metacognitive reading skills in academic support: A transactionist perspective of the relationship between reading and learning

ABSTRACT

This article argues that metacognitive reading skills are basic to learning across the curriculum and suggests that designers and presenters of academic support programmes would be wise to eschew the teaching of grammar and critical discourse which are common components of academic support programmes, and instead to concentrate on producing programmes which are designed specifically to develop the metacognitive reading skills of under-achieving and under-prepared students. Effective reading skills are transferable to many other domains, are a prerequisite for effective writing skills, underpin second-language learning and are fundamental for any academic study.

It is argued that reading skills be taught and developed from a transactionist perspective of reading which, although it shares certain characteristics with constructionist/constructivist perspectives, nevertheless has significant differences.

Key words: Metacognitive reading skills; academic support; under-achievement; models of reading; listening and reading competence; teaching strategies

It is no secret that many South African students who register for undergraduate study each year are under prepared for university education¹ and that many of these students have low levels of reading and writing ability (see Evans, 1996). South African academics and researchers are loath to pin student under-achievement to cognition, as such an argument is generally perceived as having racist undertones (see Bradbury, 1993). The same situation applies in the United States too. Designating the problem a linguistic one is not apposite either (although this is done too – see Rademeyer, 2001; Van Rensburg, 2001), because students studying in their mother-tongues also under achieve at South African schools and universities (see Bradbury, 1993; Moulder, 1995; Nyamapfene and Letseka, 1995; Rademeyer, 2001). A fairly prevalent South African school of thought sees the problem as a social one and lays the blame at the door of the universities

Brooks and Greyling (1992); Kotecha (1992); Forson, 1993; Lickindorf, 1993; Smith (1993); Starfield (1992); Bradbury and Griesel (1994); Bagwandeen (1995); Craig and Kernoff (1995); Jordaan (1995); Moulder (1995); Nyamapfene and Letseka (1995); Pavlich et al. (1995); Evans (1996); Rademeyer (2001); Van Rensburg (2001).

themselves, which teach and assess under-prepared and disadvantaged students inappropriately (see for example Moulder, 1988, cited in Combrink, 1990; Ridge, 1990; Starfield, 1990). Under achievement is thus often viewed as a social problem largely involving the traditional structuring of the South African educational system (including the universities), and the larger society².

South African university educators initially welcomed academic support programmes (which started to get off the ground in the early eighties), as the answer to the language and learning problems of disadvantaged students. These programmes have, however, not been nearly as successful as their creators originally thought they would be³. Because students' writing (in tests, assignments and examinations) is generally the most tangible evidence that they are under prepared for academic study and that they might be classified as under-achievers, current academic support is frequently provided in the form of writing courses. Other types of academic support offered to students who have to use a second language as the language of learning and instruction, commonly comes in the form of language classes of some kind or another. Language is focussed on as physical evidence, once again, of students' lack of competence. There are a number of reasons why teaching writing and formal grammar are unsuccessful in academic support programmes. As will be discussed later in this article, writing is best taught in conjunction with reading and not in isolation. It will also be argued that metacognitive reading strategies should be taught before attempts are made to improve students' writing. The educational unsuitability of so-called "critical" pedagogical approaches in academic support is discussed in Evans (1996).

There is no denying that competence in the language of learning and teaching is essential for academic success. However, it is the way in which this competence is achieved that is the issue. Psycholinguists and second-language acquisition researchers⁴ have been involved in extended debate for many years over the value of teaching formal grammar to second language learners. While the debate is by no means over, it does seem that the direct teaching of formal grammar, especially to under-achievers and students who have poor reading and writing skills is not very effective. Conscious knowledge of linguistic rules does not necessarily go hand in hand with the application of these rules in production. Usually those second language learners who have been exposed to explicit teaching of formal grammar, perform better in discrete point and grammar manipulation tests than they do in natural conversation and in writing. Conversely, the ability to apply linguistic rules does not depend primarily on consciously acquired knowledge of these rules. Rules can be and are applied when they are acquired indirectly. Formal grammar instruction seems to work best for beginners learning a second language and particularly for adult beginners.

Formal grammar instruction also works best with individuals who have what is known as field-independent learning styles⁵ and is generally unsuccessful with individuals who have field-dependent (also known as field-sensitive) learning styles. Those South African students who have been raised in authoritarian homes and/or in rural societies with socially complex cultures (as many of Black South African undergraduates have), often tend towards field dependence (or sensitivity) rather than field independence (also see Grewar, 1987 and Murray, 1990). The

See Janks (1990); Bock and Hewlitt (1993); Esterhuyse (1994); Smith (1993); Young (1994).

^{3.} See Van Wyk Smith (1990); Brooks and Greyling (1992); Starfield (1992); Imenda (1995); Moulder (1995). At conferences such as the Academic Support Programmes Conference, Cape Town (1988), and the South African Association for Academic Development (1989), it was apparent that they were not the panacea they initially promised to be.

See for example Krashen (1981); Dulay et al. (1982); Pica (1983); Celce-Murcia (1985); Krashen (1987);
 Spada. (1987); Krashen (1989); Ellis (1990); Gass (1991); Long (1991); Ellis (1994); Lightbown (1994).

^{5.} See Evans (1995; 1996) for a discussion of cognitive learning styles. Also see Van Els et al. (1984); Chapelle & Roberts (1986); Bourhis (1990); Ellis (1994).

educational strategies commonly used at universities also tend to favour field independent learners rather than field dependent learners.

Most of the research on the teaching of formal grammar has **not** found unequivocally that grammar instruction is beneficial or that it promotes second language proficiency. In some cases, research has shown that formal grammar instruction can be counter-productive in that it introduces new errors into learners' language (see Ellis, 1994). Formal instruction of grammar that teaches isolated linguistic forms one at a time has not been shown to have any benefits to second language learners. The only kind of formal instruction that has been shown to be beneficial is that which allows learners to deliberate on specific linguistic features while they are involved in other tasks of a communicative nature. Formal instruction of grammar is thus effective only when taught cyclically, by a process of consciousness-raising (see for example, Rutherford, 1987) and/or when it involves incidental learning. Whereas reading classes which focus on the processes involved in reading and also on specific textual elements, lend themselves to this type of teaching, traditional grammar teaching in which the focus is specifically on isolated grammatical elements, meets none of these requirements.

Educational research has pinpointed a number of factors which contribute to under achievement and underlying many of these factors is reading ability. Differences in the socio-cultural backgrounds and home backgrounds of certain groups and of individual students have been shown by a large body of research to affect the ways in which students learn (see Paris et al., 1991). Research has shown that a literate home background in which parents read a great deal themselves and also read to their young children, and in which there is a significant collection of varied books which children have opportunities to read themselves, contributes significantly to the amount of time individuals spend reading, to interest and proficiency in reading, and to general educational achievement in later life (see for example Stanovich, 2000). Following on from this, a number of studies have shown that the amount of leisure reading in which individuals engage, is directly related to their reading achievement.

By looking at what reading involves and by considering the relationship between reading and learning from a transactionist perspective, this article argues that what academic support programmes should focus on is the teaching of metacognitive reading strategies. Once students are able to read and comprehend successfully they will have developed the basic cognitive abilities to learn from all types of written texts and from lectures. Successful reading promotes successful learning and poor reading skills generally foreshadow under-achievement. Research has found that students with low reading ability are generally low academic achievers (see for example, Daneman, 1991; Stanovich, 2000). Effective reading uses similar processes to those used in competent second-language acquisition⁷ and promotes second-language proficiency when the reading takes place in the second language. Good reading ability in a language is directly proportionate to proficiency in that language and knowledge of the syntactic structures (see Rodger, 1983; Devine, 1988).

The skills used in competent reading are basic to institutionalised education of any kind. The input in university education takes the form of lectures – for which high-level listening skills are required and written texts – for which high-level reading skills are required. Listening and reading rely on very similar processes – both require receptive skills. A significant correlation is reported

^{6.} See Guthrie and Greaney (1991) for an overview. Also see Paris et al. (1991).

