A summary of Research Regarding Multi-Age Classrooms

Guiding our work in planning for multi age class configurations is a body of research that focuses on a child’s social emotional development. We conducted extensive searches for scholarly articles on this topic. We found a large volume of research regarding multi age classrooms and social emotional learning. Our conclusion from this research is that multi age groups benefit students in both social emotional development and academic learning.

The French Immersion team from SCE, along with the district’s Instructional Leadership team have summarized some of the research below. It is a sampling of what is available and includes research meta-analysis, articles from scholarly journals, work shared with us by local researchers from UBC and postgraduate research.

Social Emotional Learning (SEL)

Dr. Kim Schonert Reichl from the University of British Columbia asserts that a growing body of empirical research shows that social and emotional skills rival IQ in predicting educational attainment, labour market success, health, and criminality (Heckman & Kautz, 2014).

Social and emotional competencies include children’s ability to recognize, understand, and effectively respond to emotions, manage stress and be optimistic. They also include showing concern for others, sustaining healthy relationships, and making effective personal and social decisions (Weissberg, Durlak, Domitrovitch, & Gullota, 2015)

A Vancouver-based study asked Grade 10 children to volunteer 1-1.5 hours per week with elementary school children. After 10 weeks, researchers found participants had significantly decreased their risk for cardiovascular disease. The greatest health benefits were seen in children who displayed the highest self-report measures of empathy and mental health (Schreier, Schonert-Reichl, & Chen, 2013). Strong social connections in adolescence are a better predictor of well-being in adulthood than their academic achievement (Olsson, 2013).

Feelings of belonging are associated with lower emotional distress, the reduction of negative behaviours (such as bullying and mental health issues), and are associated with rates of higher resilience later in life (van Harmelen et al., 2016).

Children’s perception of kindness within a school is a consistent indicator of a positive school climate. Students who see kind behaviours in students, teachers and staff also describe their school environments as being safe and encouraging places to learn. As children transition from Grade 4 to Grade 8, perceptions of kindness in schools decrease (Binfet, Gadermann & Schonert-Reichl, 2016).

A Meta-Analysis of 213 studies involving 270,034 students by (Durlak et al., 2011) found that intentionally designing the learning environment to include a focus on Social Emotional learning had the following effect:

- 22% increase in Social Emotional Competence
- 9% increase in positive attitudes
- 9% increase in kind behaviours
- 11% increase in academic achievement
- 9% decrease in aggressive behaviour
- 10% decrease in emotional distress
Social Emotional Learning and Multi Age classrooms

Connected to research on the importance of Social Emotional Learning is the notion that multi age groupings are a structure and a strategy that promote social emotional learning. The research that our team has reviewed supports multi age groupings, including classrooms with three grade levels, as being superior to traditional single grade classrooms for the development of social emotional learning. Research that cautions against multi age groupings are most often in the context of "grade based" learning environments where curriculum is rigid and checklist like. Where curriculum is modern, flexible and multi-disciplinary, as is our BC Provincial Curriculum, multi age class configurations work well and provide advantages to learners, when they are planned and designed with intention and purpose.

- **Children's Social Behavior in Relationship to Participation in Mixed-Age or Same-Age Classrooms.** McClellan, Diane E.; Kinsey, Susan
  **Summary:**
  This investigation used a teacher rating scale to assess children's prosocial, aggressive, and friendship behaviors in mixed- and same-age classrooms. Posttest findings suggested a significant positive effect on children's prosocial behavior because of participation in a mixed-age classroom context. Fewer children appeared to experience social isolation in mixed-age classrooms than in same-age classrooms. Aggressive and negative behaviors were significantly less likely to be noted by teachers in mixed-age than in same-age classrooms.

- **The Benefits of the Mix** Lilian G. Katz
  **Excerpt:**
  Many parents mistakenly believe that mixing the ages only benefits the youngest children. The benefits go both ways. For example, in mixed-age groups, older children more often exhibit leadership than the very same children show when they are among their same-age peers. Indeed, many older children who are not confident leaders in their own age group seem to feel less threatened when attempting to be leaders in mixed-age groups. They also engage in more help-giving, explaining, teaching, and sharing behaviors, and show greater sensitivity to the complexities of group processes in the mix. These are useful life skills to develop.

  Research on social benefits indicates that children very early associate different expectations with different age groups. Experiments have shown that even a three-year-old, when shown pictures of older and younger children in hypothetical situations, will assign different kinds of behavior to an older child than to a younger child. For instance, younger children assign to older children instructive, leadership, helpful, and sympathizing roles, whereas older children assign to younger children the need for help and instruction. Thus in the mixed-age group, younger children perceive the older ones as being able to contribute something, and the older children see the younger ones as in need of their contributions. These mutually reinforcing perceptions create a climate of expected cooperation beneficial to the children, and to the teachers who otherwise feel they are doing all the giving.

