Middle Level Students’ Perceptions of Their Social and Emotional Learning: An Exploratory Study

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Abstract

As teachers and administrators focus increasing attention on the mental health needs of students, researchers are exploring ways that addressing social-emotional needs is essential to academic growth as well as personal wellness. This descriptive investigation explored ways that seventh and eighth grade students perceived their social-emotional development in a school context in which teachers integrated social and emotional learning (SEL) with academics. An English Language Arts (ELA) teacher and a team of university researchers observed students during lessons, gathered work samples, and interviewed students across a school year. Intensive case studies with ten students provided descriptions of the types of connections students made with their learning experiences and ways these connections varied.

Participants made visible connections with teachers on a personal level. They connected with peers spontaneously and reflected on peer relationships to varying levels. Reflecting on these social connections helped develop self-awareness, social awareness, and relationship skills. Reflections also enabled participants to connect interests, engagement, and accomplishment to varying extents, enhancing capacities for self-management and responsible decision-making. Results suggest that emphasizing the process of reflection in reading, writing, math, science, social studies, and electives may be a powerful way to enhance social and emotional learning in the flow of classroom events.

Keywords: middle school, social and emotional learning, classroom research

Parents, teachers, and youth advocates recognize the uncertainty of the transition from childhood to adulthood. Some students thrive during this period; some lose a bit of momentum; others continue to wrestle with the same difficult challenges faced since early childhood. In school settings, uncertainties often swirl around academic achievement – how to boost test scores and engage disengaged learners.

Faced with this complexity, educators sometimes experience conflicting priorities. They want to support students through social-emotional challenges they may face. At the same time, they want students to learn academic content and do well on mandated assessments. Consequently, many educators focus on specific approaches: find the best instructional methods, identify special needs, and prescribe interventions. While these efforts may have impact, research is showing that
nurturing social-emotional needs and supporting academic growth must be carefully integrated. More specifically, studies have demonstrated that boosting achievement without addressing social-emotional needs is almost impossible (Farrington et al., 2012; Nagaoka, Farrington, Ehrlich, & Heath, 2015).

This investigation explored the interactions among social and emotional learning and classroom experiences with seventh and eighth grade students in a small middle school setting. Participating students shared their perceptions of teachers’ efforts to support and engage them across a school year, providing descriptions of the connections they made with their experiences and suggesting possibilities for integrating academic and personal development.

Review of Literature

To provide a framework for examining students’ perceptions of themselves and their schooling, we reviewed research related to the general field of social-emotional development, the factors of school success, interactions among emotions and thought. To integrate these insights, we generated a basic proposition to guide research design. In this section of our report, we summarize our review of literature in these areas.

In recent years, organizations such as the Collaborative for Academic, Social, and Emotional Learning (CASEL) have advocated a comprehensive approach to social-emotional development (Ross & Tolan, 2018). In a recent review, Main and O’Neil (2018) noted that SEL encompasses a broad array of competencies “including resilience, cooperation and negotiation skill, a positive identity, a sense of self-worth, empathy for others, decision-making and problem-solving skills, impulse control, anger management, stress management, and self-regulation” (p. 157).

To provide a structure for understanding and addressing SEL, researchers, educators, and child advocates in the CASEL collaborative identified five Core SEL Competencies:

Self-Awareness – the ability to accurately recognize one’s own emotions, thoughts, and values.

Self-management – the ability to successfully regulate one’s emotions, thoughts, and behaviors in different situations.

Social Awareness – the ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures.

Relationship Skills – the ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups.

Responsible Decision-Making – the ability to make constructive choices about personal behavior and social interactions based on ethical standards, safety concerns, and social norms. (The Pennsylvania State University, 2017, p. 4)

Ross and Tolan (2018) reported meta-analyses examining the impact of programs designed to improve students’ SEL based on the CASEL model (DuBois, Holloway, Valentine, & Cooper, 2002; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Horowitz & Garber, 2006; Losel & Beelman, 2003). The programs investigated provided systematic instruction in the skills of SEL in school settings grades K-12. To examine the psychometric properties of the CASEL model, Ross and Tolan (2018) re-analyzed data from an earlier investigation with more than 1500 students in the middle grades. Confirmatory factor analysis supported the construct validity of the five-factor model. Longitudinal analysis showed that the model is closely aligned with important indicators of success.

Overall, SEL is positively related to school engagement and grades, and negatively related to risky behaviors, delinquency, and depressive symptoms, and each outcome relates to one or more specific scales, with substantial consistency in which SEL skills relate to which outcome over early adolescence. These results support the notion that social and emotional competencies are importantly linked to outcomes of success and thriving in adolescence. (Ross & Tolan, 2018, p. 1192)

Main and O’Neil (2018) reviewed programs designed to enhance SEL specifically in the middle grades. They concluded that educators need to integrate the teaching of these skills. “Many of the competencies such as resilience, a sense of self-worth, decision-making self-control, and relationship building could be proactively embedded within daily classroom learning experiences and linked directly with self-regulated learning to enhance educational outcomes” (p. 161).

