

## **IMPLEMENTATION OF A MUSIC EDUCATION PROGRAM TO ENHANCE SCHOOL PREPAREDNESS IN FOUR-YEAR-OLDS LIVING IN DISADVANTAGED AREAS IN QUÉBEC**

In 2013, the National Assembly of Québec adopted Bill 23 concerning the implementation of the Full-Day Kindergarten for 4-Year-Olds From Disadvantaged Areas (FDK4). The Ministry of Education, Recreation and Sport (MELS) hopes to reach a larger population of children at higher risk for learning problems at the start of schooling. Currently, 65 of Québec's 70 school boards offer this program.

The FDK4 aims, among others, to develop cognitive, language, motor, and socioaffective skills. Although the program is based on a mandate to foster overall development, previous learning consistently poses considerable challenges for many children who grow up in low socioeconomic areas. On average, an estimated 10% of Québec children have significant developmental delays when they enter kindergarten. In the poorest areas, this percentage is as high as 30%. It is noteworthy that more than 18,000 four-year-olds in Québec live in an area with a deprivation index of 9 or 10 out of 10. This represents 21% of all children in this age group. Given this situation, *is there an innovative way to improve school preparedness in the most vulnerable four-year-olds attending Québec's kindergartens?*

Numerous studies in neuroscience, psychology, and education show that music education is one of the most promising ways to achieve this goal. Studies conducted in preschool children from disadvantaged areas indicate that music (including nursery rhymes), whether listened to, sung, or performed on instruments, can foster the development of attentional functions, increase IQ, enrich phonological awareness, improve coordination, and encourage harmonious peer interaction. Yet, despite these well-documented benefits, musical activities are not specifically included in Québec's current FDK4 program. The literature contains a large body of evidence attesting that music education can help improve academic performance.

In the proposed study, we will assess the effects of implementation of a music education program on the cognitive, language, motor, and socioaffective skills of children attending the FDK4 in Québec. A sample of 216 children will participate in the project (random assignment). The experiment will take place over one school year (35 weeks) in two targeted Québec regions. In one condition, 72 will participate in a 50-minute weekly music education program (Orff approach). In a similar condition, 72 other children will participate in a weekly physical activity program called *En jouant+*. The control group will comprise 72 children with no intervention. Standardised measures will be used to assess cognitive, language, motor, and socioaffective skills (blind testing). Questionnaires will assess education practices, family practices, and children's pleasure and stress. The analysis procedures will be appropriate for our research objectives. Quantitative analyses will assess the effects of the music education program, with comparisons to the physical activity program and no intervention. Qualitative analyses will be used to analyze the questionnaires (teachers, parents) and classroom observation grids.

This study is based on solid evidence. Scientifically, the results will contribute to advance the knowledge by identifying the more effective music education strategies to improve the overall development of children in disadvantaged areas. The results could be transposed to other preschool situations across Canada, given that many provinces offer similar programs to four-year-olds. This approach could also be applied to First Nations children, who generally live in poorer conditions. These would constitute direct applications in educational and pedagogical terms. In other terms, this program would have significant social impacts, as it aims to provide

tangible avenues for improving the lives of many children who must cope with social and academic challenges every day.