HOW TO DEVELOP TECHNIQUES IN TEACHING READING

Sugirin Universitas Negeri Yogyakarta (sugirin@eudoramail.com)

Without undermining the roles of other macro language skills (listening, speaking and writing), reading usually receives substantial attention in the teaching of English to university students whose primary goal of learning is to be able to read literature or texts in English. In this regard, there are a number of basic questions lecturers of English should answer before they design a reading course and develop teaching techniques, as the answers to these questions will generally reflect the kind of course developed and how it is delivered. The questions highlighted in this paper pertain to (1) whether problems of EFL reading are language problems or reading problems, (2) what constitutes effective reading, and (3) how to develop techniques in teaching effective reading. The paper will also suggest some instructional materials, potential problems arising from the application of the suggested techniques and suggestions for problem solution.

1. Introduction

Reading plays an important role in the development of an educated and civilised society (Maryanto, 1998) as most of our knowledge is obtained through reading (Pudjiastuti, 1996:2). This is consistent with Dechant's (1991:vii) claim that educational success requires successful reading. Strevens (1977:64) argues that reading is regarded as a skill of great importance to learners because, other than providing them with a great quantity of further experience of the language, it also gives them a window onto the normal means of continuing his personal education.

For English as a second or foreign language students, reading is an essential skill and, for many of these students, who desire to attend overseas universities, reading is the most important skill to master (Carrell, 1989; Lynch & Hudson, 1991). It is partly for this very reason and partly for other reasons that the teaching of English as a foreign language in Indonesia (TEFLIN) has given priority to the development of independent reading ability (Departemen Pendidikan dan Kebudayaan RI, 1995:3). In the context of Indonesian national development, reading in English as a foreign language assumes the function of accelerating the absorption, application and the development of science, technology and arts, and

the development of international friendship (Madya, 1993:33). According to Madya (1993:34), the reason is clear: most of the books on science and technology are written in English. This is supported by Tickoo (1995:261) who observes that, for the Asian context, the primary goal of learning English is to gain access to the world's most powerful source of scientific knowledge. Therefore, Tickoo (1995:261) considers English the most important "library language". Despite the important function of EFL reading, however, Djiwandono (1993:49) observes that the current methods of teaching EFL reading in Indonesia fail to promote the students' independent ability to cope with English books. If this failure is confirmed, it also reflects the failure of the teaching of English as a foreign language in Indonesia. In turn, this failure is likely to hamper the development of the country (Madya, 1993:33-34). This has raised concerns among language teaching experts and educators in Indonesia.

Djiwandono's (1993:49) close look at the TEFLIN reading methods reveals that most of the classroom activities engage the teachers in testing the students' comprehension rather than in teaching effective reading comprehension strategies, hands-on, practical ways and tactics of tackling English texts. The teachers focus most of their attention on the product of reading, rather than on the process of achieving the product, the comprehending. Meanwhile Maryanto (1998) sees the need for effective speed reading skills as a response to the information explosion accessible through the printed media, but the primary and secondary school curricula have not included skills of speed reading which are prerequisites for an educated community in this era of globalisation. He makes an appeal for concrete efforts through strategy training as well as research studies to address vital issues such as effective speed reading and reading habits. Through the development of techniques in teaching effective reading, the educated community in Indonesia may gradually reach the status of a community of readers.

Developing techniques in teaching effective reading has been an ideal for every teacher of an English course in which reading ability is considered the main goal of the instruction. However, developing techniques is a complex process involving consideration of a number of aspects. One of these aspects is the teachers' understanding of issues related to the nature of reading itself. This understanding is paramount, as it will determine the kind of reading course they design and teaching techniques they develop. These issues will be highlighted in following sections.

2. Are problems of EFL reading language problems or reading problems?

While current reading specialists have seen considerable evidence to conclude that there are similarities and differences between first and second or foreign language reading processes (Barnett, 1989; Grabe, 1991), it is necessary to review a seminal work of which the basic idea remains unchallenged to the present. This is not meant to present a renewed argument about the status of the problem of reading in the second or foreign language, but rather to relate issues supporting the proposition that EFL readers face more difficult tasks than native readers in reading texts written in English. Since the publication of Alderson and Urquhart's (1984) *Reading in a Foreign Language*, in which Alderson examines whether reading problems in a foreign language are reading problems or language problems, there has not been any author denying or challenging Alderson's stance that reading problems in a foreign language are both reading problems (problems related to reading skills) and language problems (problems related to language proficiency).

Coady (1979) and Jolly (1978) suggest that the source of success in foreign language reading is reading ability in the first language. Poor first-language readers will read poorly in the foreign language and good first-language readers will read well in the foreign language. In contrast, Yorio (1971) considers poor reading in a foreign language a consequence of inadequate knowledge of the target language. While research evidence from studies conducted by McNamara (1970), Hatch (1973), Barik and Swain (1975), Cowan and Sarmad (1976), and Clarke (1979) reveals that foreign language reading is both a language problem and a reading problem, Alderson (1984:24) suggests, with firmer evidence, that it

is more a language problem for those with low levels of foreign language competence, than a reading problem. Alderson (1984:26-27) further suggests that for good first-language readers learning to read in a foreign language, once they reach the *threshold* level, they might be expected to take off. However, the nature of the *threshold*, if it exists, remains a question to be answered (Alderson, 1984:27).