^{7.} See the discussion below.

See Evans (1992; 1995) for how competence in a second language may be improved by the use of literary and other texts in the language classroom.

in the research literature between reading ability and listening ability, the relationship becoming even stronger in adults. Some researchers go so far as to conclude that reading comprehension ability is not distinguishable from listening comprehension ability (see Daneman, 1991). Competence in reading may thus be linked to competence in listening in all contexts, academic and non-academic.

Successful reading also forms the basis for successful writing. The processes used in reading and listening are closely related to the processes used in writing and speaking (see de Beaugrande, 1980; Hunt, 1996). Providing under achievers with the metacognitive reading strategies required to read successfully would seem to be the most appropriate starting point for improving learning in all domains and for developing the initial processes used in writing. Because reading skills are so basic to learning, it is the author's contention that specific writing skills are better taught in greater detail after students have learned to be successful readers.

Reading and comprehension use skills which underpin learning across the academic curriculum⁹. Skills in the use of effective reading strategies are transferable to a variety of other domains¹⁰ and provide students with the basis for other areas of learning. Reading involves the solving of problems¹¹ and learning is promoted when problems are experienced and then solved¹². Stanovich points out that

... an **extremely large** [emphasis added] body of research has demonstrated that reading skill is linked to an **incredibly wide** [emphasis added] range of verbal abilities. Vocabulary, syntactic knowledge, metalinguistic awareness, verbal short-term memory, phonological awareness, speech production, inferential comprehension, semantic memory, and verbal fluency form only a partial list (2000: 151).

Many of these verbal abilities, because of their global influence, affect verbal IQ scores, as is shown in the research studies discussed by Stanovich.

From a transactionist perspective¹³, reception (be it listening or reading) is viewed as providing the receiver with opportunities to construct new knowledge in the form of new schemata. A number of theories of and perspectives on learning¹⁴ (including theories of cognitive apprenticeship, situated learning, the experiential perspective of learning and various social perspectives of learning), share the basic principle in what is often regarded as the constructivist approach to learning, namely that learning involves the creation of new knowledge structures in the brain.

This article chooses (as does Evans, 1995), to align reading and learning in a transactionist perspective rather than in a constructivist perspective, although there are obvious overlaps between the two with regard to the construction of knowledge. However, the constructivist perspective¹⁵ in

See De Beaugrande (1980); De Beaugrande & Dressler (1981); Bransford & Nitsch (1985); Paris et al. (1991); Tierney & Shanahan (1991); Evans (1995).

^{10.} See de Beaugrande (1980); de Beaugrande and Dressler (1981); Paris et al. (1991); Tierney & Shanahan (1991).

^{11.} See de Beaugrande (1980); Kintsch (1980); de Beaugrande & Dressler (1981); Urqhuart & Weir (1998).

^{12.} See for example, Alderson & Urquhart (1984); Bransford et al. (1984); Singer (1985); Singer & Donlan (1985); Kohonen (1992); Bradbury (1993).

^{13.} See Evans (1995) for an overview and analysis or translationist, transmissionist, interactionist, constructionist and transactionist perspectives on reading, comprehension and literary theoretical approaches. Although it is not a specific school in any of these domains, the transactionist perspective is shown here to be able to include certain approaches to teaching and learning too.

^{14.} See for example, Kohonen (1992); Thomas (1992); Bredo (1997).

^{15.} Called the constructionist perspective (in Evans, 1995), to bring it into line with the term "transactionist" which is used to differentiate between this and other, similar-sounding but different literary theoretical approaches

literary-theoretical approaches and in reading theories relies on top-down processing of texts almost to the exclusion of bottom-up processing. Such a view has proved to be unverifiable in reading research (see Evans, 1995), while the transactionist view of a balance between the two which allows for the construction of new knowledge, is decidedly verifiable. The constructionist/constructivist view – if taken to its logical conclusion – would negate input from texts (both written and spoken) in the learning process, which is clearly absurd.

Various other avenues of education have approaches which would more reasonably fit into a transactionist paradigm. Dewey, a significant educational theorist in the first half of the twentieth century, spawned a so-called "transactional" theory of learning (see for example, Bredo, 1997) and was also the muse for Rosenblatt's (1938; 1978; 1985a; 1985b; 1990) view of the transaction between readers and writers. For Dewey, thinking takes place during and with action and changes both the thinker's brain and the environment which the individual is able to adapt to suit his/her situation. Learned habits do not involve "passive adaptation to fixed environments" (Bredo, 1997), but instead are able to change the environments themselves. Dewey was concerned with the development inherent in learning experiences. For him, learning involved augmenting one's skill at extracting meaning from experiences and the ability to apply this augmented skill to other, new situations and experiences (Bredo, 1997). Thus, learning and development are linked in a transaction between the learner's mind and the environment, each being open to change and the transferability of skills to new domains is a central component of what learning involves.

Whole Language – self-styled as a "philosophy of learning and teaching" also operates from a transactional base (Weaver, 1994). Some of the basic tenets of Whole Language are the construction of learning, necessary transactions with texts and a shift from the transmissionist paradigm of learning (see Weaver, 1994). Traditional transmissionist education, on the other hand, relies heavily on rote memorisation and invariably results in the teaching of isolated facts and fragments of language.

These transactional views dovetail with the transactionist approach to literature and reading – a very small body of publications initiated by Rosenblatt on the basis of Dewey's work. Some researchers in other fields have been working within this paradigm (for example the literary reading researchers Vipond and Hunt¹⁶ in Canada), and their findings on reading and literary reading in particular support Rosenblatt's perception of the transaction which takes between readers and texts and so implicitly between readers and writers during the reading process. Meaning is seen as arising from this transaction whereas the constructionists view meaning largely as constructed by the reader, independent of the writer and the writer's communicative intention, and fairly independent of the text too.

A central difference between the transactionist approach and the constructionist approach is that the transactionists perceive of texts and reading as both process and product, while the constructionists see texts and reading as process only. Vipond et al. (1987), for example, refer to engaged literary reading (or point-driven reading), as... above all an index of the extent to which the reader perceives the text as an intentional artefact: the product [emphasis added] of an intending being who purposefully fashioned it that way in order to convey certain attitudes, feelings, beliefs or ideas (Vipond et al., 1987: 152).

Constructionist approaches to reading incorporate into their fold (according to the distinctions drawn in this article and Evans, 1995), so-called critical discourse approaches which promote

See Hunt (1985; 1990); Hunt & Vipond (1985; 1986; 1987); Vipond & Hunt (1984; 1987; 1989); Vipond et al. (1987); Hunt (1996).

reading against the text. These cannot be included in a transactionist approach in which readers and writers share a common background of knowledge and beliefs. In many critical discourse approaches, the reader deliberately sets out to reject the writer's values and intentions. This is more than merely accepting that texts might be inaccurate, limited or fallible. Those approaches in which the reader is (according to the theorists) actively involved in shaping the author, are not transactionist (although some of them go by the name of "transactive" approaches" – see Evans, 1995).

The transactionist view of reading, although generally not spelled out as such, is implicit in a number of models of reading that include many of the principles of this perspective. These principles encompass the implied contracts (transactions) between producers and receivers of texts which necessarily entail shared knowledge of conventions. The reader assumes that the writer will produce a comprehensible, coherent and cohesive text and contracts to construct coherent meaning from a reading of the text. The writer contracts to produce a text which will overlap with the sociocultural background experience and interests of the reader, to use standardized spelling, text formats, linguistic, pragmatic and rhetorical conventions, and so on. Thus the writer creates the potential for comprehension by making the text comprehensible. The writer's side of the contract is entered into during production and in making the text comprehensible. The writer is constrained by purpose, content, language, logic, structure, form, situational context and social context and also by the assumed readership, in the same ways that speakers are constrained by their listeners. For De Beaugrande (1980; 1987c), the contract involves cohesion, coherence, intentionality, acceptability, informativity and intertextuality which are regulated by efficiency, effectiveness and appropriateness. Both the reader and the writer contract to operate within the bounds of these constitutive and regulative textual principles. The notion that readers will presuppose the existence of textual coherence and infer pragmatic purport from apparent incoherence is supported by literary reading research (see for example Zwaan, 1993), and is part of the transaction entered into between readers and texts.

