# International School Textbook Seminar (SITE) 2006 Santiago, Chile April 19–21, 2006

#### Goals

Chile's economy is growing at 5.5 percent per year and is based on the sale of copper ore. Chile, like other resource-based economies, is seeking to diversify its economy. The key to future economic growth and diversification is an educated workforce.

The Seminario Internacional Textos Escolares (SITE) 2006 was convened by the Ministry of Education, Chile. The seminar was a direct outcome of the 2004 Organisation for Economic Co-operation and Development (OECD) report (Revision de policies Nacional de Educacion, Chile) that identified a number of strengths and weaknesses in their education system. One of the major weaknesses identified was the mismatch between the aims and the objectives of the curriculum and what was being taught in the classrooms in Chile. The teaching of reading, writing and mathematics was viewed negatively in the report as were pedagogies for differentiated instruction. Given the aforementioned, resources selected by the ministry must align with the curriculum and provide exemplary learning and teaching practices.

The goal of the seminar was to share the broad array of perspectives, relating to school textbooks, from around the world. School textbooks play a central role in education and are very often provided free to students in Europe, North America and in some developing countries. The provision of free textbooks does entail considerable expense and Chile is looking at ways to:

- improve both the quality and access to school textbooks and learning resources
- better align the content of textbooks with national curriculum frameworks and programs of study
- define the characteristics of a high-quality learning resource and the critical elements that comprise a high-quality textbook
- integrate textbooks with other technologies
- provide 'more and better learning' through high-quality textbooks and learning resources.

International participants represented a number of countries, including Australia, Brazil, Canada, Columbia, France, Iceland, Mexico, Norway, Spain, the United States and the United Kingdom. The approximately 200 Chilean and international participants included teachers, graduate students, publishers, ministry staff and university-based faculty of education researchers (please see attachment 1: Directorio de Espositores).

#### **Themes**

The seminar plenary sessions and panel presentations were loosely organized around the following themes.

- Textbook Policies in Other Jurisdictions
- Improving the Quality of Textbooks
- Use of Textbooks in Schools
- Textbooks and Other Learning Resources

The three-day seminar was structured with two plenary sessions each day—one in the morning and the second after lunch. Each plenary session was followed by panel presentations focused around a particular issue. Participants chose to attend a particular panel discussion (please see attachment 2: Programa Seminario Textos Escolares 2006). Presentations in Spanish were translated into English and presentations in English were translated into Spanish.

The international participants made significant contributions to the overall themes of the seminar. Notable contributors included:

- Thomas Duffy, School of Education, Indiana University, USA, *Textbooks of the Future: A Construction of the Teacher and the Learner.*
- Stephen Heyneman, Professor of International Education Policy, Vanderbilt University, USA, *The Place of Textbooks and Public Policies in a Modern Educational System*.
- Mike Horsley, Director of Teaching Resources and Textbook Research Unit (TREAT), University of Sydney, Australia, Textbook Pedagogy: A Sociocultural Analysis.
- Bente Aamotsbakken and Susanne Knudsen, Vestfold University College, Norway, *Digital Portfolios and Teacher Education*.
- Jan van der Akker, Curriculum Director for Netherlands Institute for Curriculum Development (SLO), Twente University, Netherlands, *Exemplary Instructional Materials as Catalysts for Teacher Development and Curriculum Improvement*.

The Canadian delegate, Raja Panwar, Director, Learning and Teaching Resources Branch, Alberta Education, participated in a panel discussion regarding public policies on school textbooks. His presentation, *Supporting High Standards and Achievement Through Learning and Teaching Resources: The Canadian Context*, provided an overview of the provincial and territorial processes and policies in the procurement of high-quality learning and teaching resources. The role of the departments of education through legislation and policy, the selection criteria and the various procurement processes and methods that ensure high quality learning and teaching resources were shared at the panel presentation. As well, using Alberta as a case study, the policies and processes were reviewed in greater depth.

Key ministry staff from various countries, including Chile, discussed the potential of an international forum to maintain the dialogue on textbooks and to find ways to ensure there are future seminars on textbooks at least once every two years, with a specific theme.

#### **Conclusions**

The major conclusions made at the seminar are as follows.

# 1. Textbooks are a vital aspect of education

Research shared at the seminar demonstrates that high-quality textbooks will remain one of the most important factors in improving learning. It is critical that students have access to free high-quality textbooks if they are to learn. This is especially important for students from disadvantaged backgrounds. Research findings show a high degree of correlation between student access to high-quality textbooks and improved learning, as measured by international assessments such as the Third International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA). Nations that have invested in ensuring each student has access to a textbook have made greater strides in the overall quality of education and in economic and social progress.

# 2. Textbooks are changing

Textbooks continue to evolve in response to the latest findings on how students learn and to better integrate digital technology. One such change is that textbooks are decreasing in size as student exercises and other material are offered online or on a CD–ROM. The textbook then focuses on conceptual understanding and making the learning experience more relevant to the student. The blending of school textbooks and digital content is taking place in the following ways:

- Textbook content is supported or supplemented with additional digital content.
- Textbook content is duplicated in digital formats for a variety of reasons, including
  the support of students with special education needs and to allow adaptations to
  differing student learning styles.
- Digital content allows for the provision of additional material, such as online help. Digital formats also increase interactivity and practice opportunities and promote conceptual understanding through multimedia presentation.