In response to Alderson's (1984) question, Laufer and Sim (1985) conducted a study to measure and describe the threshold level required to read English for academic purposes. Using the *Cambridge First Certificate of English reading comprehension section* as well as their own reading strategies exam with a sample of 84 Israeli university students, they determined that the threshold necessary to read English for Academic Purposes successfully corresponds to a 65%-70% score on that particular test. Students who achieved a 65%-70% score on the test were able to read texts of an academic genre and answer questions on selected reading strategies such as distinguishing between main and peripheral ideas, distinguishing between explicit and implicit material, recognising author's intent, lexical guessing, and so forth (Laufer & Sim, 1985:409). However, little information is given about participants' first language reading ability, and documents such as texts and questions used are not available. Therefore, replication and comparison are difficult, and a 65%-70% score on the test is also difficult to relate to other measures.

Responding to the same question, Carrell's (1991) study, with L1 English/L2 Spanish readers and L1 Spanish/L2 English readers, concludes that L1 reading ability and L2 language proficiency are statistically significant predictors of L2 reading ability. Consistent with Alderson's (1984) stance, Carrell (1991) concludes that L2 reading comprehension is more a language problem at low levels of L2 proficiency.

A later study was conducted by Bossers (1992) with participants reading in Dutch as a second language and in Turkish as a first language. Consistent with one of

Carrell's (1991) findings, Bossers (1992) concluded that both predictor variables (reading ability and second language proficiency) are statistically significant contributors to L2 reading comprehension and that L2 knowledge is generally the more important factor. Bossers (1992:185) concluded that "L2 knowledge is strongly related to L2 reading comprehension even in advanced learners" and that correlations between L1 and L2 reading comprehension in readers with low and high levels of L2 proficiency did not differ significantly. Bossers (1992:186) found that although his informants were competent readers in their native language (English), they seemed to be "bound to print" while reading the second language. Even advanced L2 learners were unable to perform reading tasks as easily or as quickly in their L2 as in their L1. Therefore, Bossers (1992) argues neither for nor against the existence of a language *threshold* in second or foreign language learning.

A more recent study was carried out by Taillefer (1996) with 53 French university students reading preprofessional English texts with various reading tasks. Taillefer's (1996) study focuses on the interaction of L1 reading ability and L2 proficiency in L2 reading comprehension. Taillefer concluded that, although both predictor variables (L1 reading ability and L2 proficiency) showed statistically significant relationships to L2 reading comprehension, their relative importance appeared to depend on the reading task as well as on the readers' L2 proficiency. The more difficult the task, the more important L2 knowledge became, but it could not be affirmed that L1 reading ability gains importance as L2 proficiency increases toward threshold level. However, like the previous studies, Taillefer's (1996) study has not reached the point of providing the precise description of the nature of the threshold itself.

While the nature of the 'threshold', if it exists, remains unclear, Alderson (1984:27) points out that to differing degrees, both good and poor first language readers learning to read in a foreign language need tuition in reading skills and strategies. Poor first-language readers learning to read in a foreign language will undoubtedly need considerable tuition in these. Grabe (1996:45) suggests that

teaching L2 students to use reading strategies is now recognised as important as a means of helping them to develop into strategic readers.

In regard to the present discussion, Alderson's (1984) position that reading problems in a foreign language are both problems related to language proficiency and those related to reading skills and strategies, hence, reading processes, is supported by Bouvet (2000:67) who claims that the question of reading proficiency (or lack of it) cannot be ignored in describing readers' reading comprehension strategies. This indicates the need for further studies to discover the differences between reading in the first and second or foreign languages. The following section addresses some of these differences.

Differences between L1 reading and L2 reading

Grabe (1991:386) and Hudson (1998:44) suggest that reading in a foreign language is influenced by factors related to foreign language (FL) acquisition and training differences, which may not usually be found in the first language (L1) reading. For example, Grabe (1991:386) suggests that first language learners have already learned a relatively large number of words and have a good intuitive sense of the grammar of the language before they formally begin reading instruction in schools. Grabe (1995:43) recognises that students in English L1 academic contexts learn an average of 40,000 words by the end of secondary school, and learn approximately 3000 new words each year in school. In contrast, foreign language learners usually have only a limited store of oral language vocabulary and have a lack of sense of grammar of the language (Grabe, 1991:386). For example, on average first year Indonesian university students had some knowledge of 1226 English words, a figure that falls far short of the 3000-5000 word range that is widely considered the threshold level for independent reading of unsimplified texts (Nurweni & Read, 1999:161).