A significant feature in a transactionist approach to reading (and again one supported by literary reading research findings), is the stance which the reader adopts for the reading of a particular text. This stance is responsible for differentiation amongst different types of reading (in Rosenblatt's terms "aesthetic vs. efferent reading and in Vipond and Hunt's terms "point-driven reading" vs. "story-driven reading" and "information-driven reading"). The reader's stance is determined by features (cues) within the text and also by the situational context in which the reader reads the text¹⁷. This context includes the reader's goals in reading, and is often (but not invariably), influenced by the tasks set for student readers before reading texts¹⁸. The stance adopted by the reader is partly responsible for what aspects of the text the reader selects for particular attention during the reading process (see Rosenblatt, 1985a; Kintsch, 1980; Vipond & Hunt, 1989; Beach, 1990a; Hunt, 1990; Zwaan, 1993).

Various research studies (see Spivey, 1987) have provided evidence for the authenticity of these models by showing that a number of factors, other than textual factors, also play a role in the reader's selection of what is significant for storage in memory during the reading process (also see Beach & Hynds, 1991). These include the perspective from which the text is read, the goals set by the reader, the tasks given to the reader, the reader's attitudes to the textual content and the interest which the text has for the reader (also see Spiro & Taylor, 1987; Tierney & Gee, 1990; Zwaan,

See De Beaugrande & Dressler (1980); Vipond & Hunt (1984); Vipond & Hunt (1987); Vichoff & Meutsch (1989); Vipond & Hunt (1989); Beach (1990a); Hunt (1990); Zwaan (1993).

^{18.} See Reid (1990) on circumtextual, extratextual, intratextual and intertextual framing.

1993; Kintsch, 1980). Other studies have illustrated the equal significance of the written text¹⁹ – something relatively ignored in the process-only paradigm of constructionist approaches to reading.

Models of reading which are included within the transactionist sphere in this article (and also in Evans, 1995), often specify a control centre (or schema) set up by readers for the reading of each text. The factors determining the reader's stance also determine what type of control centre(s) will be set up by the reader for the reading process (see Kintsch, 1980; Zwaan, 1993). The nature of the control centre depends on the reader's individual interests and on other reasons for reading such as on someone else's instructions to perform a given task. Texts may initially be read with no clearly-specified control schema in place. As the reading progresses, however, textual features themselves determine the nature of the control schema. Kintsch observes that,

[a] reader may approach a text without a specific goal (i.e. control schema), form expectations from the text, and take the deviations from these expectations as his cue for the selection of an appropriate organizing principle (control schema) (1980: 97).

The control centre determines units of text and establishes the importance of text units within the macrostructure. In a narrative the text, units are likely to be events or episodes. Clearly other types of text units, such as characters, setting and so on, will also be determined by a narrative control schema. Kintsch speculates that different types of control centre (schema) may operate at the same time. The active control centre (schema) determines what the macro propositions of the text are, and stores these in memory.

Zwaan's (1993) literary comprehension control centre operates along rather similar lines to Kintsch's (1980) narrative control centre. The literary comprehension control centre monitors the reader's comprehension of the literary text, by altering the parameters of the comprehension process. Zwaan suggests that the literary comprehension control centre is triggered by generic signals, the reader's goals in reading a text or a particular task or reading instruction. Thus the reader's stance and the control centre have many contributory factors in common. If a non-literary comprehension control system is in place once the reading process has commenced, a preponderance of "literary" features in the incoming text may bring about a shift from non-literary reading to literary reading. Van Dijk & Kintsch (1983) also include a control system in their model of reading. Research on non-literary reading also indicates that readers fit incoming information into a framework which is set up for ease of comprehension (see Kintsch, 1998). The Van Dijk & Kintsch (1983) model includes a control system which is constructed according to the sociocultural context, the specific context in which reading occurs, the reader's goals, the reader's expectations about the author's intention, and knowledge about the type of text structure.

Intertextuality also plays a large part in the reading and comprehension of texts. Knowledge of textual structures, rhetorical configurations and textual conventions can be viewed as intertextual knowledge, although this is given various names in a variety of different domains of study²⁰. Intertextual knowledge can be developed through exposure to texts (see Beach & Hynds, 1991) and can be (and is), used to interpret and comprehend new texts, as readers set up expectations for the reading and comprehension of different types of texts²¹.

^{19.} See for example De Beaugrande (1980); De Beaugrande & Dressler (1981); Vipond & Hunt (1984); Hunt & Vipond (1986); Miall (1988); Hauptmeier et al. (1989); Zwaan (1993).

^{20.} See De Beaugrande (1980); Fillmore (1981); Grabe (1988); Widdowson (1992); Van Dijk & Kintsch (1988/1984) and a large body of literary theorists (see Evans, 1995 for an overview).

See De Beaugrande (1980); Hanssen et al. (1990); Beach (1990a); Beach & Hynds (1991); Kramsch (1993).

Another significant element in the reading process is the mental text which readers set up as they read. This is a text parallel to the incoming written or spoken text which contains the receiver's own inferences and structures. Research supports the view that readers construct their own mental representations of texts²², and that they recall texts that are quite different from the texts which they have read, based on the inferences they have made as a result of the integration of their own background knowledge with the knowledge in the text. Various models of reading also incorporate this mental text. In De Beaugrande's model for the production and reception of texts of all types, readers construct a textual world during the reading process, which is more than the total of the sense of the expressions in the surface text. The textual world is also made up of the knowledge contributed by the reader's and the author's acceptance and knowledge of the ways in which events and situations are organised, in other words, of inter-subjective conventions. The mental texts constructed by readers explain why different readings of the same text are produced by different readers – each reader's mental text contains his/her own inferences and elaborations, based on his/her own background knowledge and experience. As will be outlined in an article to follow on this one, poor readers to not construct mental texts in the same way that skilled readers do.

Recent research on literary reading (see Hunt, 1996), indicates the dialogic nature of literary reading. Readers feel a need to discuss certain types of texts once they have read them. Classroom observations in a course taught by the author indicate that not only texts traditionally regarded as literary, but also films and other texts which require story-driven and information-driven reading²³ seem to require dialogue and discussion after the initial reception and comprehension process. Some theories of general reading in fact also point out that comprehension continues after the text has been read, as readers re-construct what they have comprehended (see for example, Goodman, 1985).

The reason for the dialogue after reception seems to be rather closely tied to the interest factor of the texts. As has been pointed out by various researchers on reading, interest hinges on the knowledge shared between the reader and the writer²⁴. Texts are generally interesting to readers when there is a balance between the knowledge in the text and the reader's background knowledge and experience. If there is a one hundred percent overlap between these two areas of knowledge, the texts are not interesting and nothing can be learned from them. If there is no overlap, the reader has no background knowledge to match with the incoming textual knowledge and, once again, there is no interest and no learning can take place. What is perceived as interesting is what is "neither too familiar nor too strange" (Kintsch, 1998). Linking interest with learning, in an earlier publication, Kintsch points out that

... misfits between the apperceptive mass and new information are interesting and provide the right conditions for learning, which is now conceived of as a correction or addition to existing knowledge structures. Thus conceptual conflict appears to be basic to learning ... Learning occurs when a problem requires some specific piece of missing knowledge (1980: 93).

Since academic texts generally introduce new knowledge to the reader, they provide the necessary conceptual conflict which seems to be basic to learning. However, if students are poor readers and are unable to process this new knowledge, then the right conditions for learning do not exist.

^{22.} See the research cited in De Beaugrande (1980); Beach (1990a); McNamara et al. (1991); Kintsch (1998). Also see Zwaan (1993).

^{23.} Discussed below and in Evans (1995).