- **A Comprehensive Look at Multi-Age Education**
- Journal of Educational and Social Research MCSER Publishing, Rome-Italy Vol. 5 No.2 May 2015 Nadeem Saqlain
  **Excerpt**
Multi-age education is effective because students' strengths are emphasized instead of their weaknesses and students feel less competition (Aina, 2001; Banks, 1997). Multi-age schooling recognises that each learner is different by focusing on the developmental stage of learners. Diversity is embraced and students are provided opportunities to gain knowledge through interaction with each other. Multi-age schooling motivates students by providing activities according to their learning styles, learning abilities, intelligences and interests (Banks, 1997). According to Gaustad (1997), group learning increase social skills and decrease antisocial behavior.

- **Multi-Age Classes and High Ability Students**
  
  Review of Educational Research 69(2) · June 1999  
  Linley Lloyd

  This article reviews research on multi-age classroom organization as an option for high ability students. Studies of both cognitive and affective factors in multi-age contexts have consistently shown positive, sometimes significant, effect sizes. Studies of different types of ability grouping have shown that arrangements most likely to have positive and significant results are those where the curriculum is differentiated. Teachers of multi-age classes may be more likely to see their students as diverse rather than as similar and to provide developmentally appropriate (that is, differentiated) curricula. Multi-age classes are discussed as an alternative to self-contained classes and pullout programs for high ability children.

- **Examining the Transition Experience of Students from Multi Age Elementary Programs to SingleGrade Classrooms at the Middle School**
  
  Loyola University Chicago 2012  
  Cindy Lynn Ruesch

  Excerpts

  The purpose of this simultaneous, mixed methods study was to provide an in depth examination of the transition effects on students who transition from multi age elementary classrooms to traditional single-grade classrooms at the middle school. In the analysis of the data showed that the students’ overall sense of self and self-esteem improved over the course of the transitional year. Student concerns with procedures, academics, and social life decreased over the course of the year. The following major categories emerged from the interviews:
  (a) adjusting to the structure of middle school,
  (b) adjusting to new academic demands,
  (c) managing relationships with teachers and peers, and
  (d) changing sense of self.

  One of the challenges for multi age programs is getting parents to commit to a program that is different from the traditional model out of fear for causing harm to their children or somehow creating a future hardship when their child is asked to transition back to the traditional model. This research suggests that parents need not fear the transition from multi age elementary programs to single-grade classrooms. Thus, as a potential reform model, multiage classrooms at the elementary level are a viable option for meeting the academic and social-emotional needs of students without fear that students will experience difficulty adjusting to the traditional model upon entering middle school.

- **Journal of Multiage Education, Vol. 1, No 3**  
  Lester, Nita C. 2005

  Excerpt

  The following organizational strategies are useful for multi-age teaching and learning:
o schedules and routines that promote clear, predictable instructional patterns, especially those that enhance student responsibility for their own learning and flexible use of time
o use group learning experiences across and within year levels
o develop skills and strategies that allow children to have a high level of independence and efficiency in learning individually or in combination with others
o develop strategies and routines where children serve as “teachers” to others within and across different year levels (peer tutoring)

French Immersion and Rich Language Environments

In a French Immersion context, multi-age groupings can be beneficial. Students arrive to school with a variety of abilities, prior knowledge, life experiences, interests and exposure to culture and language, regardless of age or grade. Language acquisition occurs at varying rates for all students, even for students in the same age or grade group (Mahadi & Jafari, 2012). Internal and external factors affect language acquisition. Internal factors include age, personality, intrinsic motivation, experiences, cognition and native language. External factors include the curriculum, instruction, culture and status, extrinsic motivation and access to native speakers inside and outside of the classroom. Other important factors for language acquisition include authenticity, context, competency integration and student centered, personalized learning situations (Sieloff Magnan and Tochon, 2001). These factors exist independently of peer groupings and are experienced differently by all students. Of these factors, motivation, or the need or desire to learn the language, is the most significant in learning a second language (Mahadi & Jafari, 2012).

Having students with a variety of experience in French Immersion in the same class together provides an opportunity for peer interactions and peer mentoring and this can be motivating for students, particularly those provided with mentorship opportunities. Student to student interaction in a second language context leads to “more comprehensible linguistic input and more productive and ‘negotiated’ output” (Flanigan, 1991). When students are able to engage in writing, speaking, listening and reading activities together they develop a collaborative dialogue. Collaborative dialogue, which occurs when learners encounter linguistic problems and attempt to solve them together, is a communicative and cognitive tool thought to be of particular significance for language learning (Swain, Briks & Tocalli-Beller, 2002). Simply stated, peer collaborative dialogue mediates second language learning. This is coupled with our language rich environments to create diverse and personalized learning experiences. In our language classrooms, we use a multimodal approach to literacy, which allows our learners to access learning from different entry points (video, images, gestures, sound), thereby meeting the needs of our learners.