Supporting Grabe's (1991) suggestion, Koda (1994) identifies three fundamental distinctions between L1 and L2 reading. *First*, L2 readers have prior reading

experience in their L1. Koda (1994:4) infers from L1 and L2 research studies that linguistic orientation generated by L1 linguistic features not only influences L2 acquisition but also constrains the cognitive procedures used in L2 processing. Second, L2 reading is cross-linguistic in nature, involving at least two languages. Koda (1994:7) suggests that the development of L2 processing strategies involves a complicated interplay among universal principles, the L1 system, and the particular L2 features. Third, as a consequence of limited linguistic knowledge, L2 readers use compensatory devices to solve comprehension problems. In L1 reading, children have usually mastered the basic language structure through oral interaction before instruction begins. Moreover, they are continuously exposed to written symbols in their cultural environment (e.g. food packages, commercial logos and billboards), which enable them to formulate visual images of words and establish strong associations between the oral and written forms of the language. This is rarely the case with L2 learners, and almost never the case with foreign language learners. For example, in the context of teaching English as a foreign language (TEFL) in Asia, English is learnt in the classroom where the main source of the language is a prescribed textbook taught by a teacher. In most such cases the language has no existence outside the classroom; it often ceases to exist as soon as the textbook is closed (Tickoo, 1995:261). Of course, this condition has changed gradually in the context of TEFLIN.

Still in the context of TEFL in Asia, Tickoo (1995:261) observes that the English language is taught/learnt in an institutional context, which has to remain responsive to the established beliefs, expectations and attitudes about good teaching, valued knowledge and preferred forms of classroom interaction. With particular emphasis on EFL reading, Tickoo's (1995:261) observation is in line with the contention that reading cannot be separated from social and cultural contexts (Grabe, 1991; Hudson, 1998; Street, 1994; Wallace, 1988) and readers' beliefs (Sugirin, 1997). Second or foreign language readers will undoubtedly bring into the text their own social and cultural values and beliefs which may be alien to the native readers of the target language.

For example, Wallace (1988:2) notes that being a reader is likely to mean something different from one social group to another. A Pakistani Moslem boy will be expected to read aloud from the Koran, but he will not be expected to understand what he reads. A gloss is generally provided in Urdu, which in fact is not necessarily his first spoken language, which may be Punjabi. Being able to read aloud from the Koran is also expected of Indonesian Moslems. In this regard, reading aloud from the Koran is not merely for social purposes but part of religious services, as daily prayers are said in Arabic, the language of the Koran. Moslems are expected to be able to recite as well as understand the Koran. While understanding the Koran usually develops slowly through various modes of religious learning, reading it aloud starts in early childhood. The ability to read the Koran aloud is highly praised in Islam, and this can be seen from annual reading aloud contests, which are held locally, nationally and internationally. While no empirical evidence is available, it seems reasonable to assume that this reading aloud practice may, to some extent, have an impact on the Moslems' view of the nature of good reading.

Grabe (1991) suggests that foreign language learners may have certain advantages. For example, since most academically oriented EFL learners are older than L1 learners, they have a better-developed conceptual sense of the world; they have considerably more factual knowledge about the world; and they can make elaborate logical inferences from the text. As a consequence, vocabulary becomes largely a matter of remembering a second label for a well-understood concept. Thus, transfer of concept or knowledge takes place from L1 to the FL. Older EFL students will tend to make more use of metacognitive strategies in their learning as well, making them more efficient learners. However, transfer effects from language processing differences can cause difficulties for FL students. On a very basic level, transfer effects caused by *false cognates* or *near cognates* can influence vocabulary recognition. Students' L1 syntactic knowledge can also cause interference. Word order variation, relative clause formation, complex noun phrase structures, and other complex structural differences between languages can mislead EFL readers, particularly at the beginning stages (Grabe,

1991:387). This is also supported by Bouvet's (2000:77) research evidence that foreign language and second language students repeatedly claim that lack of vocabulary knowledge is a major problem in reading.

3. What constitutes effective reading?

Grabe (1991:378) observes that most of our current views of second (or foreign) language reading are shaped by research on first language learners of English. This is true in part because first language research has a longer history, because first language student populations are much more stable, and because cognitive psychologists, who see comprehension research as a major domain of their field, have conducted numerous studies which provide information about the reading comprehension processes (Grabe, 1991:378). It makes good sense, then, that an examination of second or foreign language reading can be informed by addressing reading models that have been developed for explanations of first language reading (Hudson, 1998:44).

3.1 Fluent reading in the first language

Grabe (1991:378) suggests that a description of reading should account for the notion that fluent reading is *rapid*, *purposeful*, *interactive*, *comprehending*, *flexible*, and *gradually developing*. He argues that fluent reading is *rapid*, as the reader needs to maintain the flow of the information at a sufficient rate to make connections and inferences vital to comprehension. Berg (1992:29) claims that the normal reading rate is between 150 and 400 words per minute. He suggests that if a reader's speed is less than 100 words per minute, this reader may require remedial-reading training. A reader must have a *purpose* for reading because reading for a purpose provides motivation - an important aspect of being a fluent reader. That fluent reading is *interactive* has two meanings: first, the reader makes use of information from his/her background knowledge as well as information from the printed page, or, as Carrell (1987) notes, fluent readers rely on both text-based and knowledge-based information processing, and second, many skills work together simultaneously in the reading process. That reading is

comprehending means that a fluent reader usually begins to read with an unwavering expectation to understand what s/he is reading. That reading is flexible is characterised by a range of strategies employed efficiently and selectively to suit the purposes of reading. Finally, reading develops gradually as the product of long-term effort and gradual improvement. A reader does not become fluent suddenly, or immediately after a reading development course.