As researchers have emphasized the need to incorporate SEL into the flow of classroom experiences, related studies have highlighted the mental dynamics that impact academic performance.
Farrington et al. (2012) conducted an extensive review of research on factors that enable achievement. They used the term “noncognitive factors” to represent essential dynamics of school success and identified five key categories:

1. academic behaviors – attending class, being prepared, paying attention, and doing homework
2. academic perseverance – persisting with assignments despite obstacles
3. academic mind-sets – perceiving one’s own beliefs about oneself in relation to academic tasks
4. learning strategies – using tactics to learn and remember
5. social skills - working well with classmates and teachers (pp. 9–10).

From their research, Farrington and her colleagues defined optimal learning conditions. Students who perform well academically engage with learning activities, pay attention, participate in class, and complete homework. Among successful students, these behaviors become habits as they internalize social skills, develop growth mind-sets, and know how to use learning strategies that work for them. These dynamics enable the academic perseverance successful students need to accomplish challenging tasks.

Farrington and her colleagues emphasized the complexity of these factors in their conclusions regarding students who are less successful.

Our research framework of noncognitive factors sheds a different light on the phenomenon of students who exhibit poor academic behaviors. Perhaps what looks like a lack of caring or persevering could be a student indicating that she is convinced that she cannot do the work. Another student may not have effective strategies for engaging in classroom tasks … In our own research, we find that the vast majority of student want to succeed in school, but many obstacles get in the way of their putting forth effort. (p. 73)

While Farrington and her colleagues do not directly address the role of emotions in shaping the behaviors, skills, attitudes, and strategies they identified, a parallel body of research has documented ways that emotions shape interactions among academic and social competencies. Immordino-Yang (2016) and her colleagues examined neurological responses to a wide range of academic and social tasks. Their findings showed intricate connections between emotions and attention and memory.

A revolution in neuroscience over the past two decades has overturned early notions that emotions interfere with learning, revealing instead that emotion and cognition are supported by interdependent neural processes. It is literally neurobiologically impossible to build memories, engage complex thoughts or make meaningful decisions without emotion. (Immordino-Yang, 2016, p. 10)

They defined emotions as “action programs that have evolved as extensions of survival mechanisms” (p. 18). Emotions such as curiosity and interest guide intellectual and social decisions. Significant learning involves connections among academic skills and meaningful personal experiences.

Insights from CASEL, Main and O’Neil (2018), Farrington et al. (2012) and Immordino-Yang (2016) suggested that social-emotional growth is a complex, negotiated process. Young adolescents enter middle school with perceptions of themselves as people and as students based on their experiences. New encounters with teachers, classmates, or subject matter trigger sets of emotions. To pay close attention, understand, and remember important ideas, students need an emotional connection. Negative experiences reinforce doubts and weaken confidence. Together, emotional interactions shape perceptions of identity, which then impact new interactions. Feelings and understandings intertwine as they create thoughts.

We designed this research project to explore ways these interactions occurred with seventh and eighth grade students. To integrate these insights, we framed a proposition to guide the study: The types of social-emotional connections students make with their experiences shape the extent of their personal and academic development. This proposition framed our research questions:

1. What types of social-emotional connections do students express regarding their experiences in school in interviews, observations, and assignments?
2. How do students differ in expressing these social-emotional connections?

Context for the Study

This study took place in a laboratory middle school (LMS) for 6th, 7th, and 8th grades. The mission of LMS “is to be a learning community where all students are valued and care for themselves and
others. We promote health and wellness and a commitment to learning through experience in a caring, collaborative, and socially just environment.” Our study occurred across the second year of operation.

To be eligible to attend LMS, students must meet a general category of “low performance,” which includes a range of criteria: met end-of-grade proficiency, but earned poor grades; exhibited extreme behavioral issues; demonstrated lack of growth progress over time or did not meet growth targets; experienced social-emotional issues or contextual factors such as trauma, familial issues, etc. About three-fourths of students were previously enrolled in nearby public schools and others were home-schooled or enrolled in private schools.

Located in a rural county with a population over 40,000; LMS enrolled fifty-six students during the 2018–19 school year. Approximately 76.8% of students identified as White, non-Hispanic; 14.3% as multiracial; 5.4% as Native American; and 3.5% as Hispanic. In addition, 20% of the LMS population was labeled as Exceptional Children (i.e., special education) and 46% receive free or reduced lunch. LMS employed six full-time teachers and a full-time principal, all of whom had at least five years’ experience teaching at the middle level.

Each day, students spent twenty minutes in grade-level advisory groups. A primary focus of these sessions was guided exploration of social-emotional issues. Drawing from The REACH Strategies Guidebook (Pekel, 2016) and other resources, teachers led discussions related to themes of self-awareness, relationships, responsibility, motivation, talents and interests, organizational skills, diversity, community, and coping skills. Teachers encouraged students to make connections among these issues and the topics they are studying in their classes.

During the 2018–19 school, teachers collaborated to develop two interdisciplinary units featuring Project Based Learning as advocated by PBL Works (2019). Students participated in two PBL experiences. Seventh graders explored natural disasters and engineering; eighth graders explored microbes, diseases, and health.

**Methods**

A university researcher and the ELA teacher led this investigation, supported by five undergraduate research assistants. Teachers invited students to participate in case studies. Selection criteria included willingness to meet with researchers and share work samples. Teachers selected eight seventh and eight eighth graders to represent gender, socioeconomic status, and achievement levels. Researchers invited these students to provide consent. The resulting sample included two seventh grade girls, three seventh grade boys, two eighth grade girls and three eighth grade boys. Five of these students had participated in exploratory interviews conducted during the first year, so, for them, we had additional data.

