What is the impact of developing non-cognitive skills on students in special education?

The term *non-cognitive skills* is often used to reference necessary skills for life success not easily measured. This is a grossly misleading term, as the skills referred to require significant cognitive work. When non-cognitive skills are referenced it is generally understood that one is referring to goal-directed effort, healthy social relationships, sound judgement, and decision making. These skills can be taught and require significant cognition, so many educators prefer the term *Social Emotional Learning (SEL) Competencies* (Duckworth & Yeager, 2015).

There are many descriptors and interpretations of Social Emotional Learning Competencies, but in reviewing the research themes emerge. The College & Career Competency Framework identifies 26 competencies that are loosely organizes into three domains: Intrapersonal, Interpersonal, and Cognitive ("College & Career Competency", n.d.). The Collaborative for Academic, Social, and Emotional Learning (CASEL) divides SEL into five competencies: self-awareness, social awareness, responsible decision making, self-management, and relationship skills ("CASEL", n.d.).

As I reviewed the research, I was looking for two types of impact: impact on students with extraordinary needs directly and the impact of such learning on the way students receiving general education responded to those receiving special education services. The most surprising finding of my review was the paucity of current (within the last decade) research available in this area, not least of which was the lack of available research that included all, or even most, of the 13 IDEA Disability Categories. My original intention was to focus on the five SEL

competencies described by CASEL to identify the impact of developing non-cognitive skills on students in special education. However, I was able to find very little quality research on four of the five competencies. Granted, the number of students receiving special education is relatively small compared to the general population – 14% in the 2017-2018 school year ("National Center for Education Statistics", n.d.) and more than half of those students had specific learning disabilities, speech, or language impairments – making sample sizes and generalizability challenging for researchers; but, I would have thought that with the amount of money spent in special education ($78.3 billion in the 1999-2000 school year ("Special Education Expenditure Project," n.d.)) that there would be more studies. I would also have thought, that with increasing pressures from parents to receive Free Appropriate Public Education for their children, that school districts would want to know the relative merits of different interventions for learning and I did see some evidence of researchers attempting to demonstrate the relative merits of different programs – commercially available programs – but they were quite limited. Maybe, the lack of clear definitions of SEL Competencies is a factor, the lack of clear training for teachers, or even the diversity of disabilities, or the prevalence of research silos; regardless, this is an area that could use considerably more research done.

Of the five competencies explored, self-management seems to have the most accessible research, especially as it relates to students with Autism. Part of the reason for this might be how closely related self-management is to self-determination, which has long been a priority for the American special education system. There does exist some current research on self-determination, especially as it relates to students with disabilities and many of the SEL competencies are required for self-determination. So, in an attempt to answer my initial

question, I chose to use some of the research on the impact of teaching the skills for self-determination as a proxy for the larger category of non-cognitive skills.

With respect to students with disabilities, the skills required for self-determination, like goal setting, problem solving, and decision making, enable students to assume greater responsibility and control which is important to their self-esteem and self-worth (Ward, 1996). "Moreover, when students with disabilities show they can make things happen and take responsibility for planning and decision-making, others change how they view them and what they expect from them" (Wehmeyer, 2002). It is from this stance that I looked to address my two sub-questions.

What is the impact of developing SEL competencies on students with disabilities?

Within this domain, there are several areas to explore. The research seems to be mostly focused on learning to support students in daily functionality, especially those with Autism. Lee, Simpson, and Shogren (2017) conducted a meta-analysis that showed that teaching self-management to students with autism increased the frequency of appropriate behaviour which, by extension, should enhance their quality of life. They identified that the benefits were not universal, and the study did not extend beyond looking at the immediate effects of improved self-management skills for the students. Self-management strategies empower students to control their own behaviours which serves two benefits: it increases their acceptance and ability to function in regular education classrooms, and they increase the students' ability for self-determination.

