading it again. I like to read the passage in parts.

F: What happens if you don't understand something in the process of reading the passage?

S: If I encounter something I don't understand, then I will put a star there and ask the teacher later.

This kind of reading approach is well documented in both the local and international literature, although it has sometimes been revealed through means other than think aloud protocols. Lin (1999), for example, arrives at her findings through a process of observation of student behaviour in reading lessons. Kamhi-Stein (1998), however, in her study of three Spanish-speaking students enrolled on a Health Sciences programme in a college in the USA, used a think aloud approach and the present research largely bears out her findings, especially in terms of the fragmented nature of her linear subjects' reading behaviour and their "word-boundness" i.e. their wish to understand every new item of lexis they encountered. One important difference is that Kamhi-Stein's subjects consulted a dictionary very frequently, whereas all subjects of the present study, irrespective of level of reading expertise, tended to consult a dictionary only as a last resort. The Hong Kong sample discussed here show a more marked preference than other samples reported in the literature to resolve meaning-related problems by consulting teachers. A dependent learning style, then, is evident in the sample's reading behaviour.

The second classification below provides an illustration of what is termed the emerging expert reader. It can be seen that this reader, while applying certain reading strategies is not fully strategic in behaviour. Fully strategic reading, it will be recalled, is the conscious use of a set of integrated and flexible strategies involving overt actions that remove blockages to meaning while reading. The emerging expert readers profiled below, however, manifest certain behaviour shared with inexpert readers: the initial concern

with scanning the surface of the text for key words and phrases, for example. These items are then flagged differentially according to whether they are understood or not. However, emerging expert readers exhibit a greater flexibility than the inexpert type in terms of their willingness to improve recall and understanding by reviewing whole sections of a text in a backwards looping (recursive) manner, as this extract of the transcription shows:

F: What are you doing now?

S: I will spend some time reading through every section, and make sure that I understand them before I move on to the next one.

F: So you make sure that you understand each section before you move on to the next one?

S: Yes. Otherwise, I will have difficulty understanding the rest of the text.

F: And what happens if you don't understand the section?

S: I will read the first sentence of the next section and see whether there is a relationship between the two. And most of the time they are quite related. So I tend to read 1 or 2 sections at the same time, trying to build a loop between the two sections. And it works quite well for me.

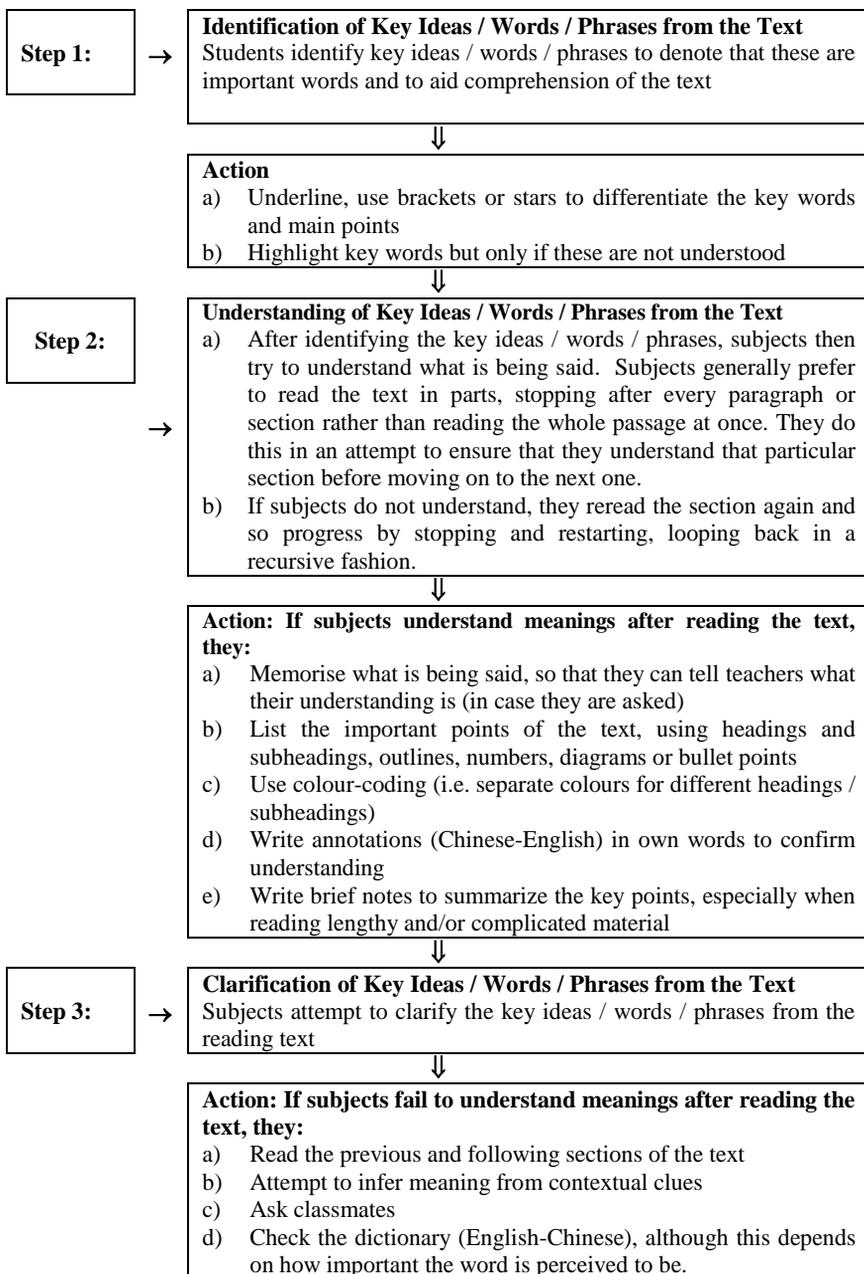
Emerging expert readers show a degree of sophistication in their use of annotations and in organizing the information in the text in ways which assist assimilation; for example, writing notes or using sub-headings. We have already seen that linear readers rarely consult a dictionary but recursive readers manifest less reluctance to do so, although this depends on how important the unknown word is deemed to be. If deemed relatively unimportant, then the students will not devote time and effort to consulting a dictionary:

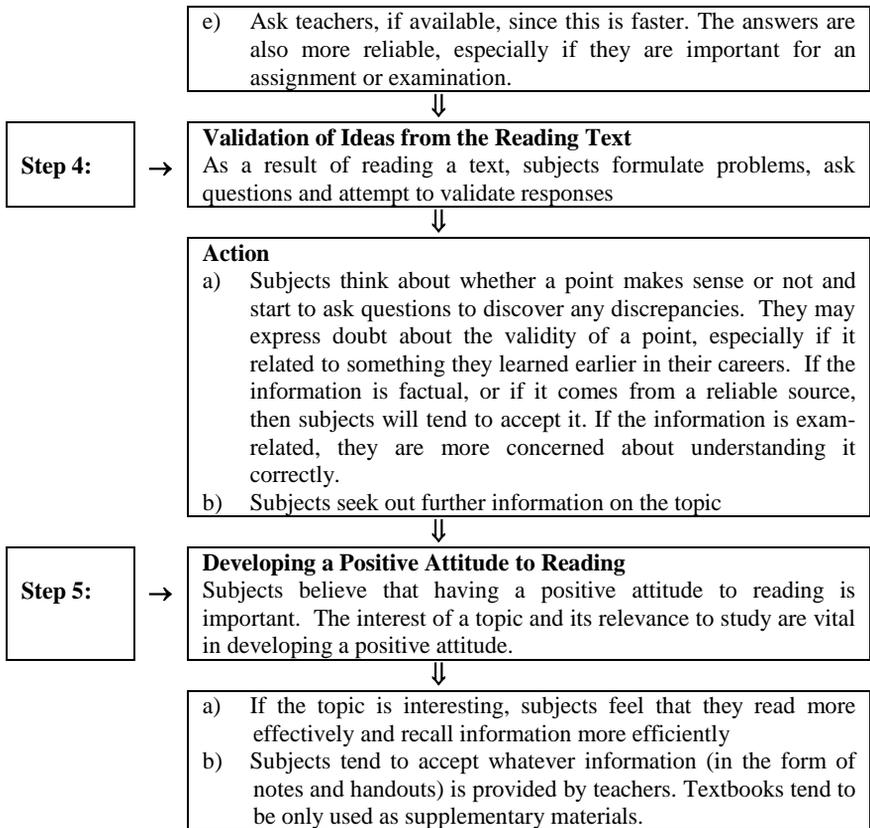
F: What if you encounter something you don't understand?