There are other characteristics of fluent L1 reading. For example, Grabe (1991:381) suggests that fluent readers not only seek to comprehend a text when they read, but they also evaluate the text information and synthesise or compare it with other sources of information. Grabe (1991:382) also suggests that fluent readers employ metacognitive knowledge and skills monitoring. Meanwhile, Barnett (1989:71) reports that successful readers kept the meaning of the passage in mind while reading, read in broad phrases, skipped words they saw as unimportant to total phrase meaning, and had a positive self-concept as readers. In addition, Bamford and Day (1998:129) found that, for first, second or foreign language learners, affective factors, such as motivation, determine the success or failure of reading. In this regard, despite the contention that fluent reading is rapid, Wineburg (1991:503) noted that competent readers may have very plausible reasons for being slow and careful readers of texts that relate to their field of expertise. An historian reading an account of familiar events, persons, and settings may have much to process: feeling related to text content and author style, domain prior knowledge that meshes or contrasts with the author's, and a conversational refutation or salutation for the absent author. Without denying the nature of fluent reading presented earlier, Wineburg's (1991) and Pressley and Afflerbach (1995) suggest that, despite the notion that fluent reading is rapid, there are reasons and occasions when fluent readers slow down their rate of reading and take more care in processing the texts. In other words, fluent readers read strategically.

This subsection has outlined the characteristics of fluent readers, but these characteristics have not said much about the nature of reading itself. The subsection that follows will address views of the nature of the reading process.

3.2 The nature of the reading process

There are various views of the nature of the first language reading process, but, in general, they are within a scale with the two approaches called *bottom-up* approaches and top-down approaches as endpoints. Between these endpoints stands a set of approaches to which most researchers currently adhere (Hudson, 1998), termed *interactive approaches*. The first group of approaches, the bottom-up approaches, are also termed *outside-in models* (Cambourne, 1979) or *data-driven models* of reading (Carrell & Eisterhold, 1988; Cohen, Eysenck & Le Voi, 1986; Silberstein, 1994), while the second group of approaches, the top-down approaches, are also called *inside-out models* (Cambourne, 1979) or *conceptually-driven models* of reading (Carrell & Eisterhold, 1988; Cohen, Eysenck & Le Voi, 1986; Silberstein, 1994).

3.2.1 Bottom-up approaches to reading

Hudson (1998:46) states that, according to bottom-up approaches, a reader constructs meaning from letters, words, phrases, clauses and sentences, sequentially processing the text into phonemic units that represent lexical meaning, and then building meaning in a linear manner. This approach assumes that the reading task can be understood by examining it as a series of stages that proceed in a fixed order from sensory input to comprehension. Rayner and Pollatsek (1989) assume that information is gained in a rather passive manner, processing is rapid and efficient, and the information that has been processed and stored in memory has little effect on how the processing occurs. According to the bottom-up approaches, the reader begins with the written text as the basis (the bottom) of the processing, and constructs meaning by absorbing and analysing small chunks of the text, gradually adding them to the next chunks until they become meaningful.

In line with the bottom-up approaches, Taylor and Taylor (1983:116) point out that all reading processes must start with visual feature extraction of some kind.

This process is identical to the visual feature extraction a human uses for perception in general. The eyes of a reader do not glide along the lines of print but instead perform a series of jumps called saccades or saccadic jumps with fixation pauses between them (Taylor & Taylor, 1983:52). It is further asserted (Taylor & Taylor, 1983:122) that as one reads, a target word is brought into the fovea (the centre of the visual field in the retina) by a saccadic jump. The eyes then fixate on the word for about a quarter of a second, during which time the image of the object is more or less stationary upon the retina. It is mainly during this fixation that a reader acquires information on the fixated word. At the end of the fixation, the eye saccades (jumps) to the next target word. Eye fixations tend to occur on informative words and clauses, and on the last words of sentences or paragraphs; regressions tend to occur on ambiguous or unexpected words.

To find a word's meaning, skilled readers seem to use a visual route primarily and a phonetic route for special words, such as unfamiliar words. The visual route is a fast passive global process, whereas phonetic coding is a slow active analytic process. According to Taylor and Taylor (1983:232), "The visual path is a route to meaning, the phonetic path a route to remembering". Taylor and Taylor (1983:277) point out that a reader processes a word as much as possible the moment it appears and then puts the results in working memory until enough words are accumulated to form a larger unit such as a phrase or a clause. Taylor and Taylor (1983:275) further suggest that in reading larger units of a text (phrases, clauses, sentences, paragraphs, discourse), the ultimate goal of a reader is to comprehend its idea and to retain the idea as a gist. The reader must recognise most of the words in a clause, assign to them syntactic and case roles, find their meanings in the context, and organise them into larger processing units (sentences, paragraphs, discourse). A clause or sentence is a major processing unit; at its end, the reader can usually integrate the information sufficiently to extract the gist. Soon after gist extraction, most individual words as well as the syntactic structure of a clause are purged from working memory to make space for new clauses (Taylor & Taylor, 1983:276). In doing this, the reader forgets the exact wording and retains the meaning (Clark & Clark, 1977:49).

In summary, Taylor and Taylor (1983:116) point out that a reader of any script has the same goal to comprehend the content and retain the gist. To do so, the reader organises incoming material into larger units, distinguishes important from unimportant units, draws inferences to get the gist, and integrates gists to build higher-level gists to build the highest gist or the gist of the text. However, the "bottom-up" or "outside-in" processing theories have been criticised as being too simplistic and inflexible (Byrnes, 1984:319; Stanovich, 1980:34; Hudson, 1998). In response, various "top-down" approaches to reading were developed. Some of these approaches are highlighted in the following sub-section.