See de Beaugrande (1980); Kintsch (1980); de Beaugrande & Dressler (1981); Fillmore (1981); Randall (1988); Kintsch (1998).

Texts which contain only information that the reader already knows are almost totally predictable. Texts which require a great deal of new knowledge and also texts which present that knowledge in unfamiliar and novel ways, are relatively unpredictable. Kintsch (1980) links not only predictability but also postdictability to the interest factor in texts. Especially if there is relatively little apparent coherence during the reading process, texts will need to be postdictable after reading (or reception in the case of film and speech), in order for them to be interesting. Postdictability - a useful term coined by Kintsch (1980), concerns the general coherence of the whole text. Once the reading is complete, the reader must be able to see the significance of the position of each textual unit or element and must be able to understand how it is meaningfully related to rest of the text. Postdictability, involving the requirement that each part has a "place in the whole", is a characteristic of all texts which are cognitively interesting, in Kintsch's view. The process of postdiction takes place towards the end of the reading of a text - or even after the text has been read - and involves the falling into place of all the previously disparate textual elements. In terms of Hunt's perception of literary texts as dialogic, postdiction can be seen as often comprising part of the dialogue which takes place in the post-processing of a variety of different texts, including academic texts.

Constructionist and transactionist perspectives both accept that knowledge is constructed by readers and learners who are not passive partners in the transmission of information (although reading research points to the fact that some readers are more passive than others – see Kintsch, 1998). Both of these are a good few steps away from earlier interactionist schema theories of reading. During the reading process the reader's background knowledge is activated (from the bottom up) by elements within the text. Then the reader integrates this knowledge (from the top down) with the knowledge in the text and constructs new knowledge as needed. As Kintsch points out,

[k]nowledge structures, either relatively permanent ones (semantic memory), or fleeting episodic traces (as in the memory for a story), receive additions and deletions that bring them into congruence with the text being read (1980: 98).

Schema theory – an interactionist perspective on reading which tends to weigh the reader's top-down contributions more heavily in the reading process than the contribution made by bottomup processes and the textual features of the written product, tends to view reader knowledge as a relatively stable selection of ready-made schemata and concepts stored in the brain in configurations also called schemes, plans, scripts, frames and so on. Smith (1985) asserts that, within each person's brain is a "theory of the world", made up of the individual's knowledge, experience, beliefs, expectations and hypotheses. Those researchers who work within the transactionist paradigm specifically reject the notion of schemata as a static set of reader knowledge which is activated during the reading process. Rather than the schemata as "building blocks" view of reading, the notion of the creation of new schemata is much closer to what actually happens during reading, and also much closer to Bartlett's original interpretation of the notion that schemata are reconstructed (see Iran-Nejad, 1987). The knowledge stored in the brain is a constantly changing set of patterns, the elements of which recreate global experiences to deal with incoming knowledge. Cognitive patterns, as perceived by Iran-Nejad (1987), are transient rather than long-term organisations stored in memory (also see Weaver, 1985). As existing knowledge elements are activated or reactivated, they generate new phenomena and new patterns. According to this conception, an unlimited number of cognitive patterns can be generated from a limited number of elements stored in long-term memory. Bransford & Nitsch suggest that

... meaning resides neither in the input nor in the organism [the brain]. Instead, meaning resides in the situation-input (organism-environment) relation. Both the environment and one's knowledge can be said to provide support for meaning or set the stage for meaning (1985: 117).

Kintsch (1980) sees the change in the reader's apperceptive mass which occurs during reading, as arising out of the reader's expectations (based on prior textual experience and on the incoming textual information) not being met. Thinking and learning take place when the reader's apperceptive mass is modified. As the reading of narratives progresses, schemata are "... constructed ... from the information so far processed, in interaction with the apperceptive mass" (Kintsch, 1980: 98).

Goodman (1985) points out that what readers know after reading is the product of what they knew before the reading process plus how well they have read the text. Cook's (1990) comment that literature assists the reader to "explore alternative schemata, rearrange them and refresh them" and that the dominant function of literature may be to "process" reader schemata is also in line with the transactionist perspective of literary reading and, of course, with a constructionist/constructivist perspective on learning.

The incorporation of schema accommodation into reading models and the research on schema accommodation, makes it quite clear that texts have an effect on readers' knowledge storage patterns. Other views on learning, from a variety of perspectives, underpin the notion of learning as involving schema accommodation. The experiential perspective on learning focuses on the learner's personal experience as the centre of learning, and emphasises learning as an active process rather than as a passive product. Kohonen, for example, sees the process of learning as "... the recycling of experience at deeper levels of understanding and interpretation" (1992: 17).

Reading research findings which support this view, indicate that autobiographical elaborations – elaborations and reflections on the text in terms of personal experience – are central to the comprehension of texts (see Hauptmeier et al., 1989; Miall, 1989; Bransford and Nitsch, 1978/1985; Beach, 1990a). From the perspective of reading theory, Smith defines learning as involving,

... not the cramming of new information, but the elaboration and modification of the theory of the world in the head ... Learning and experience are inseparable, however the experience occurs (1985: 203).

Underlying all of these views is the notion that learning is not fundamentally about the transmission of information from the teacher to the learner, directly from the text to the reader or directly from the speaker to the listener.

Research investigations indicate that real learning and comprehension only take place once readers have integrated the material to be learned into their existing knowledge structures (see Royer at al., 1984). Rote memorisation can take place even if there is minimal comprehension (see Kintsch, 1998). What is memorised by rote is not always comprehended and is not stored efficiently (if at all), in long term memory. Real learning, however, is never about memorisation but always about the construction of new knowledge in the brain. This new knowledge is constructed as a result of the interaction between existing (background) knowledge which is already stored in the brain (and based on previous experience) and the incoming (new) knowledge in the text, be it spoken or written²⁵. The two sets of knowledge are matched and then old, existing knowledge structures in the brain are either changed, discarded or added to in order to construct

^{25.} This can, of course, also take place as a result of purely visual stimulus which does not involve language.

new knowledge. The reader's own knowledge, beliefs and values are therefore altered during the reading process (also see Bransford & Nitsch, 1985; Iran-Nejad, 1987; Beach, 1990a; Tierney & Gee, 1990). The process involves comprehension, particularly in the matching phase, before a mental text is produced and before any new knowledge can be stored. It is only once the new knowledge has been stored that real learning can be said to have taken place. If there are not sufficient existing knowledge structures in the brain to match up with incoming knowledge (schemata, information), then there is either no comprehension or miscomprehension, and no learning has taken place.

Selective attention to textual elements is an essential characteristic of successful reading and listening. Readers and listeners do not process every single sound, letter or word that they read or hear. From the perspective of second-language learning, Gass (1988) points out that learners do not process all the linguistic data to which they are exposed either. Apperception is what takes place with the initial processing of input data and involves understanding by relating new (incoming) knowledge to one's own existing knowledge and experiences. Learners select for attention (i.e. apperceive) only that incoming knowledge which relates in some way to their existing knowledge. Apperception therefore involves more than mere perception, in that it is a cognitive act which processes new knowledge in terms of existing knowledge stored in memory. In language learning, learners apperceive those linguistic features which they have selected because they have come across them before, or because they can relate them to other linguistic knowledge which they have stored in memory. Learners notice and apperceive those linguistic features which are new to them only afterwards. In the same way, readers apperceive those textual elements which they notice because they have come across them before (they can be matched to existing knowledge structures stored in the brain). Prior knowledge is thus a significant factor involved in filtering input data and determining what will be apperceived. Good readers also pay selective attention and process with additional care those textual elements which do not seem to fit any observable pattern or initially do not seem to fit into a coherent textual whole. These are generally processed after those elements which fit into well-known patterns or match existing knowledge easily (see for example the research by Miall, 1988). Second language learning thus occurs along the same lines as general learning. Prior knowledge in language learning includes, among others, knowledge of a first language, world knowledge, knowledge of other languages and knowledge of linguistic universals. Reading occurs along the same lines as both of these.

