Advancing the Science and Practice of Social and Emotional Learning in Schools

Recent research findings and population-level approaches to assessment

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What knowledge, skills, attitudes, and values will our young people need in order to meet new challenges and achieve success in life and in work in the 21st century? What competencies are needed to ensure that children and youth will thrive and flourish in their roles as the citizens of tomorrow? In the face of current societal, economic, environmental, and social challenges, identifying the skills and competencies that children and young people need for the future is critical, now more than ever before (Schonert-Reichl & Weissberg, 2014).

What has emerged in recent years is a growing consensus among educators, researchers, policy makers, and the public-at-large that what is needed is a more comprehensive vision of education—one that includes an explicit focus on educating 'the whole child' (Association for Supervision and Curriculum Development, 2007; Bushaw & Lopez, 2013; Greenberg et al., 2003; Rose & Gallup, 2000). Parents, students, and the public-at-large are also beginning to call in increasing numbers for such a focus. Business and political leaders are urging schools to pay more attention to equipping students with what are often referred to as '21st century skills' (Heckman, 2007; National Research Council, 2012), including problem solving, critical thinking, communication, collaboration, and self-management. In order for children to both thrive in the moment and to achieve their full potential as productive adult citizens in a pluralistic society and as employees, parents, and volunteers, there must be explicit and intentional attention given to promoting children's social and emotional competence in schools (Weissberg & Cascario, 2013).

Promoting social and emotional competence in schools: What does the research say?

A growing body of literature demonstrates that children's social and emotional competence not only predicts success in school (for example, see Oberle, Schonert- Reichl, Hertzman, & Zumbo, 2014), but also predicts a range of important outcomes in late adolescence and adulthood, including physical health, substance dependence, and overall well-being (Moffitt et al., 2011). Recognising the interrelationships between social-emotional competence and academic success, researchers have argued that fostering positive social and emotional development may be key to enhancing academic growth (see Greenberg et al., 2003; Zins, Weissberg, Wang, & Walberg, 2004).

In a study of 423 sixth and seventh graders, Wentzel (1993), for example, found that students' pro-social classroom behaviours, such as helping, sharing, and cooperating, were better predictors of academic achievement than were their standardised test scores, even after taking into account academic behaviour, teachers' preferences for students, IQ, family structure, sex, ethnicity, and days absent from school.

Similarly, in a longitudinal study of 294 Italian children, Caprara and colleagues (2000) found that pro-social behaviour in third grade (average age 8.5 years), as rated by self, peers, and teachers, significantly predicted both academic achievement (explaining 35 percent of the variance) and social preference (explaining 37 percent of the variance) five years later, when children were in eighth grade. Most interestingly, this 'pro-sociality' score, which includes cooperating, helping, sharing, and consoling behaviours, significantly predicted academic achievement five years later, even after controlling for third-grade academic achievement. In contrast, early academic achievement did not contribute significantly to later achievement after controlling for effects of early pro-sociality.

In a recent short-term, longitudinal study of 441 sixth-grade Canadian students, (Oberle et al., 2014) examined the association between social and emotional competence and academic achievement in early adolescents. Social-emotional competence in grade six, as reported by teachers was shown to be a predictor of student academic achievement test scores in math and reading in grade seven.

Jones, Greenberg, and Crowley (2015) examined the degree to which late adolescent and early adult outcomes were predicted by teacher ratings of children's social competence measured many years earlier, when children were in kindergarten. Kindergarten teacher ratings of children's pro-social skills (getting along with others, sharing, cooperating) were found to be significant predictors of whether participants graduated from high school on time, completed a college degree, obtained stable employment in adulthood, and were employed full time. Moreover, kindergarten children who were rated by their teachers as high in pro-social skills in kindergarten were less likely as adults to receive public assistance, live in or seek public housing, be involved with police, be placed in a juvenile detention facility, or be arrested. These findings suggest that we cannot underestimate the importance of assessing young children's social and emotional competence early on. They contended that these 'softer' skills can be more malleable than IQ or other cognitive measures and, hence, important contenders for intervention.