3.2.2 Top-down approaches to reading

According to Hudson (1998:47), the top-down approaches to reading assume that a reader approaches a text with conceptualisations above the textual level already in operation and then works down to the text itself. These approaches view the information processing circuit as being slower than assumed by the bottom-up approach as a result of memory capacity and mental limitations on the speed that information can be stored. Consequently, the reader makes continually changing hypotheses about the incoming information. The reader applies schemata, both formal schemata (involving knowledge of rhetorical structures and conventions) and content schemata (involving knowledge of the world beyond texts) to the text in order to create meaning that is personally and contextually sensible to the reader. Strong forms of these models assume that the reader is not text bound, but is sampling from the text in order to confirm prediction about the text message (Smith, 1985; 1994). Goodman (1968) popularised this approach, calling reading a "psycholinguistic guessing game". The key element was that reading was a psycholinguistic process that was an interaction between thought and language (Goodman 1976).

Goodman (1967) laid out the elements of language that he thought readers employed as they constructed meaning for the text they encountered. Goodman (1996:115) reiterates these elements when he says:

By calling reading a psycholinguistic guessing game, I wanted to emphasize the active role of the reader in making sense of written language as a new key element in our understanding of the reading process. I wanted people to take distance from the view that reading is the accurate, sequential recognition of letters and words. I wanted them to understand that, in order to make sense (construct meaning), readers:

- > make continuous use of minimal information selected from a complex but incomplete and ambiguous text;
- > draw on their knowledge of language and the world;
- > use strategies of predicting and inferring where the text is going.

In short, I wanted them to understand that readers engage in informed guessing as they read.

Goodman's (1996) view of reading supports Smith's (1985:35) idea that reading depends more on what is behind the eyes - on non-visual information - than on the visual information in front of them.

Summarising the gist of the top-down approaches to the reading process, Hudson (1998:47) suggests that readers use their knowledge of syntax and semantics to reduce their dependence on the print and phonics of the text. The reader makes guesses about the meaning of the text and samples the print to confirm or disconfirm. As Goodman, Watson and Burke (1996:9) claim, sampling, inferring, predicting, confirming, and integrating - always resulting in a personal construction of meaning – are the key operations or natural strategies within the reading process. According to Goodman, Watson and Burke (1996:5), as soon as a reader is confronted with print, he/she immediately starts sampling, inferring, and predicting. No reader uses all of the available cues. He/she samples and infers the most significant cues and predicts what comes next. As a prediction is made, he/she tests it against his/her linguistic and conceptual knowledge to see if his/her prediction is meaningful. If the prediction matches the language and content of the print, the prediction is confirmed. If the prediction does not match the language and content of the print, the prediction is disconfirmed. If the latter happens, optional strategies are available to readers:

- Regress, reread, and pick up additional cues until the text makes sense.
- Stop, consider, and rethink why what is being read does not seem to make sense. Adjustments are made without rereading.
- Continue reading in order to build additional context; in so doing, generate enough understanding to decide why things do not make sense.
- Stop reading because the material is too difficult or not relevant

(Goodman, Watson & Burke, 1996:7)

3.2.3 Interactive approaches to reading

After Goodman's (1967) theory of reading became well known, reading specialists tended to emphasise the top-down aspects of the reading process. According to Carrell (1988:4), the introduction of a top-down processing perspective into second language reading had a profound impact on the field. There has been a tendency to view the top-down processing perspective as a substitute for, rather than complementary to, the bottom-up, decoding view of reading. Baynham (1995:183) argues that despite the emphasis in the psycholinguistic model on the three levels of language – grapho-phonic, syntactic and semantic – there is a distinct tendency within the model to favour the higherorder skills and to de-emphasise the grapho-phonic level. Baynham argues that Smith's stance in favour of what is behind the eye over what is in front of the eye - the form of the word and the word sequence on the page - violates Smith's own belief, because part of the knowledge behind the eye is precisely the graphophonemic patterns of English and the way these interact with lexical and grammatical information to enable readings to take place. Meanwhile, Hudson (1998:48) asserts that both the strict bottom-up and top-down models of reading are too simplistic. Reading must be seen as bidirectional in nature, involving both the application of higher order mental processes and background knowledge as well as the text processing itself.

As can be inferred from the earlier discussion, background knowledge is highly emphasised in the top-down approaches to reading. In fact it is still considered to play a crucial role in interactive approaches to reading. The crucial role of background knowledge in understanding language (Carrell & Eisterhold, 1988; Dechant, 1991; Smith, 1994; Vanniarajan, 1994) and the interaction between top-down and bottom-up approaches to reading are further illustrated in the schema theories of reading presented below.

