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Kindergarten for four-year-olds: a measure to promote school and social success in children from disadvantaged backgrounds

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Introduction

There is converging research evidence that children of preschool age need to develop their ability to regulate their emotions and behaviours in order to succeed in school. They must also develop other skills that contribute to the learning of reading, writing, and mathematics.[1,2,3,4] From the very start of school, major differences can be seen among children with respect to these skills. In Quebec, a French-language Canadian province, 26% of children come to school with significant cognitive or socio-emotional delays.[5] Although these children come from various backgrounds, their number increases according to their level of material and social poverty.[5] It is generally recognized that these delays hinder children's ability to succeed in school,[6] and that these children are at higher risk of experiencing conflictual relationships, which can also

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compromise their school success.[7]

Subject

Having four-year-olds take part in a kindergarten program is one of the educational strategies used to promote school readiness. In Canada, these programs were first set up in the 1970s; they are offered half-time at public schools to four-year-olds in disadvantaged areas.[8] In 2013, Quebec introduced a full-time kindergarten program for children from underprivileged backgrounds.[9] The justification for such a measure is based on the finding that families in underprivileged areas are less likely to use government-regulated childcare services and that their children are over-represented in poor-quality childcare services.[10],11 Yet quality preschool services are necessary to foster school readiness. Quality is defined by the service's structural characteristics (adult-child ratios, training and remuneration of staff) and by the quality of its processes (adult-child interactions, child-child interactions, and educational activities).[12] Studies amply describe the characteristics of effective programs, but the quality of preschool services still varies widely throughout North America.[13] Children of all backgrounds usually benefit from a high-quality preschool environment, but children from underprivileged backgrounds benefit even more; hence the initiative of offering a full-time program.[14,15]

Research results

Research results are clear, but consensus on educational strategies is lacking

The type and the number of stimulation activities offered in preschool programs are the subject of lively debate among researchers, practitioners and decision-makers. While some advocate development of the whole child, others prefer the teaching of specific skills. In the United States, for example, there has been strong political pressure to have preschool services focus on the development of cognitive skills within structured learning situations, as is often done in school.[16] This position is probably influenced by a number of studies which show that preschool skills in math, reading, and writing, along with children's attention capacity, are the best indicators of later school success.[17] Yet many U.S. researchers are opposed to this orientation, arguing that it disposes of all the other areas of children's development that are linked to their ability to learn.[16] Currently, there seems to be a growing consensus that preschool stimulation activities should target the child's overall development.[18]

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In addition, there is a whole debate around the best educational approaches for getting children to develop these skills. This debate revolves around the respective roles of the adult and the child in the educational process. The play-centred approach gives preference to the child's initiative in his or her learning and is often opposed to a so-called teacher-directed approach, where the teacher assigns activities for the children to do. A recent meta-analysis[19] as well as the Chicago Child-Parent Centers[20] program show that direct teaching approaches are associated with higher performance in terms of children's cognitive skills. On the other hand, when it comes to self-regulation and socio-emotional skills, approaches combining child-initiated play and adult-initiated structured teaching appear to be more effective.[14] However, the studies included in the meta-analysis are several years old and are often imprecise as to the specific nature of the approaches used. They may not take into account recently recognized practices for promoting the development of certain skills in children. These recent practices, which could be qualified as direct instruction, are carried out in a fun and interactive context. Thus, they are different from more traditional methods, which for the most part consisted in having children learn through repetition as a group.

In order to shed some light on the range of educational approaches, Table 1 presents a continuum of the approaches compiled, with free play and direct instruction at the two opposite poles. For each approach, we present the respective roles of the child and the adult, the quality of the interactions between them, and the objectives pursued. For several authors, child-initiated play is central to the acquisition of the skills needed to adapt to school.[2,21,22] But is this single approach sufficient for children who have special needs or whose quality of play is poor, as is often the case in children from disadvantaged backgrounds?[21] In guided play, the adult intervenes to create a more complex (i.e., symbolic) play situation since this type of play is associated with the development of competencies such as the self-regulation of emotions and behaviours.[23] Table 1 also presents the category of directed play, in which learning objectives are focused on school prerequisites, such as language-related notions. While still starting from the children's interests, the teacher using directed play targets the acquisition of specific skills. The category of playful learning involves activities initiated and prepared by the adult to explicitly teach specific skills. This teaching is usually done in small groups, in a way that encourages frequent and warm interactions between the teacher and the child or among the children themselves. These interactions are supported by strategies such as discussions, behaviour modelling, role playing, problem solving, interactive reading, and games among the children. Finally, the "drill and practice" category of educational approaches describes structured

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teaching situations where the teacher organizes and controls the activities. Here, teachers use repetition, memorization and worksheets; for example, they show the children letters, numbers and vocabulary words and ask them to identify and repeat them.

According to the research, these approaches are all associated, to varying degrees and depending on the application contexts, with the child being better prepared for school. In this respect, a balanced approach that includes activities initiated by the child (free play, guided play and directed play) and by the adult (playful learning and drill-and-practice) is likely the most worthwhile avenue.[14] However, there is little data available to back up this view. Regardless, given the research findings on the value of all the approaches compiled here, imposing a single approach could deprive children of experiences that would otherwise contribute to their development.

Conclusion

The success of the educational approaches is strongly associated with the quality of the interactions between the teachers and the children.[24] To ensure this quality, effective teaching should make use of a variety of approaches, including explicit instruction, engaging in warm interactions that are sensitive to the child's needs, providing feedback, verbal interactions, and making sure the stimulation offered is purposely directed toward achieving learning objectives. Moreover, this teaching should take place in an environment that is not too structured.[25] Indeed, this environment should offer a balance between adult-initiated and child-initiated activities. These requirements for quality teaching are high. Consequently, it is essential that teachers be supported in using a variety of approaches to promote children's overall development. This support should be based on best practices and provided through a professional development program specific to preschool education.[26]

Table 1. Preschool educational approaches situated along the child play (C) / adult-structured (A) continuum

Play				Direct instructions
		Balanced		
Free play	Directed play	Directed play	Playful learning	Drill and practice

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C initiates play A provides an environment rich in play opportunities Exchanges with A are not required unless C decides otherwise Pedagogical objective: development of complex (symbolic) play	C initiates play A supports child through modelling or prompting Exchanges with A are required, but are adapted according to C's proposals and play abilities Pedagogical objective: development of complex (symbolic) play)	C initiates play A supports child through modelling or prompting A-C exchanges are required, frequent, warm, and centred around C's needs Pedagogical objective: learning of specific skills	C initiates play A supports child through modelling or prompting A-C exchanges are required, frequent, warm, and centred around C's needs Pedagogical objective: learning of specific skills	A determines learning situations: who does what with who, when and how Exchanges with C are not required unless A decides otherwise. A has same objectives for all. Pedagogical objective: learning of specific skills

Symbolic play: activity freely chosen by the child where the child is emotionally and intellectually engaged without concern for day-to-day demands.

Balanced approach: the learning opportunities are initiated by C or by A, and A makes sure there is a balance among the various educational approaches so as to foster the child's development.

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