What is important for academic support programme designers to bear in mind, is that advanced reading skills and strategies can be taught and can be learned. It is generally accepted by literary reading researchers that literary reading is a conventional activity in which readers are socialised (see for example, Hauptmeier et al., 1989; Schmidt & Groeben, 1989; Zwaan, 1993), usually in educational institutions. As has been shown by a variety of research studies²⁶, readers develop literary schemas in a process of socialisation. There is a great deal of overlap between the strategies used in literary reading and those used in information-driven and story-driven reading. Literary reading strategies include most of the strategies used by successful readers in other types of reading with some modifications and additions. Superior overall reading skills may thus similarly be viewed as learned and socialised.

Teaching reading has a wide variety of positive effects. The research findings on the teaching of general reading show unequivocally that reading skills (see Paris et al., 1991; Roehler & Duffy,

See Svensson (1985); Beach & Brown (1987); De Beaugrande (1987b); Hauptmeier et al. (1989); Zwaan (1993).

1991) and comprehension27 improve when various metacognitive reading strategies are taught. Numerous research studies (discussed in Paris et al., 1991; Roehler & Duffy, 1991), illustrate that, when students receive clarification about the reading strategies they will use in specific tasks and are taught how, when and where to use these strategies, their reading improves. Instructing second language students in the use of reading strategies has been shown by research to improve comprehension, particularly for poor readers²⁸. Unpractised readers who are not aware of the strategies used by successful readers²⁹, and do not use these strategies, are more likely to misconstrue texts and to produce misinterpretations of texts (see Barnett, 1988; 1989; Carrell, 1989; Swaffar et al., 1991). In the case of texts being read with the express purpose of studying or learning, it is clear that no learning will have taken place if texts have been misinterpreted or that inappropriate "knowledge" would have been constructed.

Research with both first language and second language readers has illustrated that skilled readers use a large number of automatic processes, while unpractised readers tend to rely on slower procedures (see Cziko, 1978; 1980; Eskey, 1988; Swaffar et al., 1991). Poor readers resort to context-dependent guessing and inferencing more frequently than do good readers³⁰, while good readers tend to use the faster bottom-up decoding skills to identify lexical forms. One of the reasons for this may be that less successful readers do not share the domain knowledge of good readers (see Grabe, 1988; Carrell, 1988c; Daneman, 1991; Kintsch, 1998), but it is also accepted that good readers just recognise words more easily (see Stanovich, 2000).

Over and above the specific teaching of metacognitive reading strategies which research has shown indubitably promotes general learning, the types of thinking skills that can be developed in a well-constructed reading programme which teaches metacognitive reading strategies include: classifying, generalising, specifying, abstracting, approximating, modifying, clarifying, refining, making connections, comparing, selecting, hypothesising, formulating, solving problems, relating, defining, making analogies, applying knowledge in new situations, reasoning, restating, inferencing, defining problems and issues, shifting perspective, making decisions, testing hypotheses, revising hypotheses, making distinctions, detecting fallacious arguments, formulating questions, and so on.

Generally research points to the advisability of teaching writing concurrently with reading (see Evans, 1995). It is suggested here that an academic support programme should be focussed initially on reading and listening, which should include all types of reading (literary and non-literary) and listening (including watching films) and analyses of the processes used in reception in the form of metacognitive reading strategy training. Writing should at first be used in order to promote comprehension and the focus in early written work in the academic support programme should be on reading processes rather than on writing processes. Working within a transactionist paradigm of reading and listening, such a course should aim to make students aware of the cognitive strategies used in reception, should allow students to engage in meaningful transactions with texts by accepting the implicit contracts between readers and writers and should also encourage students to produce their own verbal and written elaborations of the texts. The textual conventions used in producing written texts might be explored along with the processes used in receiving them (i.e. the processes used by readers). At a later stage – once they have become more

See Tierney & Cunningham (1984); Hamp-Lyons (1985); Barnett (1989); Carrell (1989); Swaffar et al. (1991); Kramsch (1993).

^{28.} See Tierney & Cunningham (1984); Hamp-Lyons (1985); Barnett (1988); Swaffar et al. (1991).

^{29.} The skills and strategies used by successful readers will be outlined and discussed in a later article.

^{30.} See Coady (1979); Van Dijk & Kintsch (1983); Grabe (1988); Daneman (1991); Stanovich (2000).

successful readers – students can be introduced to the structures and planning procedures used in the writing of different types of texts.

Effective writing involves reading - often prior to writing and certainly after writing and effective reading is often enhanced by writing. Reading ability improves with instruction in both reading and writing (see the research discussed in Tierney & Shanahan, 1991). Research has illustrated that, when students are provided with opportunities for reading, writing and conferencing, they are more likely to adopt transactional stances to texts, and their learning increases (see Tierney & Shanahan, 1991). Comprehension is enhanced when students produce written responses to literary texts (see Marshall, 1987; Spor, 1987; Tierney & Shanahan, 1991. Writing which elaborates on the topics in literary texts has been shown to clarify students' knowledge about the topics, and to improve their comprehension of the texts as well as their interpretive skills31. When students write about passages that they find confusing, their comprehension improves (see the research cited in McNeil, 1992). Research studies have shown that when students engage in extended personalanalytic or formal-analytic responses, including written responses, they show significantly higher levels of interpretation, are more likely to employ analytic operations and have higher levels of generalisation than students who do not engage in extended responses both in verbal and written form (see Marshall, 1987). Written responses to literary texts have also been shown to improve general linguistic competence (see Tierney & Shanahan, 1991). When students produce written free associations before group discussions in literature classrooms, there is an increase in interpretation (see the research cited in Applebee, 1977). When they produce oral free associations before group discussions, there is an increase in engagement with the literary text. Research studies have also shown that, when students are encouraged to write as a pre-reading exercise, they read texts more critically (see Tierney & Shanahan, 1991; McNeil, 1992).

Because writing not only assists in reading comprehension, but is so integrated with reading, writing and reading should not be taught as a separate skills, but should be integrated, at least initially, in a course which teaches metacognitive reading strategies. There seems little point in attempting to train students as effective writers if they are not effective readers or are receiving no training as effective readers. Competence in both reading and writing are predicated on intertextuality and intertextual competence. The processes involved in writing interconnect in many ways with the processes involved in reading (see for example, de Beaugrande and Dressler, 1981; Leech, 1987), and encompass a thorough understanding of the textual conventions used in a wide variety of different types of texts. This understanding of textual conventions is required before they can be used in production. Such textual and intertextual competence is developed through skilled reading of many texts using a wide variety of conventions (also see Stanovich, 2000). In fact, the development of the range of skills involved in both reading competence and writing competence depends on repeated encounters with similar types of texts and similar types of textual conventions (see for example, Scholes, 1985; Porter, 1986; Haas, 1993).

In view of the overlap amongst the processes used in reading comprehension, listening comprehension, general learning, second language learning and writing, and in view of the ease with which metacognitive reading strategies can be taught and transferred to general learning and to the development of competence in second language, it would seem not only naive, but also downright negligent not to consider training in skilful reading as the very basis of any academic support programme.

^{31.} See Beach (1990a) for a report of such research. Also see McNeil (1992).

Bibliography

- Anderson, R.C., Reynolds, R.E., Schallert, D.L. and Goetz, E.T. 1997. Frameworks for comprehending discourse. *American Educational research Journal* 14(4): 367–381.
- Alderson, J.C. and Urquhart, A.H. (eds.) 1984, Reading in a Foreign Language. New York: Longman.
- Alderson, J.C. and Urquhart, A.H. 1984. Postcript on Bransford et al. In: Alderson and Urquhart (eds.).
- Applebee, Arthur. 1977. The elements of response to a literary work: What we have learned. ERIC/RCS Report 2: 255–271. Arlington, Va.: National Council of Teachers of English.
- Bagwandeen, D. 1995. Towards a philosophy of teacher education in South Africa. South African Journal of Higher Education 9.1:
- Barnett, Marva A. 1989. More than Meets the Eye: Foreign Language Reading: Theory and Practice. Englewood Cliffs, NJ: Prentice Hall Regents.
- Barr, R., Kamil, M.L., Mosenthal, P.B. and Pearson, P.D. (eds.) 1991, *Handbook of Reading Research Volume II*. New York and London: Longman.
- Beach, R. 1990a. The creative development of meaning: Using autobiographical experiences to interpret literature. In: Bogdan and Straw (eds.).
- Beach, R. 1990b. New directions in research on response to literature. In: Farrell and Squire (eds.).