S: If I don't understand something, I will not immediately check the dictionary or ask my peers or the lecturer. I will do some 'guessing' first. Also, I am trying to understand the whole section and not just the word or vocabulary. So there is no need for me to check the dictionary. I will not check the dictionary unless the word is a key term. But usually I just read the whole passage and get the gist of it, instead of focusing on the terms and vocabulary. That's why I don't check the dictionary much. I will only use it if the terms are very crucial for understanding the whole passage.

It is in Steps 4 and 5, however, that the considerable differences between emerging expert and inexpert readers become most readily apparent.

## 2. The emerging expert reader





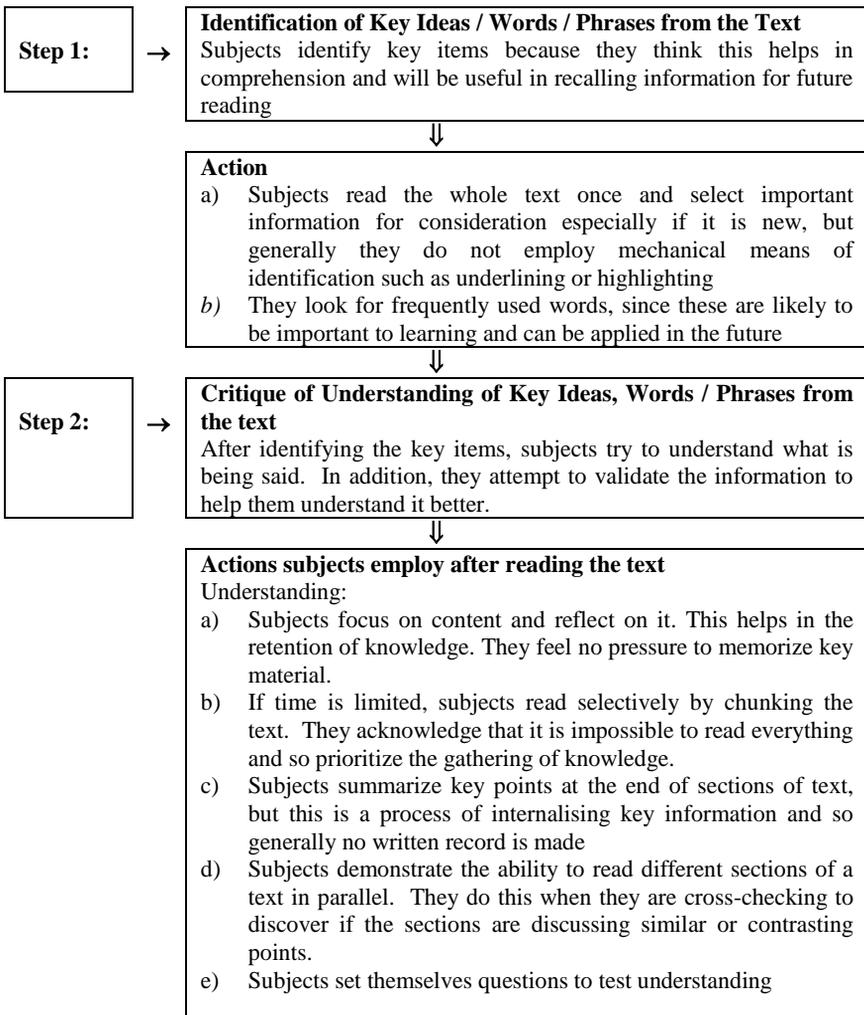
The behaviours described in Steps 4 and 5 reveal that emerging expert readers are in the process of becoming fully strategic in the sense that they engage with the content of texts through a process of critical appraisal. They also show a willingness to seek out other material on the same topic - an action crucial to the development of a deep and autonomous approach to learning. Emerging expert readers, then, are beginning to demonstrate through their reading behaviour an independent learning style, albeit an independence driven by pragmatic concerns to meet teacher expectations and the demands of examinations.

