Supporting SEL in Progressive Design Contexts

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Abstract: The current study examines the use of CA approach to support SEL and identify micro-level instructional strategies. Using interaction analysis, we identify eight strategies used by an expert facilitator that have implications for designing situated professional development programs for training novice facilitators to become more effective at fostering SEL competencies.

Keywords: Social and emotional learning, Progressive Education, Cognitive Apprenticeship

In the recent years the field of Education has brought holistic education to the forefront by emphasizing issues surrounding socio-emotional learning (SEL). SEL is the process of regulating one's thoughts, feelings, and behaviors for making responsible decisions, maintaining empathetic learning environment, and collaborating with others by becoming aware of one's own and other's behavior (CASEL, 2012; Weissberg, Durlak, Domitrovich & Gullotta, 2015). Despite SEL's success in enhancing children's mental well-being and academic performance (Elias & Moceri, 2012), developing productive SEL environments is challenging. The challenges emerge from a lack of support for teachers to develop socio-emotional skills among the students, and SEL's reliance on traditional behavioristic instructional paradigms in developing the curriculum. To address these challenges, systemic level changes, along with a movement towards more progressive socio-cultural instructional paradigms are needed (Elias & Moceri, 2012). The strategic choices that teachers make to enact the curriculum are fundamental in implementing SEL curriculums, yet rarely studied by researchers. Hence, we propose the use of a Cognitive Apprenticeship (CA) model of instruction (Collins, Brown & Newman, 1988) for promoting SEL among children. We examine (RQ) What strategies a teacher uses to operationalize CA methods in the teaching of SEL. By unpacking how SEL principles align with CA model, we analyze the difficulties in applying the CA methods in SEL environments and recommend professional development strategies to adopt progressive forms of instruction.

The study was conducted during Fall 2015 and Spring 2016 semesters, in a weekly afterschool design club at an elementary charter school in the Northern US. Two facilitators led four groups of sixteen 3rd to 6th grade students, who worked on fictional design projects using different kinds of technologies. One of the facilitator was an expert with 15 years of experience working with children developing socio-emotional skills and the other facilitator was a 2nd year graduate student with limited experience in the field. The afterschool club was a program that emphasized developing children's design skills in collaborative learning environment. Video recordings of classroom sessions were reviewed for identifying lessons taught by the expert facilitator (expertise in CA methods), addressing aspects of SEL. Eight episodes of varying lengths (approximately 14 incidents and 80 minutes of teacher talk) were preliminarily selected for further analysis. An episode was an uninterrupted whole class discussion and incidents were split within episodes based on the topic of discussion. Using Interaction Analysis methods (Jordan & Henderson, 1995), the episodes were analyzed for understanding teacher's instructional moves and open-coded for specific strategies used by the teacher. Once the first level codes were generated and reviewed collaboratively they were refined, compared and reorganized around the teaching methods designed by the Cognitive Apprenticeship model (Collins, Brown & Newman, 1988).

SEL encompasses competencies pertaining to cognition and emotion. Eight strategies emerged from the data that connected to or extended CA methods within SEL environments. As shown in Fig. 1, these strategies were embedded within the larger context of situated, reflective practices and further categorized as Emotion-focused or Cognition-focused strategies. The Emotion-focused strategies mostly pertained to SEL competencies of self-management and self-awareness: regulating and recognizing emotions, sensemaking, positive mind-set etc. The Cognition-focused strategies mostly pertained to SEL competencies of responsible decision-making, relationship skills and social awareness: making constructive choices, problem-solving, empathy, effective communication etc. Although similar evidences were gathered for all the strategies, in this section we will only discuss the Emotion-focused strategies. In one of the episodes from L4 (Fall 2015), the expert facilitator used Emotion-focused strategies to appreciate a team's effort at regulating their emotions and managing conflicts; and encouraged other students to do so. She *Replayed an experience* from previous class in order to help students develop a deeper understanding of desired design processes. She discussed this incidence during the whole-class reflection session by saying "So, last time, they (group 2) were trying to design a garden just like many of you were, but they had some differences with

regards with types of things they wanted. Leo really wanted to design a car, and the other team members push Leo to try and explain and provide some reasons for why he should try & build a car. Now, Leo tried to provide some rationale, and they tried to think about it very, you know, very hard, but, was this an easy conversation for you guys to have?" She then *reframed* some of the difficult conversations as evidence of 'hard work' and acknowledges their frustration by saying "that happens because it's really difficult for any group to try to make a joint decision. This is really, really, common, but that level of frustration and difficulty shows that you are actually doing something right". The facilitator used a variety of other strategies not explicitly stated in the CA framework. These strategies focus on helping students regulate their emotions. By reframing, the facilitator reduced the amount of negativity associated with a difficult process and acknowledged emotions using articulation. Unlike CA model, the facilitator helped the students think aloud about their thinking processes and encouraged the class to talk about how it makes them feel so as to normalize and contextualize these feelings.

Our findings show that SEL can be integrated by using CA model of instruction; however, the model needs to be extended for supporting the emotional aspects through practices grounded in theories of emotional scaffolding and regulation (Rosiek, 2003). The strategies used by the teacher for developing

Cognitive Apprenticeship Model in SEL environments

Emotion focused strategies

Reframing: constructively defining problems, by using contextually relevant examples
Replaying Experiences: focused on repeating past interactions from the class to facilitate learning
Acknowledging Emotions: explicitly discussing the learner's emotional experiences, validating them, and making them acceptable in the community
Encouraging: motivating students and groups by appreciating their efforts at expressing their emotions

Cognition focused strategies

Concretizing abstract concepts: making abstract concepts like empathy, failure, design etc. more tangible for students.

Provocative questions: posing questions to make students think deeply and guiding them to make decisions systematically

Process Talk: explicitly discussing the thinking that facilitated a design decision for the teacher Constant comparison: drawing comparisons between the student's processes and how the experts in the field function.

Figure 1. Definitions of Emotion-focused and Cognition-focused strategies

these competencies have to be equally diverse and well-integrated. The teacher's allegiance with the student's classroom experiences and letting their needs drive the curriculum is fundamental. As such, helping teachers to develop the necessary professional skills to learn how to support SEL with progressive models of instruction like CA may require us to rethink our approach to professional development. However, more research is needed on unpacking expert progressive practices to support the types of complex socio-emotional and domain-specific learning required by an increasingly collaborative, socio-technical society.

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