3.2.4 The schema theories of reading

The term "schema" was first used by Sir Frederick Bartlet in 1932 (Dechant, 1991:114). It is a concept that includes all the associations, experiences and relationships that have been connected to the concept. Schema is the cognitive base, which the reader draws upon to match new incoming information with prior information stored in memory, thereby deriving meaning from what is read. While Rayner and Pollatsek (1989) use the term schema as a synonym for real world knowledge, Adamson (1993:44) defines schema as any mental representation, typically of an object or an event, that specifies general properties and shows how these properties are related to each other. Thus, a schema is an abstraction that leaves out details of an instance. The schema for "bird" contains the information that a bird (necessarily) lays eggs and (typically) flies, but leaves out specific details like the colour of the bird (Rosch & Mervis, 1975). A schema for an event is called a script or frame. This is a generalised scenario of a sequence of actions that fit a common situation, like going to the dentist or asking a question in class (Adamson, 1993:44). Smith (1994:23) views schemes (schemas or schemata), as generalised representations of familiar settings and situations, essential in understanding and remembering. Smith (1994:23) also considers schemata to be part of, or included in, prior knowledge or cognitive structure, each individual's theory of the world. In this regard, Silberstein (1994:8) distinguishes two kinds of prior knowledge or background knowledge - formal schemata, involving knowledge of rhetorical structures and conventions, and content schemata, involving knowledge of the world beyond texts.

Schemata are considered to be the basis for all understanding and remembering (Rummelhart, 1980; Dechant, 1991; Silberstein, 1994; Smith, 1994; Vanniarajan, 1994). Rummelhart (1980:33-34) states that schemata are employed in the process of interpreting sensory data (both linguistic and non-linguistic), in retrieving information from memory, in organising actions, in determining goals, and generally in guiding the flow of processing in the system. In linguistic data, the schema is realised in the recognition of grammatical categories such as noun phrase (NP) and verb phrase (VP), and the relationship among categories, e.g. that NP precedes VP.

Schema theory claims that understanding discourse involves more than just extracting information from a text. Much of the necessary information is supplied by the reader in the form of schematic background knowledge. The text provides prompts for the reader to activate the appropriate schemas and provides appropriate new information that can be integrated into the reader's existing schemata.

3.2.5 Constructively responsive reading

Constructivist theorists believe that humans are extremely active in their pursuit of meaning (Pressley & Afflerbach, 1995:103). New information is not simple received, but rather humans construct hypotheses about the meaning of new information and test those hypotheses against the subsequent input. Humans filter new information through prior knowledge, elaborating the new ideas by relating them to what is already known. Inaccuracies in meaning construction occur on the way of understanding, with the errors often reflecting interpretations based on prior knowledge. The pursuit of more adequate understanding continues even after initial interpretations based on prior knowledge are made, due to awareness that there are differences between the meaning of the text and the conjectured meaning based on prior knowledge (Pressley & Afflerbach, 1995:98).

In this regard, Meyer and Keefe (1990:6-7) claim that background knowledge and experience related to the text are so important that without them no comprehension will occur. However, Fyfe and Mitchell (1985:166) remind us that good readers are those who manage to keep the balance between the two sources of information: information within the text and that outside the text, i.e. background knowledge and experience needed to interpret the information found in the text.

This section has discussed perspectives of reading mostly in the first language. The next question to answer is how these first-language reading perspectives fit the second or foreign language reading processes. To answer this question, the next section will present various perspectives on reading in the second or foreign language.

4. How to develop techniques in teaching effective reading?

Developing techniques in teaching effective reading should consider what constitutes effective reading, the nature of the reading process and aspects related to the present TEFLIN condition as mentioned in the introduction. Therefore, suggested techniques in teaching reading will include those that will enable learners to develop their speed, awareness of the purposes, interactive process, comprehension, flexibility and gradual development in reading. Among these techniques are: mind mapping, contextual clue inferencing, and various games in collaborative learning. In addition, materials developed or selected should also accommodate features reflecting the nature of the reading process and bridge the gap between what learners may enjoy in the classroom and the reality found outside the classroom. Due to limited space in this paper, suggested techniques and materials, potential problems in the application of the techniques and their solutions will be presented separately.

References

- Alderson, J.C.1984, 'Reading in a foreign language: A reading problem or a language problem?', in *Reading in a Foreign Language*, eds J. C. Alderson & A. H. Urquhart, Longman, London, pp. 1-27.
- Alderson, J. C. & Urquhart, A. H. (eds.) 1984, *Reading in a Foreign Language*, Longman, London.
- Barnett, M. A. 1989, More than Meets the Eye: Foreign Language Reading, Theory and Practice, Prentice Hall, Englewood Cliffs, NJ.
- Bossers, B. 1992, Reading in Two Languages: A study of reading comprehension in Dutch as a second language and in Turkish as a first language, Drukkerij Van Driel, Rotterdam.