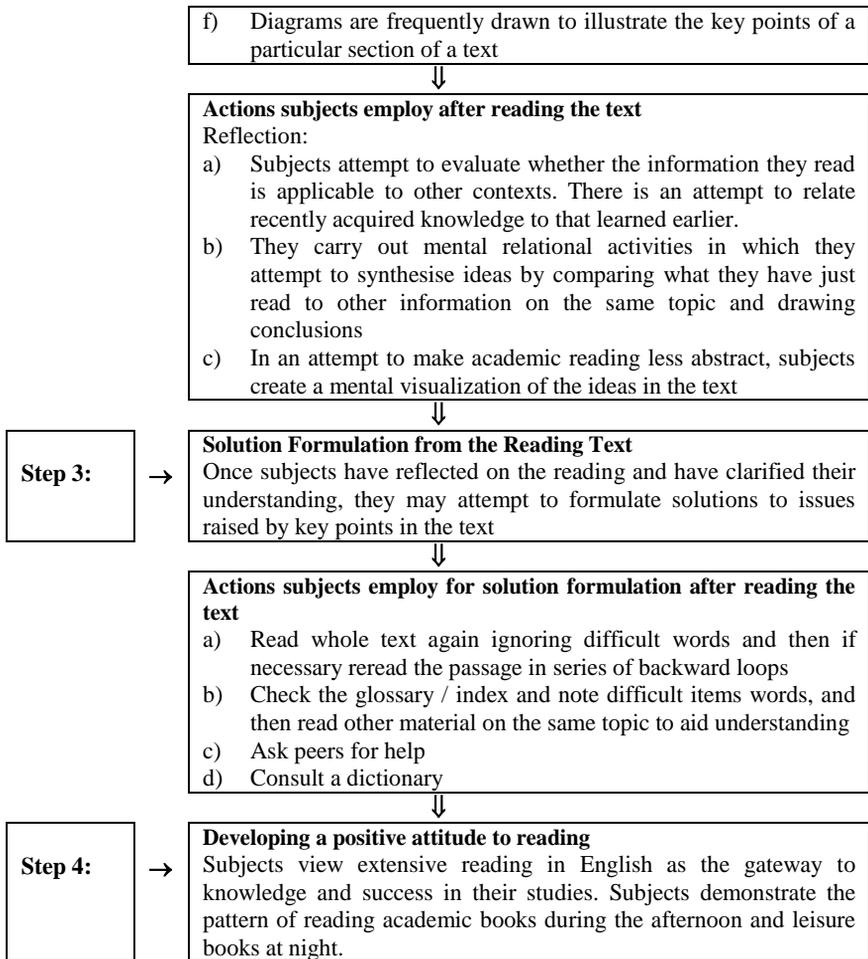
### The expert reader

The findings for the expert second language reader (see the third classification below) are very similar to those reported by both Palincsar and Brown (1989) and Block (1992) in their seminal studies of reading strategies.

Palincsar and Brown identified six essential strategies for effective reading comprehension: clarifying reading purpose to determine the appropriate approach to the task, activating background knowledge of the subject matter in hand, focusing attention on major content, evaluating content critically for internal consistency and compatibility with prior knowledge, using monitoring activities such as self-questioning and paraphrasing, and drawing and testing inferences.

### 3. *The expert reader*





The transcribed extract below shows that the expert reader is clearly able to focus on and visualize major content without being distracted by linguistic concerns:

F: Are you thinking about sentence structure or vocabulary?

S: No, I have no need to do that. I'm breaking the passage into different parts. Sometimes several sections will talk about one main point, so I will try divide them into smaller parts. And it is a lot easier when I read them again because I don't have to read the whole passage again. I just have to focus on the main parts that I have already outlined.

F: So you're dividing the passage into segments with each segment referring to a particular point.

S: Yes, I'll also write some notes on the side to outline the main points.

F: Okay. Anything else?

S: When I read a section, I actually have a mental picture of what's going on. There is a 'scene' in my brain, which is a story about this passage. In this story I have different roles, and they all fit into the passage itself.

Expert readers are questioning readers, but selectively so. They are able to differentiate genres and adjust their reading strategy appropriately. A genre identified as factual will be treated in a serious and critical way but this is not the case with other genres:

F: What are you doing now?

S: I'm raising questions in my mind. But it depends on what the passage is all about. If the passage is a story, then I will not ask myself some questions. But if it a fact of something, then I will ask some questions to test it.

F: So you raise questions if you have doubts about a particular text?

S: Yes. For example, if the passage is referring to certain opinions with a conclusion at the end, then I will try to judge whether the conclusion is appropriate or not.