From October through May, researchers observed lessons, gathered work samples, and interviewed students. As preservice teachers, the five undergraduate researchers regularly participated in lessons. They interacted informally with participants, collected work samples, and recorded observational notes. They also conducted debriefing interviews with teachers at the end of lessons. Each of the five researchers spent at least ten days in classrooms. Additionally, researchers conducted two types of interviews. At the end of each nine weeks, personal interviews elicited students’ perceptions of themselves and their experiences in school. At the end of each semester, task interviews elicited perceptions of participants’ engagement with PBL activities (see appendix for the interview protocols). To encourage research assistants to follow the protocols, the lead researcher demonstrated interviewing techniques with them individually and as a group.

The two lead researchers constructed preliminary analyses of individual cases using procedures recommended by Yin (2009) to interpret data in relationship to the research questions. Our strategy reflected his emphasis on stating “theoretical propositions” to guide data collection and analysis (p. 130). For this study, our proposition was “The types of social-emotional connections students make with their experiences shape the extent of their personal and academic development” (see Conceptual Framework section above). Using this proposition, we identified comments from interviews, observations, and assignments in which students expressed perceptions of the connections they made with classroom experiences. We organized these data chronologically to create ten individual case reports.

To address the first research question (What types of social-emotional connections do students express regarding their experiences in school in interviews, observations, and assignments?), we analyzed case reports using the “pattern matching” analytic technique described by Yin (2009, p. 136). In our first
round, we sorted student responses by topic. Three clusters emerged: students made connections with teachers, connections with peers, and connections related to their academic learning. These three large clusters characterized many, but not all, of the perceptions participants shared with researchers and provided a framework for describing the types of social-emotional connections students expressed and for organizing the next round of analysis.

To address the second question (How do students differ in expressing these social-emotional connections?), we clustered participants based on the extent of their academic progress across the school year. The ELA teacher prepared a progress summary using three measures: the average of standards-based grading on quarterly report cards, levels of proficiency on the state-mandated achievement end-of-grade (EOG) test in ELA, and scale score gains on the EOG. To give equal weight to all three measures, she reported all three on a four-point scale. The first two measures used a four-point scale. For the gain scores, we created a four-point distribution (loss = 0; gains of 1–4 = 1; 5–9 = 2; 10–13 = 4; 14+ = 4). Table 1 presents the teacher’s summary ratings.

As the table indicates, all ten participants showed evidence of academic progress. Although William and Michael did not achieve proficiency, they did show growth. Jessica, Thomas, and Ben showed proficiency on ELA standards, but not on the EOG. The other four students made more progress. Based on these data, four students were categorized as making more academic progress: Ella and Sophie from 7th grade, Daniel and Hayley from 8th grade. Thus, the case reports were organized into two groups for further analysis: Group 1—Michael, William, Ryan, Ben, Thomas, and Jessica; and Group 2—Sophie, Ella, Daniel, and Hayley.

To complete our analysis, we examined case reports within each of the two groups, again using pattern matching analytic technique. We first worked independently and then compared our analyses. We identified patterns of responses within the three general clusters (connections with teachers, connections with peers, connections related to

|                | Summary assessment of achievement of English Language Arts Standards | Performance Level on End-of-grade assessment in English Language Arts | Scale score points gains on End-of-grade assessment in English Language Arts | Total |
|----------------|------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------|-------|
| 7th grade      |                                                                        |                                                                     |                                                                         |       |
| William        | *2.7 Approaching = 2                                                   | Limited Command = 1                                                 | +4 scale score points = 1                                               | 4     |
| Michael        | *2.8 Approaching = 2                                                   | Partial Command = 2                                                 | +4 scale score points = 1                                               | 5     |
| Ryan           | *3.3 Proficient = 3                                                    | Sufficient Command = 3                                              | −4 scale score points = 0                                               | 6     |
| Sophie         | *2.5 Approaching = 2                                                   | Partial Command = 2                                                 | +25 scale score points = 4                                              | 8     |
| Ella           | *3.9 average Mastery = 4                                               | Solid Command = 4                                                   | +12 scale score = 4                                                    | 12    |
| 8th grade      |                                                                        |                                                                     |                                                                         |       |
| Jessica        | *3.5 Proficient = 3                                                   | Partial Command = 2                                                 | −5 scale score points = 0                                               | 5     |
| Thomas         | *3.0 Proficient = 3                                                   | Sufficient Command = 3                                              | −2 scale score points = 0                                               | 6     |
| Ben            | *3.5 Proficient = 3                                                   | Limited Command = 1                                                 | +8 scale score points = 2                                               | 6     |
| Hayley         | *3.9 Mastery = 4                                                       | Sufficient Command = 3                                              | +2 scale score points = 1                                               | 8     |
| Daniel         | *3.0 Proficient = 3                                                   | Partial Command = 2                                                 | +15 scale score points = 4                                              | 9     |

*average of standards-based grading on quarterly report cards in ELA
academic learning), pinpointed expressions that relate to these descriptors, organized these expressions into clusters within each of the two groups, and noted comparisons between the two groups. Finally, we selected examples to provide illustrations in this final report and assigned pseudonyms so that results would be more confidential. In all phases of analysis, multiple sources of data and triangulation among sources improved the likelihood that the analysis would be authentic, relevant, and credible.