- Bouvet, E. 2000, 'An Investigation of Foreign Language Students' Conceptualisations of Literary Reading', *Australian Review of Applied Linguistics*, vol. 22, no. 2, pp. 67-84.
- Buzan, T. 1997, The Speed Reading Book, BBC Books, London.
- Carrell, P. L. 1987, 'Content and formal schemata in ESL reading', *TESOL Quarterly*, vol. 21, no. 3, pp. 461-81.
- Carrell, P. L. 1988, 'Introduction: Interactive approaches to second language reading', in *Interactive Approaches to Second Language Reading*, eds P. L. Carrell, J. Devine & D. E. Eskey, Cambridge University Press, Cambridge, pp. 1-7.
- Carrell, P. L. & Eisterhold, J. C. 1988, 'Schema theory and ESL reading pedagogy', in *Interactive Approaches to Second Language Reading*, eds P. L. Carrell, J. Devine & D. E. Eskey, Cambridge University Press, Cambridge, pp. 73-92.
- Clark, H. H. & Clark, E. V. 1977, *Psychology and Language: An Introduction to Psycholinguistics*, Harcourt Brace Jovanovich, New York.
- Coady, J. 1979, 'A psycholinguistic model of the ESL reader', in *Reading in a Second Language*, eds R. Mackay, B. Barkman & R. R. Jordan, Newbury House, Rowley, Mass., pp. 5-12.
- Departemen Pendidikan dan Kebudayaan RI (Department of Education and Culture, The Republic of Indonesia). 1995, *Kurikulum Sekolah Menengah Umum: Petunjuk Teknis Mata Pelajaran Bahasa Inggris* (Senior High School Curriculum: Technical Guide to English Language Courses), Author, Jakarta.
- Djiwandono, P. 1993, 'Developing EFL students' reading comprehension strategies', *TEFLIN Journal An EFL Journal in Indonesia*, vol. 6, no. 1, pp. 48-68.
- Garner, R. 1980, 'Monitoring of understanding: An investigation of good and poor readers' awareness of induced miscomprehension of text', *Journal of Reading Behavior*, vol. 12, no. 1, pp. 55-63.
- Goodman, K. S. 1967, 'Reading: A psycholinguistic guessing game', *Journal of the Reading Specialist*, vol. 4, pp. 126-35.
- Goodman, K. S. 1996, On Reading: A Common Sense Look at the Nature of Language and the Science of Reading, Theoretical Models and Processes of Reading, Heinemann, Portsmouth, NH.

- Goodman, Y. M., Watson, D. J., Burke, C. L. 1996, *Reading Strategies: Focus on Comprehension*, 2nd edn, Richard C. Owen Publishers, Inc., New York.
- Grabe, W. 1991, 'Dilemmas for the development of second language reading research', *TESOL Quarterly*, vol. 25, no. 3, pp. 375-406.
- Grabe, W. 1995, 'Current development in second language reading ability', *Prospect*, vol. 10, no. 2, pp. 38-51.
- Irwin, P. A. & Mitchell, J. N. 1983, 'A procedure for assessing the richness of retellings', *Journal of Reading*, vol. 26, no. 5, pp. 391-6.
- Madya, S. 1993, 'TEFLIN in the next three decades', *TEFLIN Journal*, *An EFL Journal in Indonesia*, vol. 6, no. 1, pp. 31-47.
- Maryanto, A. 1998, 'Perlu bekali lulusan soal baca cepat efektif' (Graduates should be armed with effective speed reading), *Suara Merdeka On-line*, Available: http://www.suaramerdeka.com/harian/9803/31/kot8.1. (Accessed 31 March 1998).
- Meyer, V. & Keefe, D. 1990, *Reading for Meaning: Selected Teaching Strategies*, Scott, Foresman and Company, Illinois.
- Nurweni, A. & Read, J. 1999, 'The English vocabulary knowledge of Indonesian university students', *English for Specific Purposes*, vol. 18, no. 2, pp. 161-75.
- Parera, J. 1997, 'Calon guru harus diajar menumbuhkan dan menuntun minat baca' (Student-teachers must be taught to arouse and guide reading motivation), *Kompas*, http://www.kompas....04/DIKBUD/calo.htm (accessed 4 November 1998).
- Pressley, M. & Afflerbach, P. 1995, Verbal Protocols of Reading: The Nature of Constructively Responsive Reading, Lawrence Erlbaum, Hillsdale, NJ.
- Pudjiastuti, S. 1996, 'Penting, keterampilan baca' (Reading skills: important), *Kedaulatan Rakyat*, 8 May, p. 2.
- Ramsay, J. W. 1986, *Basic Skills for Academic Reading*, Prentice Hall Regents, Englewood Cliffs, NJ.
- Rummelhart, D. E. 1980, 'Schemata: The building blocks of cognition', in *Theoretical Issues in Reading Comprehension*, eds R. J. Spiro, B. C. Bruce, & W. F. Brewer, Erlbaum, Hillsdale, NJ, pp. 33-58.

