READING AT THE SECONDARY LEVEL

CONCERTED ACTION TO SUPPORT READING RESEARCH

Québec

DID YOU KNOW?

STUDENTS WHO HAVE DIFFICULTY UNDERSTANDING WRITTEN TEXTS:

- do not make connections between the different parts of the text
- understand only what is actually written and do not make inferences
- understand only certain types of texts
- do not make a mental image of the text
- cannot distinguish between what is essential and what is less important

READING COMPREHENSION AMONG SECONDARY SCHOOL STUDENTS:

- improves over the course of their studies
- is as evident in the students' ability to understand what is written as in their ability to understand underlying connections
- is more highly developed in girls, although the gap between the sexes diminishes over time

STUDENTS WHO READ TO LEARN:

- use cognitive and self-regulation strategies
- do not, however, use enough strategies recognized as being useful for acquiring meaningful learning

STUDENTS WHO HAVE DIFFICULTY READING TO LEARN ALSO HAVE DIFFICULTY:

- understanding the meaning of what they read
- summarizing a text
- recalling information in a written text
- processing information in types of texts other than narratives
- recalling facts related to different subject areas contained in a text
- making connections between concepts and applying them in similar tasks

THE MOST COMMON TEACHING STRATEGIES ARE:

- asking questions about the content of the text
- giving instructions
- answering students' questions
- reacting to students' questions

TEACHING STRATEGIES NOT USED INCLUDE:

- asking the students to guess what a text is about
- talking to students about what they have read
- referring to actual or virtual sites
- showing the students written works
- giving their opinion about books

READING AT THE SECONDARY LEVEL

Learning the language of instruction is an indicator of academic success at both the elementary and secondary levels. Difficulties experienced in learning the language of instruction lead to the identification of learning difficulties and are one of the main arguments school authorities use to justify their decision to have a student repeat a grade at either the elementary or the secondary level.[1]

Grade repetition and delay appear to be mostly related to gender differences in learning the language of instruction since no significant performance gap has been noted for the other subjects.[2] A survey conducted among young secondary school dropouts in 1997 revealed that 52 per cent of them had failed French, language of instruction.[3]

A study[4] conducted as part of a concerted action to support reading research[5] attempted to shed light on several aspects of reading at the secondary level. Among other things, the researchers were seeking to understand the development of reading comprehension in Secondary I, II and III, and to identify strategies that help students read to learn, as well as teaching strategies currently in use in the classroom.

CONTEXT

In secondary school, students still spend a considerable amount of time learning to read. They are required to read a variety of texts, to develop their ability to understand the information conveyed and to read to learn, i.e. to learn information conveyed in a text.

To become a good reader, one must be able to understand and learn information conveyed in a text. Simply decoding a text is not enough; it is essential that the ideas be understood. The reader must be able to give meaning to a text in order to glean new information and acquire new knowledge. Students who experience cognitive difficulties in reading are either focusing solely on the code and paying no attention to meaning, or they are trying too hard to understand the meaning of the text and guessing at words rather than reading them.

1. M. Pelletier, J. Lamarre and S. Rheault, Boys' *Academic Achievement: Putting the Findings Into Perspective* (Québec: Gouvernement du Québec, 2004), p. 13.
2. Pelletier, Lamarre and Rheault, p. 4.
3. D. Charest, *La situation des jeunes non diplômés de l'école secondaire* (Québec: Gouvernement du Québec, 1997), p. 35.
4. N. Van Grunderbeeck et al., *Étude longitudinale et transversale des conditions scolaires favorables au développement des habitudes et des compétences en lecture chez des élèves du secondaire.* Final report. Fonds FCAR-CQRS-MCC-MEQ-MFE concerted action. Support for reading research, Université Laval, March 2004.
5. This concerted action to support reading research is a follow-up to the *Politique gouvernementale de la lecture et du livre* (government policy on reading and books) aimed at identifying the factors and conditions needed to improve teaching strategies in an effort to promote reading and the sustainable development of reading practices, and was initiated in collaboration with the Ministère de la Culture et des Communications (MCC), the Ministère de la Famille et de l'Enfance (MFE) and the Fonds pour la formation de chercheurs et l'aide à la recherche (FCAR).

> ## Students who have difficulty understanding written texts:
>
> understand only what is actually written and do not make inferences
>
> do not make connections between the different parts of the text
>
> understand only certain types of texts, such as narratives, and know little about other types, such as informative texts
>
> do not make a mental image of the text
>
> cannot distinguish between what is essential and what is less important

READING COMPREHENSION AT THE SECONDARY LEVEL

The researchers studied the development of reading comprehension among Secondary I, II and III students in regular French, language of instruction, classes and individualized paths for learning over a period of three years. Students in each grade were asked to read a five-page text individually and answer a series of questions without referring back to the text. Some questions called for answers that were explicit in the text, while others required that the students make inferences. Still others involved a combination of both types of answer.