Results

Across the academic year, case studies documented ways that participating students expressed three major types of social-emotional connections with their experiences in school: connections with their teachers, connections with their peers, and connections related to their interests, engagement, and accomplishments. Case studies also documents differences among students in ways they expressed connections with peers and engagement.

Connections with Teachers

In their interviews, all ten participants repeatedly expressed ways they connected with teachers. Most comments expressed appreciation for teachers relating to them as individuals and caring for their well-being. We found no differences between groups in their perceptions of connections with teachers. In their comments about these connections, participants demonstrated elements of social awareness.

Michael provided a visible example of connecting with teachers on a personal level. Observers noted that he enjoyed playful interactions. He soon developed a regular routine with teachers. As the ELA teacher noted,

> He would bring us rocks, his “rock army” and leave them on our desks and in our things. He found this to be very funny (it was amusing). The student teacher and I relished hiding them back in his things. We finally stopped the rock thing because it was getting excessive (many, many rocks) and Michael took to hugging us. He liked making us laugh and would also try to scare any of his teachers who were unaware.

In a related fashion, Jessica jokingly called one of the teachers “My mom.” She said she connected with her teachers because “they are there to help kids and it’s obvious. They are always willing to talk to me, about stuff outside of school and involving school.”

Comments from other participants echoed this sense of appreciation. For example, Hayley noted:

> The teachers here are way nicer, and they bond with the kids a lot more. At my old school, it felt like the teachers were there but just wanted to go home. Here, they put their heart and soul into their work.

Ben especially appreciated the way all the teachers expressed their care for students as people.

> LMS never lets students go hungry, there are always snacks and lunch available. Students here are held accountable for their actions. When one student chooses to disrupt class, the teacher does not punish the entire class like they did at my old school.

This shared sense of appreciation indicated that participants recognized the extent to which teachers cared for them individually and collectively, creating a climate of emotional safety in which they could reflect on their interactions with peers and their experiences in lessons.

Connections with Peers

Initially, much of the conversation in interviews centered on peer relationships. Most often, these were spontaneous connections, focusing on making new friends and enjoying working in groups. As participants became more comfortable talking with researchers, we noticed that some connections became more reflective. Patterns among expressions characterized differences between students who made more academic progress and their classmates.

Group One. Michael, William, Ryan, Ben, Thomas, and Jessica frequently expressed social awareness focusing on peer relationships and friendships. Michael quickly found friends who shared his interest in video and fantasy games. During his second year, he created his own fantasy board game and invited friends to play the game with him at lunch time. Researchers studied his hand-drawn diagram of a fantasy world and asked him about it. He explained that the game changed each time they played as all players developed new characters and adventures. William often described himself a good friend, telling interviewers that “one thing that you should do [for
friends] is care about them, and if they fall or something, you can jump in there and help them.”

When talking about peer relationships, Ryan said that his biggest challenge is “staying out of the drama.” His teacher reported, “Ryan cares very deeply about his friends and about doing the right thing. If Ryan feels like someone he cares about has been wronged, or if he has done wrong, it bothers him tremendously.” Initially, he preferred to work with his friends on group projects, telling interviewers that it was difficult to work with people who were not friends. Later, he made conscientious efforts to work with other classmates and, by the end of the year, was proud of how much he had grown as an accepting person and of the effort he invested in making new friends.

In his interviews toward the end of the year, Ben showed that he was also more socially aware.

I get along pretty well. Some things I’ve had problems with in the past is when people say something to me that my parents say isn’t okay. I’m just one of those people that doesn’t like other people walking over me. Sometimes, I won’t ask people for help. I’m trying to get that grit to ask for help and do things for myself.

Observers noted that Thomas developed positive relationships with almost everyone. “I am kind of like everybody’s friend. I don’t like starting fights really. If somebody is picking on somebody, that’s different.” Thomas repeatedly described himself as someone who tries to encourage others. Teachers reported that this was especially the case with drama and dance. He participated in all the productions and was instrumental in establishing the boys’ dance group, a troop that became so accomplished they performed at a university basketball game.

Jessica talked frequently about how much she enjoyed her friends. She realized her love for softball was closely connected. “I really like to play softball because when I play, I am able to talk and hang out with my friends.” Part of her enjoyment was feeling a sense of accomplishment. She often said that she is good at softball because she asked her friends and coaches to help her. “I was having trouble batting, but I reached out to my friend and she helped me get better.” From her perspective, peer relationships and accomplishment were closely connected.

Michael William, Ryan, Ben, and Jessica were beginning to identify feelings related to peer interactions and think about these connections. Moments when they could step back and think about themselves in social situations showed growing self-awareness and social awareness, which enabled relationship skills.

**Group Two.** Sophie, Ella, Daniel, and Hayley expressed more sophisticated perceptions of their relationships with peers and demonstrated greater growth in social awareness and relationship skills. They also began to show moments of self-management and responsible decision-making.

Observers quickly noticed that Sophie really enjoyed talking to her friends. At lunch time and in the hallways, she was often active in conversations and, when lessons emphasized group work, would readily engage with any team to which she was assigned. Soon after the start of the year, Sophie said, “The best thing about school so far, is meeting new friends.” During the PBL units, observers noted that Sophie was most engaged when she had a specific role to fulfill. She worked hard on the vertical garden, lugging bags of soil for her team and using the power tools when others were reluctant to do so. When roles were less clear, Sophie sometimes struggled with teamwork, wanting to take a leadership role, but unsure how to do so. Over time, she reported working through some frustrations with peers. She told interviewers about a time when she felt impatient with new players on her volleyball team. She said it was aggravating because it cost the team points. She said she worked hard to get over this and now tries to be more patient and help the new players.