 Beach, R. and Brown, R. 1987. Discourse conventions and literary inference: Toward a theoretical
- Beach, R. and Brown, R. 1987. Discourse conventions and literary inference: Toward a theoretical model. In: Tierney et al. (eds.).
- Beach, R. and Hynds, S. 1990. Research on response to literature. In: Farrell and Squire (eds.).
- Beach, R. and Hynds, S. 1991. Research on response to literature. In: Barr et al. (eds.).
- Bell, N. and Cowper-Lewis, M. (eds.) 1993. *Literature, Nature and the Land*. Collected AUETSA (Association of University English Teachers of South Africa) Papers. University of Zululand: AUETSA.
- Bock, M. and Hewlitt, L. 1993. Critical language awareness (CLA): Applying CLA to an introductory first year course. South African Journal of Applied Language Studies 2(1): 73–78.
- Bogdan, D. and Straw, S.B. (eds.) 1990, *Beyond Communication*. Portsmouth, NH: Boynton/Cook Publishers, Heinemann.
- Bourhis, Richard Y. 1990. Social and individual factors in language acquisition: Some models of bilingual proficiency. In: Harley et al. (eds.).
- Bradbury, J. 1993. The meta-language of cognition. Paper prepared for the *Kenton Olwandle Conference*. (Page references are to an unpublished copy of the article received from the author).
- Bradbury, J. and Griesel, H. 1994. Text as impetus for learning. Paper prepared for the *SAARDHE Congress*, June 1994. (Unpublished copy of article received from the authors).
- Bransford, J.D. 1985. Schema activation and schema acquisition: Comments on Richard C. Anderson's remarks. In: Singer and Ruddell (eds.).
- Bransford, J.D. and Nitsch, K.E. 1978/1985. Coming to understand things we could not previously understand. In: J.F. Kavanaugh, and W. Strange (eds.), *Speech and Language in the Laboratory, School, and Clinic.* MIT Press. (Reprinted in Singer and Ruddell (eds.).
- Bransford, J.D., Stein, B.S. and Shelton, T. 1984. Learning from the perspective of the comprehender. In: Alderson and Urquhart (eds.).
- Bredo, E. 1997. The social construction of learning. In: Phye (ed.).
- Brooks, M. and Greyling, W.J. 1992. Assessing an intervention in English at first-year university level and predicting learner success. *Journal for Language Teaching of the South African Association for Language Teaching* 26.1: 33–45.
- Brumfit, C.J. (ed.) 1983. Teaching Literature Overseas: Language-Based Approaches. Oxford: Pergamon.

- Carrell, P.L. 1989. Metacognitive awareness and second language reading. *Modern Language Journal* 73: 121–134.
- Carrell, P.L., Devine, J. and Eskey, D. (eds.) 1988. *Interactive Approaches to Second Language Reading*. Cambridge: Cambridge University Press.
- Celce-Murcia, M. 1985. Making informed decisions about the role of grammar in language teaching. TESOL Newsletter 19.1.
- Chapelle, C. and Roberts, C. 1986. Ambiguity tolerance and field independence as predictors of proficiency in English as a second language. *Language Learning* 36.1: 27–45.
- Coady, James. 1979. A psycholinguistic model of the ESL reader. In: Mackay et al. (eds.).
- Combrink, A.L. 1990. The teaching of literature: Approaches and the design of syllabuses. In *The English Academy of Southern Africa Conference on English at Tertiary Level: Edited Proceedings*. Johannesburg: English Academy of South Africa.
- Cook, Guy. 1990. Goals and plans in advertising and literary discourse. Parlance 2(2): 48-71.
- Craig, A.P. and Kernoff, R.J. 1995. Development of textual interpretation by underprepared students. South African Journal of Higher Education 9(1): 23–30.
- Cziko, G.A. 1978. Differences in first- and second-language reading: The use of syntactic, semantic and discourse constraints. Canadian Modern Language Review 34(3): 472–489.
- Cziko, G.A. 1980. Language competence and reading strategies: A comparison of first- and second-language oral reading errors. *Language Learning* 30(1): 101–116.
- Daneman, M. 1991. Individual differences in reading skills. In: Barr et al. (eds.).
- De Beaugrande, R. 1980. Text, Discourse and Process: Towards a Multidisciplinary Science of Texts. Vol. IV. Advances in Discourse Processes. Norwood, NJ: Ablex.
- De Beaugrande, R. 1987a. Critical Discourse: A Survey of Literary Theorists. Norwood, NJ: Ablex Publishing Corporation.
- De Beaugrande, R. 1987b. Schemas for literary interpretation. In: Halász, László (ed.), *Literary Discourse: Aspects of Cognitive and Social Psychological Approaches*. Berlin: Walter de Gruyter.
- De Beaugrande, R. 1987c. Text, attention, and memory in reading research. In: Tierney et al. (eds.).
- De Beaugrande, R. and Dressler, W. 1981. *Introduction to Text Linguistics*. London and New York; Longman.
- De Bot, K., Coste, D., Ginsberg, R. and Kramsch, C. (eds.) 1991, Foreign Language Research in Cross-Cultural Perspective. Amsterdam, Netherlands: John Benjamins.
- Devine, J. 1988. The relationship between general language competence and second language reading proficiency: Implications for teaching. In: Carrell et al. (eds.).
- Dulay, H., Burt, M. and Krashen, S. 1982. Language Two. New York: Oxford University Press.
- Ellis, R. 1994. The Study of Second Language Acquisition. Oxford: Oxford University Press.
- Eskey, D.E. 1988. Holding in the bottom: An interactive approach to the language problems of second language readers. In: Carrell et al. (eds.).
- Esterhuyse, Jan. 1994. Psycholinguistic cocoon spinning and language education in a fragmenting society. South African Journal of Applied Language Studies 3(1): 51–59.
- Evans, M.E. 1992. A Language-based Approach to Literature Teaching for ESL Undergraduates. Unpublished M.A. dissertation, Johannesburg: Rand Afrikaans University.
- Evans, M.E. 1995. *Literary Reading for ESL Undergraduates*. Unpublished D. Litt. et Phil. thesis. Johannesburg: Rand Afrikaans University.
- Evans, M.E. 1996. Under-achievement at South African Universities. Studies in Applied Linguistics and Literary Theory 4(1): 51–79.
- Fabb, N., Attridge, D., Durant, A., and MacCabe, C. (eds.) 1987. The Linguistics of Writing: Arguments between Language and Literature. Manchester: Manchester University Press.

