

Teaching reading across the curriculum in secondary school

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Abstract

Since our country became a democracy various attempts have been made by the South African government to improve the literacy levels in the country through various literacy and reading campaigns and educator training. Yet, systemic evaluation undertaken by the National Department of Basic Education indicates that the literacy skills of students are still much lower than what is needed for them to learn and develop effectively. Reading is one of the most important academic tasks faced by students. Many students entering higher education are not adequately prepared to meet the challenges of higher education mainly because they cannot read at the required level. This paper highlights the literacy situation in South Africa with a particular focus on reading in secondary school. In addition, I am arguing that reading across the curriculum should be one of the main goals of education and all teachers should also be teachers of reading. The paper highlights the importance of teaching students reading strategies across the curriculum in order to improve their reading comprehension, thereby enhancing their chances of academic success. The implications of this research for policy makers and the Department of Basic Education are outlined and some suggestions are made to ensure that all teachers of content also teach reading.

Key words

academic success; content-area; literacy integration; secondary school; reading across the curriculum; reading comprehension; reading strategies; teaching reading.

Introduction

Over the past two decades there has been much written in the literature about the importance of reading and the importance of teaching students different reading strategies to improve their reading comprehension (Falk-Ross, 2002; Nel, Dreyer & Klopper, 2004). Reading is the essence of all formal education as “literacy in academic settings exists within the context of a massive amount of print information”

Pretorius, 2002; Le Cordeur, 2010b) and students access this information primarily through reading. It follows therefore that reading is one of the most important academic tasks faced by learners. Many learners entering higher education are not adequately prepared to meet the challenges of higher education, mainly because they cannot read at the required level (Jansen, 2009; Ramphela, 2008).

Methodology

I have used have chosen historical study together with a literature review as my research design. Many current educational practices, theories and issues can be better understood in light of past experiences. The knowledge of education history can yield insight into the evolution of the current educational system as well as into practices and approaches that have been found to be effective or unfeasible (Wierma 1995). Mouton (2001, p. 181) states that a comprehensive and well-integrated literature review is essential to any study. Such a review provides you with a good understanding of the issues and debates in the area in which you are working, as well as an understanding of current theoretical thinking and definitions, along with a description of previous studies and their results.

Literature review

The democratisation of South Africa brought about radical changes in education, the most significant of which was the integration of the previously separated education systems both at national and provincial levels. Since 1994 the South African government has made various attempts to improve the literacy levels in the country through various literacy and reading campaigns, by upgrading schools that were previously under-resourced and by providing educator training. Most if not all of these interventions were aimed at the foundation phase where various interventions (Pretorius 2002, Le Cordeur 2010a) has been done to improve the skills of literacy teachers in an attempt to enhance the standard of literacy. With a more equitable distribution of resources it was anticipated that all students in South Africa would have access to and receive the same learning opportunities which would result in better academic results.

However, despite these efforts literacy rates in South Africa remain low. The 2011 Annual National Assessment (ANA) of literacy undertaken by the National

Department of Basic Education indicates that results had declined since 2008 (DoBE 2012). Literacy skills of learners are much lower than what is needed for them to learn and develop effectively (Bloch 2009). According to educationists (e.g. Jansen, 2009; Ramphela, 2008; Bloch, 2009) the problem starts in the foundation phase where learners do not succeed in mastering the basic literacy skills. Numerous studies by independent researchers (e.g. Horne, 2002; Matjila & Pretorius, 2004; Pretorius & Ribbens, 2005; Le Cordeur, 2010a) reaffirm that learners are not reading at the level expected of them in a specific grade.

According to Pretorius (2002:174), the reading problem in SA tends to be masked by the language problems as many teachers attribute the difficulties that students experience in reading comprehension to limited language proficiency. Whilst the focus in South Africa was very much aimed at the foundation phase, I will argue in this paper that we embrace the idea of William Gray: "Every teacher is a teacher of reading" (Gray, 1937). This idea of William Gray has been a popular foundational belief in content-area reading for decades. Since Gray first coined this well-known saying in 1937, a school of thought emerged who argue that reading across the curriculum (RAC) should be the main goal of all subjects at school.