As the extract below shows, expert readers relate what they are reading to knowledge acquired earlier:

F: What are you doing now?

S: Trying to recall what I've learned in the past. Then I think I will try to make some connection between the two.

F: Do you always try to make connections?

S: If it is academic, then I will think of many things. But if it is newspapers or magazines, then I will just read the material. I will not bother to relate it to my previous knowledge. I will not even bother to check for words that I don't understand.

F: Okay. But how do you integrate new and existing previous knowledge? What is the actual process that is going on?

S: I will try to relate what I've learned in the past to what I am learning in the present, and then see whether there is a correlation between the two. I think it helps me integrate what I have learned for this particular topic.

Emerging expertise in second language reading may be summarized as mastery of a process involving active engagement in making meaning of texts combined with the capacity to reflect critically on content and its interrelatedness to other knowledge. Expert readers adopt flexible strategies: if a text is relatively brief, it will be dealt with in summary fashion by skimming. If a text is long, expert readers will chunk it into sections. A recursive process of rereading selected key sections then occurs. If time is a factor, selective reading takes place.

Expert readers attempt to question the information while they are reading to increase their understanding of and ability to retain it without memorization. They may summarize the key points at the end of sections of text but this is a mental operation only - no written summary is produced. Expert readers draw diagrams to illustrate key points, and crucially they relate what is being read to prior readings on the same subject. They also evaluate whether the information in a text is applicable to other contexts. Overall, expert second language readers exhibit an independent learning approach in which critical thinking abilities play an important role.

## **Conclusion**

The acquisition of second language reading expertise is obviously a developmental process and this is shown by the areas of overlap between the three profiles presented in this study. One of the most notable features of the profiles is their relationship to the notion of learner autonomy. Inexpert readers exhibit little by way of independence from the teacher or the texts they engage with. Expert readers, by contrast, engage actively in making meaning from content because they are less concerned than other kinds of readers to understand all the information presented in a text. They seek out and read other texts on the same subject and are unafraid to ask peers (rather than teachers) for help. A descriptive profile of expertise in second language reading is clearly a valuable outcome of this project, since it provides a blueprint for teachers and students in developing effective approaches to the teaching and assessment of second language reading and to the achievement of learner autonomy.

Results of international studies cohere to such an extent that it may be possible to speak in terms of the “universal” expert second language reader. The core skills and strategies employed, however, will be coloured, shaped and accented by local characteristics. The results of the present study show that expert readers of English in Hong Kong demonstrate through their reading behaviour a deep learning approach but with a pragmatic (assessment and time management-related) edge. Hong Kong expert readers differentiate skilfully between genres and adjust the strategies employed in handling particular texts appropriately. They are able to carry out a number of operations which are designed to maximize understanding while at the same time minimizing the time spent absorbing information. This stands in some contrast to results for other studies discussed earlier in which subjects appear to be rather more concerned than their Hong Kong counterparts with, for example, the meanings of unfamiliar words. Of the three reader profiles presented here none shows a concern to understand every unfamiliar word. Indeed, consulting a dictionary

constitutes marked behaviour for Hong Kong readers of English; the result perhaps of an overall time-efficient approach to study reading.

There are, of course a number of limitations to the present study. A potential problem with research design is researcher expectation. A researcher may unwittingly produce results which reflect wide reading of the relevant literature. This problem was addressed in the study by the use of NUD\*IST software to sort and label data. A strenuous attempt was made to ensure that results are data-driven. A greater problem perhaps is the fact that the subjects were all volunteers. A sampling method involving self-selection by subjects is likely to produce an uneven distribution of ability levels with a bias towards the higher end of the ability scale. This is, in fact, the case with the present study. Of the sixty volunteer subjects (selected, it will be recalled, from an initial pool of 115), 24 proved to be expert readers, 21 were finally classified as emerging expert readers and only 15 as inexpert readers.

However, the non-probability approach to sampling is to some extent offset by the relatively large sample involved in the study. Also, the fact that our findings tend to corroborate those of other researchers must increase confidence in our results. Indeed, we do not claim that the study contributes radically new knowledge to the existing literature on reading expertise. The claim we are advancing here is that there are important connections between second language reading expertise and learning approach. The results of the study suggest that the achievement of a deep, autonomous approach to learning is heavily dependent upon the development of expert reading strategies; a connection which needs a great deal more exploration.

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