In her interviews and in observations, Ella showed increasing sophistication in reflecting on her interactions with peers. Early in her first year, she focused on events.

**Interviewer:** have you ever been in the position of either being bullied?

**Ella:** I felt like I’ve been talked about behind my back by even my close friends – they pass rumors about everyone.

**Interviewer:** Were you able to address it?

**Ella:** No, because I felt like if I said anything about it, they’d just say that they’d never said anything bad about me, and they’d say I’m crazy.

**Interviewer:** What ended up happening?
Ella: It just kinda went away. I stopped talking to them because they stopped talking to me.

A few months later, Ella explained how she strategically established a stronger relationship with one of her classmates.

When we first met, that’s kind of how it was – I thought she was kind of weird but now we’re best friends. We had to work together at the beginning of the year and just worked it out. I had hung out with this one group, and decided that they probably weren’t the best choice for me. The next day I decided to sit somewhere else at lunch, and liked them, so I kept sitting there and she and I started hanging out. My friend from my old school thought she was really weird but I liked her. My understanding of her changed. I know her better now.

Like Ella, Daniel began to share more reflective perceptions about peer relationships over time. At LMS, he developed new friends. In response to a question about what he had learned about himself, he said, “I’m better at talking than I was last year to people. And I have better friends than last year because last year I didn’t know that many people. Now I know more about people.”

Even more so than Ella and Daniel, Hayley demonstrated an increasingly sophisticated process of reflection over time. In her first interview, she described how she perceived herself socially.

Interviewer: When you’re meeting someone new, what do you think are the most important aspects of yourself that they should know?

Hayley: I guess what kind of person I am. like I want them to know right away that I’m awkward. I like to prove that point, that I’d much rather be at home watching YouTube or laying in the grass or something.

Interviewer: What would you say are some of your strengths as a person?

Hayley: I’m really good at talking to people, like I can help them get through problems. I have a few friends who cut themselves, and I am always the one to talk them through everything.

As the year progressed, Hayley came to value qualities in her friends that she considered herself to possess, such as nonjudgment, empathy, supportiveness, and emotional perceptiveness. Hayley’s choice to take time to think before getting too angry when working with “annoying” peers indicated that she has was developing coping mechanisms.

In their interviews, Sophie, Ella, Daniel, and Hayley expressed more sophisticated reflections about ways they interacted with their peers. Like their classmates, they talked frequently about connections they made with their peers, their social awareness focusing on friendship. Like them, they began to identify feelings related to peer interactions and think about these feelings. With greater sophistication, they expressed moments of self-awareness and became more strategic in thinking about social relationships.

Sophie realized that being more patient with new team mates not only helped them, but also strengthened the team. Ella negotiated a stronger relationship between an old friend and a new one. Daniel conscientiously tried to be more supportive. Hayley took more ownership of her need to involve herself in friends’ problems. These insights revealed developing self-awareness and self-management that strengthened social awareness, relationship skills, and responsible decision-making.

Connecting Interests, Engagement, and Accomplishment

As they shared perceptions of peer relationships, all ten case study participants also expressed views of themselves as students and of their experiences in lessons. All were enthusiastic when describing their interests, especially sports and video games. The connections they made between their efforts and their accomplishments showed a progression of sophistication:

- Some students found it difficult to engage with activities outside their interests.
- Some students became more aware of connections between effort and accomplishment.
- Some students made more conscious efforts to make better decisions about engagement.
Comparisons between the two groups showed that this progression was much stronger among participants who made more academic progress.

**Group one.** Michael’s experiences demonstrated the close link between interests and engagement. He told researchers repeatedly that he only enjoyed reading and writing about his interests. He was emphatic about his preference for reading science fiction novels. After a trip to the University’s library to check out books, for example, he informed the librarian that there were not enough science fiction novels in the collection.

Occasionally, he articulated connections between his interests and academic subjects. In an early interview, he shared details about the mythology in ELA. Later in the semester, he talked about a social studies project on the achievements of Roman ingenuity. He recalled information he had researched related to clothing, architecture, and civil warfare, all topics he found fascinating.

Like Michael, William sometimes found it challenging to engage with lessons that did not align with his interests. The ELA teacher noted that he had been able to hide quietly in classes at his previous school without drawing attention to himself.

William is not eager to raise his hand if he doesn’t understand something. We’ve learned you have to check in on him frequently to make sure he’s with you. He reads slowly, and easily loses focus- so it can be a struggle for him to keep up.”

During lessons, observers frequently noticed that William struggled with focus. In interviews, he sometimes gave robotic answers to questions, repeating ideas such as “never give up” and “just keep on trying” without deeper insight. He expressed clearer connections when describing experiences outside the classroom, such as riding a dirt bike or playing video games. Following the advisory lessons on failure as opportunity for growth, he shared an example of persistence.

Two years ago, I got my first dirt bike, and I fell like three times, and I started getting really frustrated and had to take a break. Then, I went back out and avoided the muddy spots where I fell before. It hurt when I fell, but I got used to it, and it helped me do better on the track.