For many decades literacy researchers have called on content-area teachers to provide explicit reading instruction in secondary classrooms. Cries of "every teacher a teacher of reading" are anything but new. However, the message sometimes seems to have fallen on deaf ears, and there is much room for improvement with regard to literacy integration in math, science, social studies, and the fine arts. Ness (2007:231) for example suggest that teachers see literacy integration and providing support for reading comprehension as just one more time-consuming burden.

Horning (2007) states that teachers in all disciplines need to refocus on Reading Across the Curriculum to address students' needs, to achieve instructional goals, and to prepare citizens for full participation in our democracy. It seems clear that a refocused emphasis on reading as the process of getting meaning from print to be used for analysis, synthesis and evaluation, in the context of critical literacy across the curriculum could potentially address the difficulties of students, the goals of teachers and the needs of the nation for an educated, informed, fully participatory democratic population.

Peterson (2007) adds to the longstanding literature on writing across the curriculum by showing that content area classrooms are ideal places for helping students to develop as writers, as well as content learners. Writing is a natural and easy fit in content classes. As teachers teach writing, they help students to reinforce and build on their content understandings. As content concepts are taught, students will be creating pools of knowledge that they can draw upon when they write.

Given the multilingual nature of South African communities, schools are usually linguistically diverse. These contexts create a challenging environment for teaching effectiveness given the fact that learners are required to use high status languages for academic purposes. It is therefore important that teacher education programmes recognise and respond effectively to this challenge. Therefore it makes sense, as Van der Walt and Ruiters (2011) argue, that the demand for every teacher to be a language teacher is a useful way how we view teaching in multilingual environments.

But the academic tasks students encounter in the upper elementary grades, and even more so in secondary school, involve a great deal of reading in support of learning new and complicated content. The ability to comprehend the expository texts in content-area textbooks is critical to students' academic success. Yet as the academic demands on our secondary students become more complicated, explicit reading instruction diminishes. The academic importance of instruction in reading comprehension is clear. Students who are taught comprehension strategies such as predicting, questioning, and summarizing improve their reading comprehension on both experimenter-constructed tests and standardized tests (Ness 2007).

The new literacies of the Internet and other ICTs [information and communication technologies] include the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge in our world and influence all areas of our personal and professional lives. These new literacies allow students to use the Internet and other ICTs to identify important questions, locate information, critically evaluate the usefulness of that information, synthesize information to answer those questions, and then communicate the answers to others (Leu *et al*, 2004:1572).

Leu *et al* (2004:1590) make the point that the new literacies almost always build on foundational literacies rather than replace them. Foundational literacies include those

traditional elements of literacy that have defined almost all our previous efforts in both research and practice. These include skill sets such as phonemic awareness, word recognition, decoding knowledge, vocabulary knowledge, comprehension, inferential reasoning, the writing process, spelling, response to literature, and others required for the literacies of the book and other printed material. Foundational literacies will continue to be important within the new literacies of the Internet and other ICTs. In fact, it could be argued that they will become even more essential because reading and writing become more important in an information age.

So students and all members of a democratic society need more, better, faster, more efficient and more effective reading skills. Students do not have these skills because they are not taught in public schools, colleges or universities. They do not possess good reading skills because they do not read sustained, nonfiction prose to provide sufficient practice and they are not thoughtful, rhetorically aware consumers of multi-modal texts. They do not have good reading skills because they do not think they need them, since everything is on the computer and can be found easily with search techniques. But teachers know that just being able to find material is not enough anymore just as being able to get main ideas is not enough to make one critically literate (Horning 2007).

The idea that teachers can and should play an active role in awakening children to the rewards of lifelong reading is repeatedly stressed in the professional literature on teaching. According to Pikulski (1984:101), “[d]eveloping permanent interest in reading must be the goal of every teacher regardless of the particular subject she may be teaching”. There is a sense that assessment and comprehension dominate in classrooms (Le Cordeur, 2012). The idea (Gray,1956:136) that reading instruction is to deepen interest in reading both for pleasure and information is thus important.

Implications for the curriculum

In 2008 a National Reading Strategy (NRS) was put into place by the Department of Education, the aim of which is to promote a nation of life-long readers and life-long learners (DoBE, 2008). However, it seems that the bulk of reading instruction and practice fall on the Language Arts instructors. Imagine how much better our students would be in the area of reading if all teachers, no matter what subject they teach, took some time to reinforce important reading skills every day. Many teachers may

be feeling a bit nervous at the prospect of taking on additional responsibilities, especially when they wander into this territory of reading and/or writing. However, by understanding the basic reading objectives, teachers can very easily incorporate them into their instruction (Macdonald, 2012).