The students' results indicate that there is a progression in reading comprehension from one grade to the next. The Secondary III students did better than their Secondary II counterparts, who in turn were more successful than the group of Secondary I students. The longer they have been in school, the more students are able to understand the meaning of a text.

Moreover, in every grade, the results on questions whose answers were explicit in the text were better than those on questions requiring that the students make inferences. The researchers also observed progress on all types of questions from one grade to the next.

When we compare the results of boys and girls in Secondary I, we notice that the girls obtained better results on all types of questions. The gap was more pronounced, however, on questions requiring a combination of both types of answer. In Secondary II, the boys obtained better results on questions requiring that they make inferences, while the girls were better at questions whose answers were explicit in the text and those that required a combination of both types of answer. The boys made progress on all types of questions, while the girls made more progress on questions requiring a combination of both types of answer.

During the three-year study, only 54 students did the test three times at different grade levels. Their results indicate that they made progress from one year to the next, on all three types of questions. The boys, whose average mark was far lower than that of the girls in Secondary I, made much more progress than the girls, so much so that, in Secondary III, their average mark was almost as good as the girls' results, which changed very little between Secondary II and Secondary III. The researchers observed that, over time, the gap between boys' and girls' results tends to diminish. The students developed the ability to identify the main characters in a story and their roles, but had some difficulty recounting the chain of events. In the researchers' opinion, reading comprehension continues to develop beyond Secondary III.

SUMMARY

According to the researchers:

Reading comprehension improves over the course of the students' academic career.

This involves their ability to understand both what is written and underlying connections.

Girls have an easier time with reading comprehension than boys, although the gap between the sexes diminishes over time.

Students have an easier time identifying the main characters in a story and their roles and answering traditional questions than recounting the chain of events.

Reading comprehension continues to develop beyond Secondary III.

READING TO LEARN

Another aim of the study was to examine students' use of reading as a means of learning. Effective readers read with intention and interact with the text. Their actions must explicitly aim at acquiring new knowledge and, to this end, they must use reading, learning and metacognitive strategies. Some students have difficulty reading to acquire meaningful learning.

Students who have difficulty reading to learn also have difficulty:

understanding the meaning of what they read

summarizing a text

recalling information in a written text

processing information in types of texts other than narratives

recalling concepts and facts related to different subject areas and mastering and applying them

making connections between concepts and applying them in other tasks

The researchers also attempted to identify the different strategies for reading to learn used by Secondary I, II, and III students in geography and history class and to relate these strategies to the knowledge acquired.

In the classroom, the students read, individually, three texts of about fifteen pages each, whose content related to a program of study. Some of the content had been introduced in class, while some was new, which allowed the students to make connections between what they had already seen and learned in class and what they were reading. In addition, they were told that their knowledge of the subject, as well as the learning strategies they used, would be evaluated before and after the activity. They were also given a checklist and asked to indicate which strategies they had used during the activity.

The results revealed a general profile describing the main cognitive and self-regulation strategies used by the students during an activity involving reading to learn. According to the researchers, the strategies used were generally similar.

Strategies for reading to learn used by the students

At the beginning of the activity, they made sure that they:

- understood what needed to be done (self-regulation strategy)
- had all the necessary materials (self-regulation strategy)

During the activity, they said they:

- used titles and subtitles to help them identify key points (cognitive strategy)
- underlined, circled or highlighted what they considered important for the task (cognitive strategy)
- adapted their work method according to the progress they made (self-regulation strategy)
- kept the assigned task in mind while reading and learning about the subject (cognitive strategy)
- reread all or part of the text in order to review the content (cognitive strategy)

At the end of the activity, they determined:

- whether they had read all of the texts (self-regulation strategy)
- whether they had accomplished the assigned task (self-regulation strategy)

Many of the strategies that the students did not use had been recognized in previous studies as being very helpful in acquiring meaningful learning.

Learning strategies not used by the students

At the beginning of the activity, they did not:

- allot time for reading all the texts (self-regulation strategy)
- plan the steps in the process (self-regulation strategy)
- set learning objectives (cognitive strategy)*

During the activity, they did not:

- group together the main ideas in a diagram or table (cognitive strategy)*
- copy passages word for word (cognitive strategy)*
- copy important words in the margin (cognitive strategy)*
- take notes summarizing the texts (cognitive strategy)*
- convert the titles into questions and try to answer them by reading (cognitive strategy)*
- rewrite passages they wanted to remember in their own words (cognitive strategy)*

At the end of the activity, they did not determine:

- whether they had successfully managed their time in the classroom (self-regulation strategy)
- whether they had adopted a good work method (self-regulation strategy)
- whether they had achieved their goal (self-regulation strategy)*

* These strategies are known to be very useful in acquiring meaningful learning.