Ben made more sophisticated connections between interests and engagement. He reported that he learns best when he can draw from personal experience. For example, he enjoyed a presentation on the life cycle of trout from a presentation on the local fish hatchery. After this event, he could describe trout farming in detail. His engagement with reading and writing activities were inconsistent. In one interview, he described how he enjoyed reading *The Absolutely True Diary of a Part-Time Indian* (Alexie, 2007).

This book related to my life, it also related to me because the guy was the soft guy, and I am a soft guy. It’s is for a mature audience, not younger kids. I like how Junior’s drawings are incorporated into the book, especially details about Junior’s best friend, Rowdy. Rowdy has a soft side, and I can relate to that.

In contrast, when discussing reading assignments related to his PBL projects, Ben’s recall of information and reflections on his work were rather vague.

Thomas also began to connect interests and engagement. During lessons, observers noted that he was usually involved in hands-on activities, although at times he could be distracted by his peers.

I really try to work hard no matter what class I’m in. Kids can be loud in class. I won’t lie, I’m loud and disruptive sometimes. But I always try to be respectful to the teachers. Drama club, I’m addicted to it so I always try to study hard for it. And I think that if I can study drama, then I can probably work harder in my other classes too. Even though I love drama and don’t like math, it doesn’t mean I can’t do my best.

When his team was working on their PBL projects, Thomas sometimes had difficulty finding information. Following the first PBL unit, Thomas shared a few things about the dynamics of groupwork.

Every now and then we would have a communication error. Me and A. worked hard, and so did the other two. Sometimes we would get off task and go to other groups though. We were just getting distracted. Then, we had a little rule where if one of us was off task we would just tap them on the head.
Thomas also reported that he had learned an explicit reading strategy.

The readings gave you more information to use in the project. Sometimes they wouldn’t make sense to people. I tried turning it into my own words – stuff people would understand better. Like instead of “This microbe enters the small intestine” it would be “This microbe enters through the body and then travels down into the small intestine.”

In his interviews, Ryan described his involvement with lessons in greater detail. For example, he made baseball card style cards for various Greek gods and created his own “utopian island.” He enjoyed learning about the Hindu faith in social studies. “It’s interesting to learn about how they view things like the afterlife that are really different to how we think about things here.”

Thinking back on science lessons, Ryan described the foldable he made to show the phases of the moon. In his interviews, Ryan also demonstrated an ability to reflect thoughtfully on his learning.

Interviewer: Part of this activity in advisory was to think of a time you faced a challenging task, to think of how that felt, and to come up with one word to describe how that felt. What is that word for you?

Ryan: It makes me feel “mad.” Whenever I fail at something, it makes me feel like I’m not very good at it, and this probably happens to everybody, but I really want to be good at whatever I try.

Interviewer: So, next time you feel that anger, what do you think that tells you?

Ryan: That I’m always going to fail at something, and that doesn’t mean I have to quit. Like they said, your brain is growing, which helps you have more space for new knowledge, and more space for failure.

In a follow-up interview, Ryan talked more about ways he has learned to deal with challenges.

In soccer, when I first started, I was tripping a lot and couldn’t kick the ball well. It made me feel bad because when I tripped that one time, I assumed I was just bad at soccer. I was on a team with a bunch of other people who were really, really good, and I didn’t get to score very often until this last spring and I got to make a winning shot.

Jessica came to LMS without much confidence in herself as a student. She was especially anxious about achievement tests. Early in her first year, she shared that when taking tests, she gets overwhelmed by the pressure to do well.

I freak out a lot in tests – especially math tests. Like I’ll study and get everything right, but when it comes time to take a test, my mind goes blank and I can barely remember how to spell my name. I feel like it’s such a big part of my grade, and I know the teachers are going to re-teach it to me, and I don’t feel like going through all that, and that it determines what the teacher is going to think of me. I just don’t want them to judge me, because I know my stuff, but I’m just not good at taking tests.

With day-to-day school tasks, Jessica had more confidence. In ELA, she was often a leader in discussions. Her teacher noted, “She’s a great reader and has great things to say figuratively about the pieces we read.” Jessica described her approach.

When I am reading, I need to break it down. I can’t just like read something and then answer it quickly, because my mind takes a little longer to process the information. So, I try to take my time rather than worrying about how long the other students are taking. And I work mostly on math because I have to take a long time to process math.

Over time, Jessica became more aware that her performance in classes depended on how well she could control her tendency to get distracted. She invested more effort in preparing for end-of-grade reading tests.

I used to get pretty bad EOG grades on reading, and this year, I was like “I’m going to sit down and focus and read and use all of the things I know.” And my score was 15 points better this time. I had the biggest growth in my grade. Like, I read over the questions first, and got out my highlighter, and numbered the things that I highlighted, and just did all of the strategies that I was taught.

Responses from this group of participants showed clear differences in levels of socio-emotional development. Michael and William recognized their interests and noted when they were more engaged.
Ben and Thomas began to articulate awareness of connections between effort and accomplishment. Ryan and Jessica made more specific connections, demonstrating greater self-awareness, self-management, and responsible decision-making.

**Group two.** Comparisons between the two groups showed that Sophie, Ella, Daniel, and Hayley expressed many of the same connections when talking about interests, engagement, effort, and accomplishment. Across time, however, they articulated a stronger sense of responsibility for their learning and more sophisticated connections between purposes for studying and accomplishments.