- Farrell, E.J. and Squire, J.R. (eds.) 1990. *Transactions with Literature: A Fifty-Year Perspective*. Urbana, Ill.: National Council of Teachers of English.
- Fillmore, C.J. 1981. Ideal readers and real readers. In: Tannen (ed.).
- Forson, Barn. 1993. Language programmes in language departments. In: Bell and Cowper-Lewis (eds.).
- Gass, S. 1988. Integrating research areas: A framework for second language studies. *Applied Linguistics* 9(2): 198–217.
- Gass, S.M. 1991. Grammar instruction, selective attention and learning processes. In: Phillipson et al. (eds.).
- Goodman, Kenneth. 1985. Unity in reading. In: Singer and Ruddell (eds.).
- Goodson, I. and Medway, P. (eds.) 1990. Bringing English to Order: The History and Politics of a School Subject. London and New York: The Falmer Press.
- Grabe, W. 1988. Reassessing the term 'interactive'. In: Carrell et al. (eds.).
- Grewar, Andrew. 1987. Teaching students to think, read and write: Study skills for under-prepared students. Aspects 8: Proceedings of the 1987 ASP Conference. Grahamstown: Rhodes University.
- Guthrie, J.T. and Greaney, V. 1991. Literacy acts. In: Barr et al. (eds.).
- Haas, Christina. 1993. Beyond 'Just the facts': Reading as rhetorical action. In: Penrose and Sitko (eds.).
- Hamp-Lyons, Liz. 1985. Two approaches to teaching reading: A classroom-based study. Reading in a Foreign Language 3.
- Hanssen, E., Harste, J.C. and Short, K.G. 1990. In: conversation: Theory and instruction. In Bogdan and Straw (eds.).
- Harley, B., Allen, P., Cummins, J. and Swain, M. (eds.) 1990. The Development of Second Language Proficiency. Cambridge and New York: Cambridge University Press.
- Hauptmeier, H., Meutsch, D. and Viehoff, R. 1989. Empirical research on understanding literature. *Poetics Today* 10(3): 563–604.
- Hayhoe, M. and Parker, S. (eds.) 1990. Reading and Response. Milton Keynes and Philadelphia: Open University Press.
- Hunt, R.A. 1996. Literacy as Dialogic Involvement: Methodological Implications for the Empirical Study of Literary Reading In: Kreuz & McNealy (eds.).
- Hunt, R.A. 1990. The parallel socialization of reading research and literary theory. In Bogdan and Straw (eds.).
- Hunt, R.A. and Vipond, D. 1986. Evaluations in literary reading. Text 6(1): 53-71.
- Hunt, R.A. and Vipond, D. 1987. Aesthetic reading: Some strategies for research. *English Quarterly* 20(3): 178–183.
- Hyltensam, K. and Pienemann, M. (eds.) 1984. Modelling and Assessing Second Language Acquisition. Clevedon, England: Multilingual Matters.
- Imenda, S.N. 1995. Linking staff and student development programmes. South African Journal of Higher Education 9(1): 178–182.
- Iran-Nejad, Asghar. 1987. The schema: A long-term memory structure or a transient structural phenomena. In: Tierney et al. (eds.).
- Janks, H. 1990. Contested terrain: English education in South Africa 1948–1987. In: Goodson and Medway (eds.).
- Jordaan, J.J. 1995. Affirmative action: Excellence versus equity. South African Journal of Higher Education 9(1): 53-64.
- Kintsch, W. 1977. On comprehending stories. In: Carpenter and Just (eds.).
- Kintsch, W. 1980. Learning from text, levels of comprehension, or: Why anyone would read a story anyway. *Poetics* 9: 87–98.
- Kintsch, W. 1987. Contributions from cognitive psychology. In: Tierney et al. (eds.).

- Kintsch, W. 1998. Comprehension: A Paradigm for Cognition. Cambridge and New York: Cambridge University Press.
- Kohonen, Viljo. 1992. Experiential language learning: Second language learning as cooperative learner education. In: Nunan (ed.).
- Kotecha, Piyushi. 1992. A description of the English for specific purposes (ESP) course in engineering at the University of the Witwatersrand. *Journal for Language Teaching of the South African Association for Language Teaching* 26(1): 7–15.
- Kramsch, Claire. 1993. Context and Culture in Language Teaching. Oxford: Oxford University Press.
- Krashen, S. 1981. Second Language Acquisition and Second Language Learning. Oxford: Pergamon.
- Krashen, S. 1987. Principles and Practice in Second Language Acquisition. New York and London: Prentice-Hall International.
- Krashen, S. 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *Modern Language Journal* 73(4): 440–464.
- Krashen, S. 1993. The Power of Reading: Insights from the Research. Englewood, Colo.: Libraries Unlimited
- Kreuz, Roger J. and McNealy, Mary Sue. (eds.) 1996. Empirical Approaches to Literature and Aesthetics. Advances in Discourse Processes Vol. 52. Norwood, New Jersey: Ablex.
- Leech, G.N. 1987. Stylistics and functionalism. In: Fabb et al. (eds.).
- Lickindorf, Elizabeth. 1993. The case of the dodo: A parable for literary studies. In Bell and Cowper-Lewis (eds.).
- Lightbown, P. 1984. Can language acquisition be altered by instruction? In Hyltensam & Pienemann (eds.).
- Long, M. 1991. Focus on form: A design feature in language teaching methodology. In: De Bot et al. (eds.).
- Mackay, R., Barkman, B. and Jordan, R.R. (eds.) 1979. Reading in a Second Language. Rowley, Mass.: Newbury House Publishers.
- Marshall, J. 1987. The effects of writing on students' understanding of literary texts. *Research in the Teaching of English* 21, cited and discussed in Beach and Hynds (1990); Beach (1990b).
- McNamara, T.P., Miller, D.L. and Bransford, J.D. 1991. Mental models and reading comprehension. In: Barr et al. (eds.).
- McNeil, John D. 1992. Reading Comprehension: New Directions for Classroom Practice. (Third edition.) New York: HarperCollins.
- Meutsch, D. and Viehoff, R. (eds.) 1989. Comprehension of Literary Discourse: Results and Problems of Interdisciplinary Approaches. Berlin: deGrayter.
- Miall, David S. 1988. The indeterminacy of literary texts: The view from the reader. *Journal of Literary Semantics* 17(3): 154–171.
- Moulder, J. 1995. Universities and 'Africanisation'. Editorial. South African Journal of Higher Education 9(1): 7.
- Murray, Sarah. 1990. Teaching English for academic purposes (EAP) at the University of Bophuthatswana. *The English Academy of Southern Africa Conference on English at Tertiary Level: Edited Proceedings.* Johannesburg: English Academy of South Africa.
- Nunan, D. (ed.) 1992. Collaborative Language Learning and Teaching. New York and Cambridge: Cambridge University Press.
- Nyamapfene, K. and Letseka, M. 1995. Problems of learning among first year students in South African universities. *South African Journal of Higher Education* 9(1): 159–167.
- Paris, S.G., Wasik, B.A. and Turner, J.C. 1991. The development of strategic readers. In: Barr et al. (eds.).