## 3. <u>Textbook design/development/authorization/procurement policies</u>

High-quality textbooks are extremely complex to design and develop and require both specialized and professional competencies and enlightened policies. To ensure the development of high-quality educational materials, departments of education must set conditions that require competition and choice. Unlike Canada, Australia, the United States and Scandinavia, many countries do not have a market-driven procurement process. In general, market-driven processes result in higher-quality texts than those produced by departments of education or other monopolistic processes.

In many countries in the world, teachers are not involved in the development, review and field testing of textbooks.

# 4. Schools are purchasing fewer textbooks and spending more on photocopying

Although there is no Canadian data, research data, published in 2005 from the Australian state of Victoria, indicates that schools are spending less on textbooks and more on photocopying. Anecdotal information indicates a similar trend in other jurisdictions. In Victoria, schools spent AUS \$1 billion on technology and AUS \$178 million on texts—a 5 to 1 ratio that is increasing annually. Schools are choosing to spend more on technology and photocopying and less on textbooks. Investments in textbooks and technology are perceived very differently.

The purchase of large quantities of textbooks occurs when a new curriculum is implemented and is viewed by educators as a capital expenditure. Technology, on the other hand, demands evergreening on an annual and ongoing basis so as to meet changing expectations and evolving standards. Technology upgrades lend themselves more readily to annual budgets than planning for large expenditures once every five or ten years. This trend, if not monitored and checked, could have a negative impact on student achievement. As mentioned earlier, there is a correlation between student access to quality textbooks and increased learning. There is, as yet, no data that links investments in technology with improved learning. School administrators need to ensure that the basic requirement of student access to textbooks is met before diverting resources to technology.

## 5. Research on textbooks and lack of teacher training on how to use textbooks

Given the correlation between student access to textbooks and student achievement, and the considerable expense to which governments go in providing school textbooks, it is surprising that few places in the world conduct research on such questions as what makes textbooks effective, how are textbooks used by teachers and what is the best way to organize the graphics and print to promote student learning. Two exemplars include the International Association for Research on Textbooks and Educational Media (IARTEM), based at Vestfold University College in Norway, and the Teaching Resources and Textbook Research Unit (TREAT) at the University of Sydney in Australia. IARTEM organizes a biannual international research conference and publishes conference reports. TREAT conducts research on a wide array of topics, such as how texts are used in schools and how teachers decide which textbook to purchase.

Conference participants agreed that the weakest link in teacher education is that teachers are not equipped to assess the quality of learning and teaching resources, nor how to use them effectively. Research in Australia indicates that effective teachers use textbooks very differently from novice teachers, but this knowledge is not being shared with students in teacher education programs. As it is teachers who select and use textbooks for instruction, this gap in knowledge needs to be addressed. Investment in high-quality, and expensive, learning and teaching resources will not be fully realized unless teachers become more knowledgeable in this area.

# 6. Assessment criteria for identifying and retaining high-quality and effective textbooks

In many parts of the world there are no criteria to assess the quality of textbooks. Criteria such as curriculum congruency, instructional design, language level, overall difficulty, page layouts and technical design are important, but there is an emerging awareness of the importance of social considerations. Textbooks have been known to have errors of fact and portray minority cultural and linguistic groups in a stereotypical or outdated manner. As countries become multicultural, or become aware of the educational needs of their indigenous populations, assessment criteria take on new importance. Inclusive education policies require inclusive textbooks and the involvement of such populations in assessing textbooks for use in schools is increasingly becoming a necessity.

It appears that no jurisdiction undertakes a formal assessment of the effectiveness of textbooks once they are in use in classrooms. In free market conditions, where there is a range of choice available, schools will purchase the most effective resource.

### Suggestions for follow-up:

- The Council of Ministers of Education in Canada (CMEC) should participate in international seminars on textbooks. Staff from provincial and territorial departments of education can learn and contribute much to these hemispheric discussions. Additionally, Chile, like Canada, is a member of NAFTA. This connection could result in closer ties in education and could open doors to other mutually collaborative activities, such as exchanges in educational services, programs and goods.
- Provincial and territorial departments of education should consider sending staff to the 2007 International Association for Research on Textbooks and Education Media (IARTEM) conference. Attending ministry staff would learn more about the research regarding the criteria for effective textbooks and how textbooks and digital learning resources can be integrated or blended.
- Provincial and territorial departments of education should consider evaluating the
  effectiveness of authorized textbooks at an early or the mid-point of a curriculum
  implementation cycle. Findings from this formal assessment could be incorporated
  into procurement strategies, processes and improved assessment criteria and should
  be viewed as part of a continuous improvement cycle.
- Teachers should be part of any provincial or territorial assessment of learning and teaching resources. The additional cost is well worth the investment as it yields better resources, more professional teachers and a closer match between the "intended" and the "taught" curriculum.
- Provincial and territorial departments of education should consider requesting faculties of education to provide courses on how to use learning and teaching resources more effectively in classrooms.