Like Jessica, Sophie entered LMS without much confidence in herself as a student. Observers noticed that she seemed comfortable reading aloud, even though she sometimes mispronounced words or hesitated. She appeared more engaged when listening to the teacher read aloud. In conversations, observers noticed that she sometimes found it difficult to make connections with earlier passages or to summarize information. Even so, with encouragement from teachers, she usually persisted with the task.

Sophie was more articulate about connections between hard work and success when talking about sports. She described how volleyball was difficult for her at first, but with her coaches’ help, she got much better. “Be sure to stay positive” is now her slogan and she has begun teaching skills to new players on the team.

Working with team mates on PBL projects gave Sophie opportunities to expand her awareness of her effort and accomplishments. When her team was reading about natural disasters, Sophie offered insights based on her prior knowledge about tornados. She explained the “safe place” concept and why it was important to “bunker down” in a place that was accessible to all. She talked about the safe place her family has for tornados, adding personal knowledge that was not specifically in the articles. She would reread things, and often used the highlighting feature on her computer to make sense of things. When her team decided to design and build a house that would withstand a natural disaster, she readily engaged with the project.

In early observations, researchers noted that Ella often displayed a strong work ethic. For example, she readily took advantage of time to work on assignments. One time, in ELA, she engaged with a math game that presented problems with number combinations. When class was over, Ella stayed in the room, entering code combinations until her teacher reminded her to move on to the next class. Another time, Ella was unable to complete a Venn diagram comparison during class time. She asked the teacher if she could take the assignment home and bring it back, finished, the next day.

When asked to describe her values, Ella told interviewers, “Academics is a big thing for me. I am someone who does well and does not want to disappoint anyone. I’m here, and I don’t want to let the people down around me.”

After advisory lessons, Ella frequently shared insights about her values and motivation. For example, she connected the concept of mind-sets to her personal experience.

**Ella:** I used to ride horses in California and was part of a drill team, and my horse would never do what I told it to, and I always just assumed that the horse was just like that, and that there was nothing I could do to fix it.

**Interviewer:** What ended up happening with that?

**Ella:** I kept practicing at my grandma’s house and ended up getting a lot better. I realized that it was more about me as a rider than it was about the horse.

**Interviewer:** So, your fixed mindset turned into a growth mindset. What about a time that you’ve had a growth mindset?

**Ella:** Well in fourth grade, I was pretty bad at math, and now I’m in advanced math.

**Interviewer:** How did you get there?

**Ella:** I just kept working at it, and had tutoring in fourth grade.

**Interviewer:** Why do you think that you thought about that differently from how you thought about the horse?

**Ella:** Well the horse isn’t pencil and paper. Horses have personalities and are kind of out of my control. But when I was doing math, I knew that I could work on it and get better.

Like several other participants, Daniel came to LMS with doubts about himself as a student. Homeschooled for several years, he chose to attend
LMS because he thought he might need to catch up academically. In terms of his work ethic, Daniel noted that if something is hard for him, he “just keeps trying.” He said he might ask a teacher for help, depending on which teacher it is. He also shared that he mainly does his homework on his own. He believes that he has the responsibility for his school success, since he is the only one doing the work. “Other people are not accomplishing my work for me. How well I do is up to me.”

For one of their PBL projects, Daniel and his group did a presentation on depression. Daniel’s interest in this topic sparked a high level of engagement. For his part, he constructed a detailed overview describing symptoms and treatment. During an interview, he explained that he had learned anyone can get depression. Although he did not think he himself had suffered from depression, he felt that he might now be able to help someone else, perhaps a friend struggling with depression.

At the end of the year, the ELA teacher noted that, while not an extremely effusive student, Daniel showed subtle improvements in his classroom behaviors. He made more appropriate academic choices that enabled him to make progress. For example, he chose to seat himself away from some of his classmates that sometimes distracted him and engaged less frequently in off-task behaviors. While never one to develop close relationships with teachers, he began to ask for help more often.

Like Ella, Hayley came to LMS with a clear sense of purpose. Over time, she expressed increasingly contemplative perspectives on herself and her world. She credited the advisory lessons with introducing her to mindfulness, and “seeing the standing point in the universe.” She shared how much she loved mindfulness practices and the related spiritual aspects, noting it reminds her of who she is. In an interview that followed advisory lessons on how the brain works, Hayley articulated some of the connections she was making.

Hayley: I love that stuff! The idea that I can take a moment to focus on myself and be still – it’s just really nice. We did this exercise where the teacher would read out a list of words and we’d close our eyes and think about it, and it just makes me feel so good. It makes me remember who I am and the body that I’m in. It has kind of changed what I’ve been doing at home. I’ve been doing yoga and meditation before school. I’m not a sports person, but this feels like the one thing I can do to be in my body. It’s helping me have a clear state of mind.

On another occasion, Hayley shared an example of a time when she was trying to apply the lessons learned in advisory to her decisions. “I was getting frustrated with my math homework and then I decided to take a walk and listen to piano music and go back to it. It can be overwhelming sometimes, but for the most part, it clears my mind.”