The Department of Basic Education (DoBE) recognises that many teachers do not know how to teach reading. The DoBE therefore listed teacher training, development and support as a key pillar of the Reading Strategy. This led to many researchers calling for teaching reading strategies in all content-areas (Bharuthram, 2007). Reading research has also shown that reading strategies can be taught to students, and when taught, they can enhance student performance in tests of comprehension and recall (Le Cordeur, 2010a; Le Cordeur, 2010c; Vacca, Vacca & Mraz, 2011).

Shanahan writes that we should “avoid the fatuous rhetoric that ‘all teachers are teachers of reading’” (2004:44). Shanahan goes on to say that content teachers must be committed to teaching their subject matter and that each discipline has its own specialised reading demands. Torgesen, Houston, Rissman, Decker & Vaughan (2007:4) writes the following: “Our current understanding of reading growth indicates that students must continue to learn many new things, and acquire many additional skills, in order to maintain reading proficiency as they move from elementary school to middle and high school. If they do not acquire the skills specific to reading after the initial period of learning to read, they will not leave high school as proficient readers”.

It is acknowledged that some teachers may argue that they are not language specialists as it is their job to teach content; therefore the teaching of reading should be done elsewhere. Generally, teachers who think this way also tend to believe that learning content and reading can be separated and that learning content does not require one to be a good reader or even a regular reader. This line of thinking encourages a reliance on class notes, rote learning and verbatim recall of information that is often not accurately presented. Furthermore, learners who memorise information would not be in a position to challenge or re-interpret texts in the light of other texts (Hall, 2005:403).

In a study by Paris and Block (2007) of effective adolescent literacy teachers, they found that teachers who were deemed effective by their administrators and peers were able to embed literacy in their teaching by using critical thinking skills, asking questions, and allowing students to become independent learners. These teachers use reading and learning strategies to help students learn their content, and thus students experience using reading to make sense of complex and varied texts. Lenski, Johns, Wham and Caskey (2007) suggest that content-area teachers can use reading as one of the best ways to help students learn content.

Strategies for Reading Across the Curriculum (RAC)

Although it is important to embrace the teaching of RAC, it must be emphasised that for RAC to be successful, all teachers need to buy into this approach of teaching reading. Among the strategies schools might try are the following taken from various researchers for effective literacy integration in content-area classrooms.

Strategy 1: Understanding reading. As a first strategy, readers need to understand the nature of reading in both print and digital contexts. Effective reading is fast, not precise and not strictly or even mostly a visual activity. RAC should mean that readers come to understand the reading process in ways that improve their reading activity (Horning, 2007).

Strategy 2: The teaching of critical reading skills. Readers must be taught specifically how to do critical reading so that they can develop the key skills of critical literacy in all the reading that they do. They must be able to analyze, including summary of key points, main ideas and the point of view of a writer. They must be able to synthesize, that is, draw ideas together from several sources to support their own views and ideas. And finally, readers should be able to evaluate what they are reading, judging authority, accuracy, relevance, timeliness, and bias. When readers can do all these things, they will be able to read more efficiently and effectively, the ultimate goal of RAC (Horning 2007).

Strategy 3: Providing opportunities for practice. Studies not only of students but also of the population at large show that people are reading less and less, so there is a clear need for more reading and more practice with focused critical reading. Teachers can also provide focused practice in reading in every assignment that they give, building readers' skills over the course of every semester through the use of a

carefully constructed set of reading guides (Horning, 2007). Students could be asked to read two books outside of class from a short list of choices of current books on topics related to those discussed in the course. They must also write about these books in a review that not only summarizes key ideas but also ties them to concepts in the course (Le Cordeur, 2012).

Strategy 4: Learning to read in specific disciplines. To be an expert reader in a particular subject area, students need to come to understand the genres and conventions of that discipline. There is also useful research on the nature of communication patterns in different disciplines that can be helpful to those teaching reading across the curriculum (Horning, 2007).