A comparison of learning strategies used by the students who made the most progress and those who made the least progress reveals that the most successful students used more self-regulation strategies. They kept in mind the assigned task, the time they had to read the texts and the goals they must achieve.

The students who made the least progress also used self-regulation strategies, but used fewer cognitive strategies (aimed at acquiring knowledge). It appears that these students have a limited repertoire of cognitive strategies. According to the researchers, these students attempt to adapt to the activity, but do not have the necessary means at their disposal.

The students who made the least progress:

- adapted their work method in accordance with the time they had in the classroom (self-regulation strategy)
- assessed their progress at different points in time in order to ensure that all was well (self-regulation strategy)
- **did not** select strategies that would help them read and learn effectively (cognitive strategy)
- **did not** set a learning objective (cognitive strategy)
- **did not** find examples of what they had read in their personal lives (cognitive strategy)
- **did not** underline, circle or highlight what they considered important for the task (cognitive strategy)
- **did not** repeat word for word the passages they had read (cognitive strategy)

The students' knowledge was evaluated following the activity. They had learned very little.

SUMMARY

According to the researchers, overall, students have a strategic base for reading to learn.

In their opinion, however, it is insufficient and teachers should help students improve it.

Students focus more on reading the text and managing the activity than on acquiring learning.

The researchers suggest helping the better-equipped students improve their repertoire of strategies and learn how to use them more effectively.

They suggest helping the less well-equipped students set learning objectives and evaluate what they have done, while increasing the number of strategies at their disposal in order to improve their performance.

TEACHING AND LEARNING STRATEGIES IN SECONDARY SCHOOL

The researchers also observed teaching strategies in Secondary I, II and III French, language of instruction, and social studies classes, as well as students' behaviour in periods devoted to reading.

Observations were made five times over the course of the three-year study, at a rate of two or three systematic observations in each grade, including individualized paths for learning. Observations of 37 teachers were recorded on checklists containing 48 distinct teaching strategies and 27 learning strategies.

Overall, it appears that teachers frequently use nine of the 48 identified strategies. These can be divided into two categories, i.e. asking the students questions and reacting to their answers. The other strategies were rarely used, if at all, except in French, language of instruction, where up to 16 of them were observed.

The most common teaching strategies are:

- asking questions about the content of the text
- giving instructions
- answering students' questions
- reacting to students and commenting on their answers
- having a student read
- using examples

Teaching strategies not used include:

- asking the students to guess what a text is about
- talking to students about what they have read
- referring to actual or virtual sites
- showing the students written works
- giving their opinion about books
- providing access to books
- asking the students to identify the type of text and to comment on it
- criticizing a text
- asking the students to state the difficulties they encountered

The teaching strategies observed reveal a conventional teaching style focused on questions and limited instructional approaches. Learning strategies were seldom taught. According to the researchers, these teaching strategies were recognized long ago as the least effective. They note that in Secondary III, however, the teaching strategies appear to be more open, while in Secondary Cycle Two there is a greater variety of reading practices. However, in subjects other than French, teaching strategies appear to be limited and fail to adequately reinforce the students' strategies for reading to learn.

Only seven learning strategies were regularly observed among students. This appears to be related to the fact that students are more often asked to answer teachers' questions than to talk about the strategies they use. However, strategies for reading to learn are more common in Secondary I and in French, language of instruction, classes. According to the researchers, the students' strategies do not appear to be conducive to the development of advanced reading skills.

The most common learning strategies are:

- answering oral questions
- answering written questions
- reading to themselves
- reading aloud

Learning strategies not used include:

- talking about what they have read
- grouping together ideas in a table
- explaining their strategies
- talking about the usefulness of their strategies
- confirming their guesses

SUMMARY

According to the researchers:

Teaching strategies focus more on asking questions than teaching learning strategies.

Students are not inclined to talk about the strategies they use.

Teaching reading appears to be limited to one subject, i.e. French, language of instruction.

Strategies for teaching reading should attempt to improve students' reading comprehension, to instill in them habits and attitudes that promote reading, and to promote skills in reading to learn in order to allow them to pursue their studies in a more independent manner.

Methodology

Secondary I, II and III individualized paths for learning, French, language of instruction, geography and history classes in three schools in the Montréal area participated in the study. Year 1 of the study (Winter 2000) involved 340 students in 14 classes; Year 2 (2000-2001) involved 620 students in 19 classes and Year 3 (2001-2002) involved 584 students in 20 classes.

Data was gathered from reading tests and situations involving reading to learn preceded and followed by a series of questions intended to evaluate the students' knowledge and another on the strategies used. All of the classes were observed during reading periods, and each teacher was interviewed by one of the researchers.

The document is available at the following Web site:
www.mels.gouv.qc.ca/publications/menu-rapports.htm