- Pavlich, G.C., Orkin, F.M. and Richardson, C.R. 1995. Educational development in post-apartheid universities: Framework for policy analysts. *South African Journal of Higher Education* 9(1): 65–74.
- Pearson, P.D. (ed.) 1984. Handbook of Reading Research. New York and London.
- Penrose, A.M. and Sitko, B.M. (eds.) 1993. *Hearing Ourselves Think: Cognitive Research in the College Writing Classroom.* New York and Oxford: Oxford University Press.
- Phillipson, R., Kellerman, E., Selinker, L., Sharwood Smith, M. and Swain, M. (eds.) 1991. Foreign/Second Language Pedagogy Research. Clevedon, England: Multilingual Matters.
- Phye, G.D. (ed.) 1997. Handbook of Academic Learning: Construction of Knowledge. San Diego and London: Academic Press.
- Pica, T. 1983. Adult acquisition of English as a second language under different conditions of exposure. *Language Learning* 33: 465–497.
- Porter, J.E. 1986. Intertextuality and the discourse community. Rhetoric Review 5.
- Rademeyer, C. 2001. Writing wrongs right, the works of a language proficiency unit. Paper delivered at LSSA Annual Conference. July. University of Bloemfontein.
- Randall, Marilyn. 1988. The context of literary communication: Convention and presupposition. Journal of Literary Semantics 17(1): 46–53.
- Reid, Ian. 1990. Reading as framing, writing as reframing. In: Hayhoe and Parker (eds.).
- Ridge, S.G.M. 1990. Standards at school and first-year success: Some implications and options for South Africa in transition. *The English Academy of Southern Africa Conference on English at Tertiary Level: Edited Proceedings.* Johannesburg: English Academy of South Africa.
- Rodger, A. 1983. Language for literature. In: Brumfit (ed.).
- Roehler, L.R. and Duffy, G.G. 1991. Teachers' instructional actions. In: Barr et al. (eds.).
- Rosenblatt, Louise. 1938/1976. Literature as Exploration. (Third edition.) New York: Noble and Noble.
- Rosenblatt, Louise. 1978. The Reader, the Text, the Poem: A Transactional Theory of the Literary Work. Carbondale: Southern Illinois University Press.
- Rosenblatt, Louise. 1985a. The transactional theory of the literary work: Implications for research. In: Cooper (ed.).
- Rosenblatt, Louise. 1985b. Viewpoints: Transaction versus interaction. *Research in the Teaching of English* 19(2): 96–107.
- Rosenblatt, Louise. 1990. Retrospect. In: Farrell and Squire (eds.).
- Royer, J.M., Bates, J.A. and Konold, C.E. 1984. Learning from text: Methods of affecting reader intent. In: Alderson and Urquhart (eds.).
- Rutherford, W.E. 1987. Second Language Grammar: Learning and Teaching. London: Longman. Schmidt, S. and Groeben, N. 1989. How to do thoughts with words: On understanding literature. In: Meutsch and Viehoff (eds.).
- Scholes, R. 1985. Textual Power: Literary Theory and the Teaching of English. New Haven and London: Yale University Press.
- Singer, H. 1985. A century of landmarks in reading research. In Singer and Ruddell (eds.).
- Singer, H. and Donlan, D. 1982/1985. Problem-solving schema with question generation for comprehension of complex short stories. *Reading Research Quarterly* 17. (Reprinted in Singer and Ruddell, eds. 1985).
- Singer, H. and Ruddell, R. (eds.) 1985. Theoretical Models and Processes of Reading. (Third edition.) Newark, Delaware: International Reading Association.
- Smith, Frank. 1985. A metaphor for literacy: Creating worlds or shunting information? In: Olson et al. (eds.).
- Smith, Frank. 1993. Whose Language? What Power? A Universal Conflict in a South African Setting. New York: Columbia University Teachers' College Press, reviewed and cited in Young (ed.) 1994.

- Spiro, R.J. and Taylor, B.M. 1987. On investigating children's transition from narrative to expository discourse: The multidimensional nature of psychological text classification. In: Tierney et al. (eds.).
- Spivey, Nancy N. 1987. Construing constructivism: Reading research in the United States. *Poetics* 16(1): 170–192.
- Spor, M. 1987. The Effect of Four Methods of Response to Literature on Reading Comprehension. Doctoral dissertation, University of Pittsburg, cited and discussed in Beach and Hynds (eds.) 1999).
- Stanovich, Keith 2000. Progress in Understanding Reading. New York: The Guilford Press.
- Starfield, S. 1990. Contextualising language and study skills. *The English Academy of Southern Africa Conference on English at Tertiary Level: Edited Proceedings.* Johannesburg: English Academy of South Africa.
- Starfield, S. 1992. Language and academic achievement: Academic support at the University of the Witwatersrand. *Journal for Language Teaching of the South African Association for Language Teaching* 26(1): 1–6.
- Svensson, C. 1985. The Construction of Poetic Meaning: A Cultural-developmental Study of Symbolic and Nonsymbolic Strategies in the Interpretation of Contemporary Poetry. Lund, Sweden: Liber Forlag, cited and discussed in Beach and Hynds (eds.) 1990.
- Swaffar, J., Arens, K. and Byrnes, H. 1991. Reading for Meaning: An Integrated Approach to Language Learning. Englewood Cliffs, NJ: Prentice Hall.
- Tannen, D. (ed.) 1981. Analyzing Discourse: Text and Talk. Georgetown University Round Table on Languages and Linguistics 1981. Washington, D.C.: Georgetown University Press.
- Thomas, Ruth. G. 1992. Cognitive Theory-based Teaching and Learning in Vocational Education. Columbus, OH: ERIC Clearninghouse on Adult and Vocational Education.
- Tierney, R.J. and Cunningham, J.W. 1984. Research on teaching reading comprehension. In: Pearson (eds.).
- Tierney, R.J. and Gee, M. 1990. Reading comprehension: Readers, authors, and the world of the text In: Bogdan and Straw.
- Tierney, R.J. and Shanahan, T. 1991. Research on the reading-writing relationship: Interactions, transactions and outcomes. In: Barr et al. (eds.).
- Tierney, R.J., Anders, P. and Mitchell, J.N. (eds.) 1987. *Understanding Readers' Understanding: Theory and Practice*. Hillsdale, NJ and London: Lawrence Erlbaum Associates.
- Urquhart, A.H. and Weir, C.J. 1998. Reading in a Second Language: Process, Product and Practice. London and New York: Longman.
- Van Els, T., Bongaerts, T., Extra, G., Van Os, C. and Janssen-van Dieten, A. 1984. Applied Linguistics and The Learning and Teaching of Foreign Languages. (Revised English language edition.) London and New York: Edward Arnold.
- Van Dijk, T.A. and Kintsch, W. 1977/1985. Cognitive psychology and discourse: Recalling and summarising stories. In: W.U. Dressler (ed.), Current Trends in Textlinguistics. New York: De Gruyter. (Reprinted in Singer and Ruddell, Eds. 1985.)
- Van Dijk, T.A. and Kintsch, W. 1983. Strategies of Discourse Comprehension. London: Academic Press.
- Van Rensburg, A. 2001. Studente-taal swak. Beeld 17 July.
- Van Wyk Smith, Malvern. 1990. Pressures and models: Rethinking English studies *The English Academy of Southern Africa Conference on English at Tertiary Level: Edited Proceedings*. Johannesburg: English Academy of South Africa.
- Viehoff, R. and Meutsch, D. 1989. Interdisciplinarity in the empirical study of literature introductory remarks to 'Comprehension of literary discourse'. In: Meutsch and Viehoff (eds.).
- Vipond, D. and Hunt, R.A. 1984. Point-driven understanding: Pragmatic and cognitive dimensions of literary reading. *Poetics* 13: 261–277.

- Vipond, D. and Hunt, R.A. 1987. Shunting information or making contact?: Assumptions for research on aesthetic reading. *English Quarterly* 20(2): 131–136.
- Vipond, D. and Hunt, R.A. 1989. Literary processing and response as transaction: Evidence for the contribution of readers, text and situations. In: Meutsch and Viehoff (eds.).
- Vipond, D., Hunt, R.A. and Wheeler, L.C. 1987. Social reading and literary engagement. *Reading Research and Instruction* 26(3): 151–162.
- Weaver, Constance. 1985. Parallels between new paradigms in science and in reading and literary theories: An essay review. Research in the Teaching of English 19(3): 298–316.
- Weaver, Constance. 1994. Reading Process and Practice: From Socio-Psycholinguistics to Whole Language. Portsmouth, NH: Heineman. Second edition.
- Widdowson, H. 1992. Practical Stylistics. Oxford and New York: Oxford University Press.
- Young, D. 1993. Review of Janks, H. 1993. (ed.) Critical Language Awareness Series: Materials for the Classroom. South African Journal of Applied Language Studies 2(2): 64–69.
- Zwaan, Rolf A. 1993. Aspects of Literary Comprehension: A Cognitive Approach. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Dr. Moura sweetnam Evans is a senior lecturer in the department of Linguistics and Literary theory at the Rand Afrikaans university. Her research interests include the differences between reading and listening in the first and a second language and the reception of humour. she teaches sociolinguistics, psycholinguistics, bilingualism s bilingual education, the teaching of reading and writing, resor, anthropological linguistics and secondlanguage teaching methodology to honours and ma students in the department, she teaches general linguistics to undergraduates and also discourse analysis, psycholinguistics, stylistics and editing, she also teaches production and neception of texts to undergraduate language practitioner students.

Dr. Moyra sweetnam Evans
nepartment of Linguistics and Literary
Theory
Rand Afrikaans University
po BOR 524
Auckland park
2006

mese@lw.rau.ac.za