Strategy 5: Provide explicit professional development opportunities that show the instructional value of literacy integration. To increase instruction in reading comprehension in secondary classrooms, schools must show teachers its value in content classes. With solid professional development in this area, teachers can begin to understand that literacy integration does not detract from content coverage but actually improves both comprehension and retention. In addition to receiving appropriate professional development, practicing teachers would also benefit from mentoring and coaching so that they could see the range of possibilities in content literacy. Integrating literacy, in particular comprehension strategies, into content-area instruction need not mean that content learning must suffer (Ness, 2007).

Strategy 6: Create an inquiry-based school environment where teachers critically reflect on their instructional goals and priorities. Secondary schools can provide opportunities for inquiry-based teacher reflection. Though the majority of professional development opportunities will provide teachers with a plethora of reading and writing strategies, teachers are rarely asked to examine critically how literacy instruction might support their instructional goals. When schools create collaborative environments in which teachers share both their instructional successes and struggles, literacy integration becomes a school wide priority, rather than a mere catch phrase (Ness, 2007).

Macdonald (2012) emphasizes that many teachers would be doing many of these strategies without being aware of it. Many science and social studies teachers, for

instance, require learners to locate facts from the textbook. Sequencing is another common skill that is used in Mathematics, Science and Social Studies classes.

However, Macdonald points out that teachers must also make their students aware that these skills are not just practiced in their Reading or Language class, but that they can be applied in all content subjects and in real life. For example, a Science teacher may have a lesson on electricity. Before the textbook reading, the teacher may want to introduce important vocabulary terms that students will encounter when reading the textbook. Within the objectives section of the lesson plans, this teacher would write: Students will be able to identify key vocabulary terms within the text. When discussing the vocabulary terms, it would also be very easy to incorporate a discussion on how the prefix or suffix gives a clue as to the meaning of the word.

This little bit of *reading instruction* won't take more than a few extra minutes in the discussion. However, such a teacher has now made the effort to utilise an important reading skill within the teaching of the Science curriculum. Although it may not seem like a big deal, this teacher has just helped a classroom full of students to become fluent readers. The time is minimal, but if every teacher makes the commitment to apply at least one reading skill each day, the effects will multiply. Through constant daily use, these skills will be refined to the point where they are implemented fluently and without conscious effort (Macdonald 2012).

Peha (2012) suggest the following basic objectives that all teachers can begin to apply in their classroom: Identify the purpose of the text, distinguish fact from non-fact, determine the meaning of words, determine cause and effect relationships, compare ideas or look for contrasting ideas, make observations and analyse issues within a text, locate specific information in a text, use graphic sources to help interpret reading, make generalisations and draw conclusions from a text.

Finally, Howard (1995: 708) suggests that the proper development of reading ability could help to address the great current plague of plagiarism in student writing. He believes that true plagiarism is fundamentally a reading problem, not a writing problem or a problem of morals or ethics. Here plagiarism refers to where students take the work of others and copy word-for-word or do an approximate paraphrase that is essentially the same as the original, without citation. Therefore, to help stem

the tide of true plagiarism, teachers must help students develop the reading skills that will allow them to understand source materials and use them appropriately.

So from the perspective of all teachers, there are a number of reasons why an emphasis on RAC would help them achieve their own goals. Developing students' writing skills requires developing their reading skills. The use of these strategies can help teachers improve students' critical literacy in significant ways across the disciplines. From students' point of view, RAC has the potential to make all of their educational experience much more rewarding and successful.

Reading is clearly the key to work in all courses and in every discipline. So it seems clear that secondary teachers can help students become proficient readers of academic texts if they arm them with a variety of comprehension strategies (Ness, 2007: 229). Furthermore, secondary teachers' goals in every discipline could all be furthered by Reading across the Curriculum (Horning 2007).

Recommendations

Although some teachers might feel that not all teachers need to teach reading, I do believe that all teachers can help their students read more effectively by making small changes to their regular teaching in the areas that I have outlined here. If language teachers take a leadership role in defining how reading is taught, content area teachers can support them effectively without taking time away from their teaching or making radical changes in their practice. In this regard I want to refer to Shanahan (2004) who states that it is crucial that all children learn to read well enough to function effectively in the world which is why it is important to make sure that children learn as much about reading as they can.