Observers noted that Hayley worked well in class most of the time. She tended to stay on-task and focused, especially if it involved a task she is interested in such as drawing. When working on a project about the plague in history, she decided to research stories written about the time-period. She found a podcast and used this format to guide her writing. She looked for models, then listened to another podcast and read another narrative to help her create her own.

When compared with other participants, Sophie, Ella, Daniel, and Hayley were more reflective in their conversations and more focused on lesson activities. They articulated connections among thoughts, feelings, and decisions with greater sophistication. Each of them shared examples of ways they made more strategic and thoughtful decisions. With these expressions, they demonstrated developing strengths in self-awareness and self-management that were closely associated and, together, provided an emotional foundation for more responsible decision-making.

**Conclusions**

Results from our exploratory study describe some of the ways that middle level students express social-emotional connections regarding their experiences in
school. To varying degrees, participants developed stronger levels of CASEL’s core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. They shared an awareness and appreciation of teachers’ support for them, which contributed to a climate of emotional safety in which they could reflect on their experiences. They identified feelings related to peer interactions and reflected on social relationships more insightfully over time. Those who made more academic progress did so with greater sophistication. All participants recognized their interests, noted when they were more engaged, and began to articulate awareness of connections between effort and accomplishment, showing progress toward more responsible decision-making. Participants who made more academic progress articulated these connections with greater complexity. Case studies indicated that the connections participants made with their emotions and with other people contributed greatly to their development. From students’ perspectives, this progression illustrated inter-relationships among the core capacities. A threshold of self-awareness and social awareness enabled self-management, relationship skills, and responsible decision-making.

Though exploratory in nature, results may support and extend insights from previous research. As Immordino-Yang (2016) and her colleagues suggested, participants’ feelings toward their teachers and peers shaped the connections they made, as did their emotional responses to lesson topics and activities. Results also illustrated the importance of social-emotional factors in school success that large-scale studies have documented (Farrington et al., 2012; Nagaoka et al., 2015; Ross & Tolan, 2018). Small-scale and contextual in nature, our study may provide a classroom-level view. While teachers provided some advisory lessons on social and emotional learning, their primary emphasis was infusing SEL into the environment across the school day. In this setting, participants strengthened their social-emotional capacities. When provided the emotional safety their teachers created, participants made connections in the flow of lessons and conversations.

Applying these insights beyond this investigation poses some limitations. We conducted our study in a small partnership school in a rural setting. Students chose to attend LMS for a variety of reasons, but most had experienced some frustrations in their previous settings. While we conducted our interviews in a semi-structured, open fashion, our questions prompted responses directly related to social and emotional learning. Although we tried to balance participants’ comments with lesson observations, we may have elicited more thinking about connections than student might have expressed otherwise.

Even with these limitations, our study may offer insights for practice and continued research. By focusing on students’ perceptions of their own social and emotional learning, we learned a great deal about their perspectives. When talking with researchers, participants provided detailed examples of times they thought about social and emotional issues such as perseverance, mind-sets, strategic thinking, and social skills while engaged in sports, video games, and outdoor activities. By encouraging these types of comparisons and weaving them into lessons, teachers can help students become more self-aware and better understand their emotional and social development.

It is likely that the process of reflection encourages better understanding, especially when nurtured through conversation. Reflection enabled the integration of out-of-school experiences with lessons. Reflection enabled new insights about relationships with teachers and peers. Emphasizing the process of reflection in reading, writing, math, science, social studies, art, and physical education may enhance social and emotional learning. In future studies, more detailed analysis of the dynamics of reflection in academic conversations may further illuminate ways these connections impact academic learning.

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**Appendix**

**Personal Interview Questions**

1. What have been some of the best things about school this year?
2. When do you think you do your best in school? What types of activities? Why?
3. What are some of your favorite activities outside of school?
4. What are some of the biggest challenges you have faced this year?
5. When something is difficult for you, how well do you think you can accomplish what you want?
   a. Tell me about something that was difficult for you to learn to do, either in school or out of school, that you eventually learned to do well.
   b. Why did you stay with it?
   c. How did you learn to do it well?
   d. [if the example is not about school] How is that like school? When you face a difficult problem in math or a reading passage that is difficult to understand?
6. What are some of the things in life that matter the most to you?
7. Think specifically about lessons in recent months. Tell us about a lesson that really engaged you in learning and thinking. Why was this lesson so engaging to you?
8. How well do you get along with other students? Which students have related best to you? How? Please give examples.
9. How well do you get along well with the teachers? Which teachers have related best to you? How? Please give examples.
10. Let’s think specifically about the resilience rubric you have been using the past few months.
   A. How well do you think you are understanding your personal values and needs? Please give examples.
B How well can you identify your emotions and their triggers? Please give examples.
C How well can you identify other peoples’ emotions? Please give examples.
D What have you learned about your school community?

**PBL Project Interviews**

1. Compared with our usual lessons, how much did you enjoy the activities related to the project based learning project?
2. Compared with our usual lessons, how much effort did you put into your work with the project-based learning project?
3. How well did you and your team mates work together on your project?
4. How well did you make positive behavior choices that contributed to your team?
5. How well did you stay focused on the tasks and complete them on time?
6. How well did you find information and apply it to what you already knew?
7. What were three of the most important things you learned about your project?
8. What were three of the most important things you learned about working together as a team?
9. What were three of the most important things you learned about how to think like a scientist?

What suggestions do you have for doing activities like this better the next time we do them?