Appendix C: Research Findings

Overview

The examples in this guide draw on a wide range of current research published between 1990 and 2004. This includes studies, surveys, reports, literature reviews, procedural reviews, and analyses conducted across Ontario, Canada, the United States, Australia, and in other OECD countries. The research is supported by examples of approaches and effective practices currently in use in several different school boards across Ontario.

Much of the research focuses on planning school entry for children with special needs, based on long experience in planning their entry into Kindergarten, and can be generalized to all children.

Research commissioned by the Ministry of Education has highlighted the guiding principles that support effective planning for school entry and identified the key features of effective planning discussed in this document. In addition, these and other research findings:

• underline the importance of planning for school entry;

• demonstrate that the timing of school entry is critical in early childhood development;

• stress the need to build bridges from preschool settings to the school setting.

The Importance of Planning for Entry to School

Positive early experiences with school are of paramount importance to young children, who arrive at school with different backgrounds and experiences, at different stages of development, and with different needs (Ontario Ministry of Education, 1998).

Entry to school can be a significant culture shift for children. It often implies a change from play-based, developmentally appropriate practice to more academically related requirements that may bring additional challenges (Conn-Powers, Ross-Allen, and Holburn, 1990).
Such change can be confusing and anxiety-producing for the child and family (Fowler and Ostrosky, 1994). Changes are “times of vulnerability”, especially for children with special needs and their families (Rice and O’Brien, 1990). However, young children's positive experiences in different settings, such as family, peer group, preschool, and school, will contribute to their successful entry to school (Pianta and Kraft-Sayre, 1999).

It is important to create mechanisms and practices to sustain and build on those positive experiences, especially of competence. Children who receive additional environmental support as they move into and through Kindergarten and the early elementary grades perform better in school – for example, in reading and mathematics (Ramey and Ramey, 1998).

Starting school is not just an experience for the individual child. Rather, it is a community experience, involving a wide range of people (Pianta and Kraft-Sayre, 1999). That experience involves not only how children adjust to school but also how families and the school interact and collaborate. Indeed, starting school is a significant “family milestone” for parents and other family members as well as children (Rosenkoetter and Rosenkoetter, 1993). School entry has a major impact on family routines and relationships.

Most families view entry to school as a positive experience. They are optimistic about their child’s upcoming entry to school and feel the child is ready for new challenges and more exposure to academic activities (Rosenkoetter and Rosenkoetter, 1993). That creates a positive climate for change that supports the child and the family through the school-entry process and is reinforced in the community, where the child’s peers and their families are embarking on the same change.
Critical Timing

Children’s early learning experiences have a profound effect on their development and school readiness - that is, their ability to meet the task demands of school (such as sitting quietly) and to assimilate the curriculum content at the time of entry into the formal school system (Kagan, 1992).

New evidence has shown that development from the prenatal period to age six is rapid and dramatic and shapes long-term outcomes (First Ministers’ Meeting Communiqué on Early Childhood Development, September 11, 2000). Opportunities for a child to learn by solving problems through play drive the development of multiple sensing pathways in the brain. There are critical periods when a young child requires appropriate stimulation for the brain to establish the neural pathways needed for optimum development. During these early critical periods, children are developing binocular vision, emotional control, habitual ways of responding, language and literacy, and a beginning understanding of symbols and relative quantity. Many of these critical periods are over or waning by the time a child is six years old (McCain and Mustard, 1999).

Scientists believe that children are especially primed for acquiring language and language skills between nine months and five years of age. This “critical period” begins to wane between ages five and seven. A person’s fluency and vocabulary can continue to improve after age seven in languages that the individual has already started to learn. However, if learning a second language does not begin until around puberty, eventual fluency will be much less than it would have been had the learning started earlier (Doherty, 1997).

In Kindergarten, children’s receptivity to new influences and capacity to learn are at their peak. During this period, they acquire a variety of important skills, knowledge, and attitudes that will affect their ability to learn, their personal development, their relationships with others, and their future participation in society (Ontario Ministry of Education, 1998).
Building Bridges From One Developmental Stage to Another

Ideally, early child development programs and the school system should be part of a continuum for children that extends from the early years through to adulthood (McCain and Mustard, 1999). There is a long way to go to develop the systemic bridges that can support that goal.

Faculties of education train teachers, and colleges of applied arts and technology programs train early childhood educators. McCain and Mustard (1999) recommend that these institutions develop articulation agreements and programs for training in early child development that bridge both professional worlds. Although some institutions have such agreements in place, there is more work to be done in this area. That could help the 10 per cent of children in Ontario in regulated daycare settings. The next challenge is to reach out to unregulated care situations (McCain and Mustard, 1999).

Rosenkoetter (1995) suggests that the goal of planning for school entry should be to create as much continuity as possible for young children entering Kindergarten by developing a partnership among families, schools, and communities that is aimed at facilitating the transition from preschool to Kindergarten.

Kagan (1999) describes continuity as a principle involving three aspects: philosophy, pedagogy, and structure. Effective school-entry strategies aim to build greater congruence among the beliefs and values underlying educational practice, between the curriculum content and the instruction process, and among the broad system/legislative issues that shape services, such as policies, regulations, and funding (Kagan, 1991).