Social and emotional learning: An emerging field in education

Social and emotional learning (SEL) is the process by which individuals acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage their emotions, feel and show empathy for others, establish and achieve positive goals, develop and maintain positive relationships, and make responsible decisions (Collaborative for Academic, Social, and Emotional Learning, 2015). SEL teaches the personal and interpersonal skills that all humans need to handle themselves, their relationships, and their work, effectively and ethically. As such, social-emotional competence is viewed as a 'mastery skill' underlying virtually all aspects of human functioning.

Historically, SEL has been characterised in a variety of ways, often being used as an organising framework for an array of prevention and intervention efforts in education and developmental science, including conflict resolution, cooperative learning, bullying prevention, and positive youth development (Devaney, O'Brien, Resnik, Keister, & Weissberg, 2006). SEL builds from work in child development, classroom management, and prevention, as well as emerging knowledge about the role of the brain in self-awareness, empathy, and social-cognitive growth (for example, see Best & Miller, 2010; Carter, Harris, & Porges, 2009; Diamond & Lee, 2011; Greenberg, 2006).

One model for SEL has been created by the Collaborative for Academic, Social, and Emotional Learning (CASEL) (www.casel.org), a not-for-profit organisation in Chicago, IL that has been at the forefront in North American and international efforts to promote SEL. Since its inception, CASEL has defined SEL more specifically and has served as a guide to school-based SEL programming (CASEL, 2005). Based on extensive research, CASEL (2015) has identified five interrelated sets of cognitive, affective, and behavioural competencies that are central to SEL: Self-Awareness (e.g., the ability to accurately recognise one's feelings and thoughts and their influence on behaviours); Self-Management (e.g., the ability to regulate one's emotions, thoughts and behaviours in different situations); Social Awareness (e.g., the ability to take the perspective of and empathise with others from

diverse backgrounds and cultures); Relationship Skills (e.g., the ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups); Responsible Decision Making (e.g., the ability to make constructive choices about personal behaviour, social interactions and school and life expectations based on consideration of ethical standards and the well-being of self and others).

SEL is sometimes called 'the missing piece,' because it represents a part of education that is inextricably linked to school success but has not been explicitly stated or given much attention until recently. SEL emphasises active learning approaches in which skills can be generalised across curriculum areas and contexts when opportunities are provided to practice the skills that foster positive attitudes, behaviours, and thinking processes. The good news is that SEL skills can be taught through nurturing and caring learning environments and experiences (Weissberg et al., 2015).

SEL is grounded in research from developmental cognitive neuroscience that indicates that social and emotional skills can be taught across the life span and are viewed as more malleable than IQ (Schonert-Reichl & Kitil, 2016). Perhaps some of the most compelling evidence for the malleability of social and emotional skills comes from a recent meta-analysis conducted by Durlak et al. (2011). The meta-analysis conducted by Durlak et al. (2011) examining the effectiveness of SEL programs included 213 school-based, universal SEL programs involving 270,034 students from kindergarten through high school examining findings of effectiveness. Their findings revealed that students in SEL programs, relative to students who did not receive an SEL program, were found to demonstrate significantly improved social-emotional competence, attitudes, and behavioural adjustment (increased prosocial behaviour and decreased conduct problems and internalised problems). SEL students also outperformed non-SEL students on indices of academic achievement by 11 percentile points. Durlak et al. (2011) found that classroom teachers and other school personnel effectively implemented SEL programs.

Assessing SEL in schools and communities

One crucial step in advancing the future agenda of promoting students' social and emotional competence in schools and communities involves the development and implementation of psychometrically sound and developmentally appropriate measurement tools to assess and monitor children's social and emotional development over time. 'What gets assessed gets addressed' – this widely known axiom suggests that systematic assessment is key to create an accountable system in which social-emotional skills, on an equal footing with academic skills, are prioritised, evaluated, and used to plan policies and programs to promote children's ability to care for themselves and others and prevent adjustment problems later in life.