Konrad, Fowler, Walker, Test and Wood (2007) published a literature review that connected instruction of self-determination skills with increasing academic skills for students with Learning Disabilities (LD) and/or attention deficit/hyperactivity disorder (ADHD). This study attempted to fill a gap in the research. According to Konrad et al. prior literature reviews looked at the impact of developing self-determination skills on social skills and on-task behaviours, but not whether or not improvements in those areas had a positive impact on academic achievement. Their findings showed that some strategies were more effective than others, but the most effective strategies were those that were combined with strategies to improve student productivity.

Carr, Anderson, and Moore (2014) worked on a study that brought both of the previous findings together. In their study they looked at research that connected the development of self-management skills with improvements in social skills and academic achievement. Their review of literature also found reductions in challenging behaviours which increases opportunities for children with ASD to receive support in regular education classes. Another interesting piece of this study is that it looked at people from many different age groups and function ability levels. The results showed that improving self-management skills improved social and academic outcomes.

From this research base one can conclude that teaching Social Emotional Learning Competencies to students with disabilities benefits them is several ways. They increase their quality of life, they are better able to function in mainstream classrooms, and they increase their ability for self-determination. The research has also shown that by developing SEL Competencies, students

with disabilities academic achievement is likely to improve (Espelage, Rose, Polanin, 2016). This last point has also been borne out in studies of general education students (Durlak, Weissberg, Dymnicki, Taylor, and Schellinger, 2011) and is a growing area of research.

What is the impact of general students learning SEL competencies on students with disabilities?

This question is easy to answer but difficult to find research to support the answer. Logically, as intrapersonal and interpersonal skills are developed in a student body, inclusion will become easier and those with disabilities will find more success. They will find more success socially which will transfer to success academically. Reicher (2010) describes the different ways SEL can be integrated throughout schools to benefit all and that it underlines inclusive learning cultures (p. 237). And then, in a meta-analysis, Taylor, Oberle, Durlak, and Weissberg (2017) demonstrated that students with SEL Competency training fared significantly better than their peers in socio-emotional skills, attitudes, and indicators of well-being. Unfortunately, with this study, they did not focus on students with learning disabilities, they were included in the general mix. Finally, Sokal and Katz (2017) are more direct: "In order to facilitate the success of inclusion as an approach and philosophy, it is important that all class members as well as their teachers develop the skills to understand on another, and to communicate and work together effectively".

How does the impact of SEL Competency instruction on student with disabilities inform my proposed project?

The central question of my study is "Are student self-assessments, using standardized profiles, of Core Competencies in British Columbia, a valid method for measuring their development of the seven identified Core Competencies?" There are several reasons I am interested in doing this research. Practically, British Columbia has put non-cognitive skills at the heart of their redesigned curriculum in the form of the Core Competencies; however, there are no mechanisms for systemic reporting of such SEL Competency development. Another reason I am interested in this work is the lack of value we give SEL Competency skills, simply because they are not easy to measure: reading, writing, and numeracy are easy to measure so we judge schools and school systems based on those, yet non-cognitive skills have a much greater impact on individuals and their communities. From this stance, I was interested to find out what the research said about the impact of SEL Competency development on students with disabilities.

The findings of my research for this paper mirrored much of the research I had already done about the value of non-cognitive skills for youth and for their development. However, there were several elements I did not think about or anticipate. I am embarrassed to admit that I did not consider the impact such skill development would have on the success of students with disabilities. From the research I found, and referenced above, it seems as though the learning of non-cognitive skills provides greater impact for students with disabilities than it does for students without disabilities. This manifests itself in two key areas. I had failed to consider how closely aligned SEL Competencies are with Executive Skills, which we know are necessary for effective learning and living. The other area this manifests itself is in the learning environments created when SEL Competencies are taught: they become much safer and more welcoming for students with disabilities. I was also surprised by the lack of research available connected to the impact

of SEL Competency learning on students with disabilities, especially in the area of creating inclusive environments.

Coming from this work, I am rethinking some of the rationale for my project and think that I should add a section specifically referencing the impact of developing non-cognitive skills for students with disabilities and for the creation of inclusive learning environments that benefit all. Increasingly, I think that there is a symbiotic relationship between developing non-cognitive skills and inclusive environments, in that creating an inclusive environment also helps develop non-cognitive skills. This will not change my research questions, but the implications of findings and future directions will be impacted.

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