- Shearer, B. A. & Lundeberg, M. A. 1996, 'Do models of expert reading strategies facilitate graduate students' reading of research?', in *Literacies for the 21st Century: Research and Practice*, eds D. J. Leu, C. K. Kinzer & Hinchman, K. A., The National Reading Conference, Chicago, pp. 430-6.
- Silberstein, S. 1994, *Techniques and Resources in Teaching Reading*, Oxford University Press, New York.
- Smith, F. 1994, *Understanding Reading*, 5th edn, Lawrence Erlbaum Associates, Hillsdale, NJ.
- Strevens, P. 1977, New Orientations in the Teaching of English, Oxford University Press, Oxford.
- Taillefer, G. F. 1996, 'L2 reading ability: Further insight into the short-circuit hypothesis', *The Modern Language Journal*, vol. 80, no. iv, pp. 461-77.
- Taylor, I. & Taylor, M. M. 1983, *The Psychology of Reading*, Academic Press, New York.
- Tickoo, M. L. 1995, 'Reading-writing research & Asian TEFL classroom: Providing for differentness', in *Reading and Writing: Theory into Practice*, ed M. L. Tickoo, Sherson Publishing House, Singapore, pp. 259-80.
- Vanniarajan, S. 1994, 'Cognitive (information processing) aspects of reading and their implications for research in reading in English in Singapore', in *Research in Reading and Writing: A Southeast Asian Collection*, ed M. L. Tickoo, SEAMEO Regional Language Centre, Singapore, pp. 16-29.
- Widdowson, H. G. 1979, *Explorations in Applied Linguistics*, Oxford University Press, Oxford.
- Wineberg, S. S. 1991, 'On the reading of historical texts: Notes on the breach between school and academy', *American Educational Research Journal*, vol. 28, pp. 495-519.
- Yorio, C. A. 1971, 'Some sources of reading for foreign language learners', *Language Learning*, vol. 21, pp. 107-15.

TOPICS FOR DISCUSSION

1.EFL reading problems are both problems of language proficiency and reading skills/strategies. In the low-level language proficiency they are more of language problems.

QUESTIONS:

- a. What teaching materials would you focus on for the first semester students of Economy, Law, or Education? Why?
- b. What teaching materials would you focus on for the fourth semester students of an English Education Department? Why?
- 2. Grabe (1991) suggests that a description of reading should account for the notion that fluent reading is *rapid*, *purposeful*, *interactive*, *comprehending*, *flexible*, *and gradually developing*.

 QUESTIONS:

a. What are the implications of the fluent reading characteristics for

teaching? (materials used)

- b. What are the implications of the fluent reading characteristics for teaching? (techniques developed)
- 3. Grabe (1991) suggests that fluent readers not only seek to comprehend a text when they read, but they also *evaluate* the text information and synthesise or compare it with other sources of information. In addition, fluent readers employ metacognitive knowledge and skills monitoring.

 OUESTION: What are the implications

QUESTION: What are the implications of these for teaching?

4. Bamford and Day (1998:129) found that, for first, second or foreign language learners, *affective factors*, such as motivation, determine the success or failure of reading.

QUESTION: What is the implication of this notion for teaching?

Characteristics of Fluent Reading and Their Implications for Teaching

FLUENT	IMPLICATIONS FOR		
READING	TEACHING		
Rapid			
D C 1			
Purposeful			
Interactive			
Comprehend-			
ing			
Flexible			
Gradually			
developing			
Critical			
Citical			

Techniques for Developing Fluent Reading

FLUENT	TEACHING
READING	TECHNIQUES
Rapid	
Purposeful	
Interactive	
Comprehend-	
ing	
Flexible	
Gradually	
developing	
Critical	

CHARACTERISTICS OF FLUENT READING:

- RAPID
- PURPOSEFUL
- INTERACTIVE
- COMPREHENDING
- FLEXIBLE
- CRITICAL
- GRADUALLY DEVELOPING

DEVELOPING QUESTIONS & TASKS: (Be realistic/true to life.)

POOR:

The train to Jakarta leaves at

- a. 11:00 am
- b. 1:00 pm
- c. 3:00 pm
- d. 5:00 pm

(In real life, we do not enter a train station with four hypotheses concerning departure times.)

BETTER:

Ask an open-ended question such as: When does the train to Jakarta leave?

BETTER STILL:

Ask students to work in pairs or small groups to plan an itinerary using a train or bus schedule.

Berg (1992:29) claims that the normal reading rate is:

150 - 400 words per minute

< 100 words per minute

→ remedial-reading training.

Buzan's (1997:24) review informs these:

Reader	Speed	Comprehension
	wpm	
Poor	10-100	30-50%
Average	200-240	50-70%
Functionally	400	70-80%
literate		
Top 1 in 100	800-1000	>80%
Top 1 in 1000	>1000	>80%

THE CURRENT WORLD RECORD HOLDERS

NO	NAME	COUNTRY	WPM
1	Sean Adam	USA	3850
2	K.Gunarson	NORWAY	3050
3	Vanda North	UK	3000
4	Cr. van Aken	NETHERLANDS	2520
5	Mithy Corke	NETHERLANDS	2100
6	Luc van Hof	NETHERLANDS	1906
7	M. J. Gelb	USA	1805
8	Cinn. Adam	USA	1782
9	J. Longworth	UK	1750
10	F. van dr Poll	NETHERLANDS	1560

READING ASSESSMENT

(Test & Non-Test Techniques)

- OPEN-ENDED QUESTIONS
- CLOSED PROCEDURES
- COMPLETIONS
- MULTIPLE-CHOICE TEST
- PORTFOLIO ASSESSMENT

Goodman, Watson and Burke (1996:9) claim that the key operations or natural strategies within the reading process are:

- sampling
- inferring
- predicting
- confirming
- integrating

Result: a personal construction of meaning.

Outline of the paper:

- 1.Introduction
 - Product-process orientations
 - Speed reading
- 2.Language problems vs Reading problems
- 3. The nature of the reading process
 - a. Bottom-up
 - b. Top-down
 - c. Interactive
 - d. Schema theory
 - e. Constructive
- 4. Fluent L1 Reading
- 5. Developing teaching techniques