In British Columbia (BC), Canada, researchers at the University of British Columbia are building toward a comprehensive child development monitoring system. A central component of this system is the Early Development Instrument (EDI)—a teacher-report questionnaire that has been used across BC since 2001 to gather data about children's developmental characteristics at age five and how ready they are to start school. EDI data provide essential insights into how the health and well-being of our children is changing over time so that evidence-based decision making can improve our investment in children and therefore improve child development outcomes. BC EDI data confirm that, over the past thirteen years, while vulnerability in children's language and cognitive development has reduced, there has been a sustained and steady increase in vulnerability in children social competence and emotional vulnerability (see EDI Provincial Report, http://www.edibc2016.ca/).

More recently, HELP researchers created the Middle Years Development Instrument (MDI; Guhn et al., 2012; Schonert-Reichl et al., 2012). This instrument, now being used in 50% of the school districts in BC, across Canada and internationally, is designed to routinely and reliably assess children's development and wellbeing during these transitional 'middle childhood' years between childhood and early adolescence. The MDI questionnaire, administered to children in grades 4 and 7 (ages 9 and 12), asks children to report on their social-emotional development, well-being, feelings about school, home, and life, and the presence of social and contextual assets at home, in schools and communities (e.g., the supportiveness of adults and peers, after-school program participation).

The MDI has five unique characteristics that have contributed to the survey's acceptance and usefulness within BC schools and communities. The theme that runs through each of these is the importance of making data available and accessible to those using it toward program and policy innovation.

First, the MDI gives children a voice in reporting how they feel, how they spend their time, and what they would want to see changed within their schools and communities. This voice is essential, not only to provide perspective for policy makers and educators on setting priorities, but engaging children directly and actively in decisions about their schools and communities

Second, the survey gathers data at a population-level: all children within participating school districts take part in the MDI unless they, or their parent, opt-out. This method avoids common sampling pit-falls including under-representation of children from ethnic minorities or families with lower educational attainment (Anderman et al., 1995; Ellwood et al., 2010). It also promotes stakeholder interest in the results as the survey data represents actual children within a local context as opposed to a statistic derived from a weighted sample (Guhn et al., 2012).

Third, implementation of the survey requires collaboration between schools, school districts, and community partners. This ensures that, once results are reported, both schools and communities work together on improving things for children: this mechanism reflects the continuum of children's lived experience both inside and outside school.

Fourth, the MDI explicitly asks children about their perspectives on a wide range of social, emotional and physical health issues that are of great interest to parents and guardians. In doing so and in ensuring that reporting is public and accessible, the MDI provides invaluable information to support parents in their own relationships with their children.

Fifth, the MDI has been designed to reflect and support broader changes taking place in the BC Education system (changes that are being seen in many other parts of the world). The current transformation of the education curriculum in BC to include personal and social competency at the heart of students' learning is fully underway (see https://curriculum.gov.bc.ca/). The MDI can act as important tool in understanding the effectiveness of this renewal approach and in supporting administrators and teachers to understand how to see progress toward improved personal and social competence.

Toward systems change in education

A focus on SEL in the education system requires a systematic perspective and approach (Durlak et al., 2015). The acceptance of the importance of SEL to children's lifelong health, wellbeing and achievement is a good first step. And underpinning this acceptance with solid evidence and ongoing research about the power of SEL is essential. But to achieve real change in our education systems requires new ways of thinking and behaving: a systems thinking approach.

Not only do we need to be concerned with both researching and scaling out effective programs and interventions, but we also need to shine a strong light on the critical importance of supporting teachers own wellbeing and the nurturance and effective systems leadership in the education sector (Patti et al., 2015; Mart et al., 2015). These last two and essential components of the required culture shift in the education system. A final essential ingredient is the ongoing capture of relevant and useful data, both at an individual and population level, that holds the focus in the right places, that provides a foundation for evaluation and that gives an on-going measure of progress at the level of the population toward the larger goal of overall improved child well-being.

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