Reading research has also shown that reading strategies can be taught to students, and when taught, they can enhance student performance in tests of comprehension and recall (Pearson & Fielding, 1991; Nel, Dreyer & Klopper 2004; Le Cordeur 2010a; Vacca, Vacca & Mraz, 2011). These reading strategies are most effective if they are reinforced through practice in the mainstream curriculum (Bharuthram, 2007). In order to achieve success it is important that this be a collective (school-wide) effort. It is suggested that a good staff development programme be put in place that encourages conversations around the current trends in reading and reading pedagogy. This is important so as to prevent the belief that reading is a

decontextualised process that contains a set of skills/strategies that can be generically applied across content areas (Le Cordeur, 2010b).

Teachers in all disciplines need to refocus on RAC to address students' needs, to achieve instructional goals, and to prepare citizens for full participation in our democracy. Teachers could show students the conventions of texts and websites and pages in their disciplines. Teachers' goals in every discipline could all be furthered by RAC. It does mean that RAC must move to the centre of all educational efforts. More importantly, though, all teachers want students to learn what they are teaching.

Research done by Van Jaarsveld at WITS university showed that one of the main reasons why students perform as poor as they do in Mathematics, is a poor understanding of Language. One student mentioned that the main benefit of her study at Wits was to understand the language of Mathematics (Van Jaarsveld, 2012).

By stressing that literacy develops across sign systems that can include art, music, and movement, in addition to language, Berghoff *et al* (2000) encourages "artful" teaching and learning. It argues, in fact, that those most challenged by traditional curriculum will find with this approach the encouragement to shine.

The goals of self-directed critical inquiry, of using writing to think through genuine problems and issues, and of writing to an imagined community of peers require of students a level of academic writing. It is also difficult for students to read well enough to achieve these goals if they are not stated explicitly, taught directly, and required in students' work (Flower *et al.*, 1990, p. 251). Research done in the UK by Becher (1989: 77) of twelve different academic disciplines, revealed how students found it easier to study reading or to read and write in all subjects.

So to improve student success, the reading problem must be addressed. Teachers all across the curriculum need to renew their focus on reading to improve student performance in all courses as well as in writing (Honing 2007).

Closing remarks

The broad surveys reported on in this paper demonstrate the clear need for a renewed focus on reading. If students want to be successful in school more and better reading is essential. Achieving this goal is within reach if students can read

the material assigned in their courses. Too often, this is not happening. A widespread RAC movement would support faster and better reading in every subject, across the curriculum. If we raise the level of expectation, better reading will follow and teachers will be more successful through RAC (Horning, 2007).

Nationally and internationally, RAC fits well with the Department of Basic Education's Literacy Strategy (DoBE, 2009) and other attempts to address the widespread illiteracy in South Africa. For economic and social reasons, too, a renewed focus on RAC both in and out of school is definitely in order. The implication is that in addition to Writing Across the Curriculum, Reading Across the Curriculum must move to the center of all educational efforts. Thoughtful application of the reading objectives of RAC will provide the basis for student success across the curriculum (Horning, 2007).

Content-area teachers must be encouraged to reshape their understandings of reading and writing across the curriculum as an effective way to improve student understanding and retention of content. In these ways, teachers can begin to critically examine their own instruction and see literacy integration as an essential support for their content-related goals (Ness, 2007:232). Only then will they begin to see literacy integration as a fruitful opportunity rather than an instructional burden.

In conclusion, a wide range of data has been presented here in discussing the poor reading levels of South African learners. These results are presented to highlight the gravity of the reading problems experienced in the South African educational system, in an attempt to convince all schools to teach reading across the curriculum in our schools. It is hoped that this paper will serve as a catalyst for institutions to seriously promote discussions around the importance of reading and the actual implementation of the teaching of RAC, while taking into account some of the suggestions offered.

The nation's large number of struggling readers calls for systemic change. Low levels of literacy is not a problem that can be solved in isolation with some isolated extra tutoring or supplement programmes for those unable to read well – it will take a concerted nationwide policy and effort that reaches deep into districts and the classrooms of teachers across the curriculum. Change must occur at the classroom level, as well as at the school, district and provincial levels.

Clearly, teaching reading to struggling readers means additional work for teachers, but if we want learners to learn the content, we have to help them read that content (Fawcett & Rasinski, 2008: 167). It will be time well invested.

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