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The Research Behind RethinkEd

Social Emotional Learning Platform

Social and emotional learning, or SEL, refers to evidence-based practices informed by rigorous, systematic social science that underscore the way we understand, use, and manage emotions to learn. Emotions drive how we think, pay attention, make decisions, manage our time, and countless other processes that impact how students and teachers show up in the classroom.

SEL challenges can lead to chronic absences, behavior problems, suspensions, lower academic achievement, and self-destructive behavior such as substance use or engaging in unhealthy or dangerous relationships. In a study from CASEL (Collaborative for Social and Emotional Learning) (DePaoli, Atwell, & Bridgeland, 2017), 97% of principals reported that they felt SEL is important for improving student behaviors and social development.

SEL is a good investment for schools financially as well. Studies show that for every $1 a school invests in SEL, they can get an $11 return on investment (Belfield, Bowden, Klapp, Levin, & Shand, 2015).

SEL is an important component of the MTSS (Multi-Tiered Systems of Support) framework and encompasses all 3 tiers of support and adheres to the same structure and philosophy

as the academic and behavioral components of the framework. For more information on MTSS and how SEL fits into the model, refer to The Research Behind MTSS.

RethinkEd's SEL solution is based on solid evidence from research from CASEL and other literature and from our own research studies with the Educational Research Bureau (ERB) and the University of Delaware.

RethinkEd SEL Assessments

The RethinkEd SEL assessments are based on the 5 core SEL competencies outlined by the Center for Academic, Social, and Emotional Learning (CASEL) five core SEL competencies: self-awareness, self- management, social awareness, relationship skills, and responsible decision-making, all of which directly impact learning outcomes. These competencies are based on extensive research studies that will be described in more detail below. Six subject-matter experts in psychology, education, and assessment reviewed and evaluated all assessment items and feedback was incorporated into the final assessments. Measures have been evaluated and demonstrate strong reliability and validity.

In the development of these assessments, field data were collected from 1,446 students in Grades 6-8 (47.1% male, 49.9% female, 3% no response) with the following ethnicity breakdown: 56% white, 9.4% Asian, 5.2% Black, and 0.1% Native Hawaiian or Pacific Islander, with remaining students putting combinations of various ethnicities. Another sample of 1,905 students in grades 3-5 (44% male, 41.6% female, 14.4% no response) were measured with the following ethnicity breakdown: 47% white, 11.1% Asian, 6.1% black, and 0.8% Native Hawaiian or Pacific Islander with other students putting combinations of various ethnicities.

The SEL Student Self-Assessment in the RethinkEd SEL platform is for grades 3-12 and is designed to empower students to reflect on and evaluate their own SEL skills. Educators

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Science Behind RethinkEd's SEL

While SEL is a relatively new term, the science behind it is not. SEL was developed by taking research on emotional intelligence, child development, cognitive and behavioral science, prevention science, and public health, and weaving them together for a more comprehensive and inclusive framework. SEL is based on a rich history of student-centered approaches that focus on the development and growth of the whole child including the following:

- **Learning Theory:** In learning theory, the learner gains their own understanding and knowledge of the world through processing information, experiencing things, and reflecting on those experiences. Being able to self-manage, self-reflect, self-advocate, and self-monitor builds skills for time management, study skills, critical thinking, and asking for help that improves academic success (Richardson, Abraham, & Bond 2012). This builds resilience and improves "deliberate practice" or persistence and being able to stay focused on tasks for extended periods of time without giving up (Ericcson, Krampe, & Tesch-Roemer, 1993).

- **Goal Setting Theory:** Goal setting builds self-awareness and increases the probability of meeting a goal and extensive research (e.g. Locke & Latham, 2006) suggests that this is important for taking on more difficult tasks and for being able to accept feedback and make improvements while working toward a goal. The five principles for effective and successful goal setting are creating clear goals, setting goals that are challenging but attainable, committing to your goals, getting feedback, and breaking down complex goals into more attainable steps.

- **Cognitive Behavioral Theory (CBT)** asserts that our thoughts influence our emotional and behavioral reactions and that we can change our thoughts to alter our emotions and behavior (Beck, 1993). Using these strategies, we can build self-awareness, emotion regulation, stress management, and relationships skills.

- **Neuroscience** looks at the structure and function of the nervous system and how it influences intelligence. Our brains change as we grow and learn and have different experiences which suggests that intelligence is not fixed and can be changed over time. For example, supporting a growth mindset and improve intrinsic motivation to learn (Ng, 2018).

- **Mindset** is the set of underlying beliefs that we have about learning, experiences, and intelligence and breaks down into fixed and growth mindsets. Studies demonstrate that changing a person's mindset can improve their academic or work performance (Dweck, 2015). Student with a growth mindset tend to perform much better than students with a fixed mindset. Teaching empathy, compassion, cultural competence, values, and growth mindset can help "grow their brains" and make students more open to learning new things and having new experiences.

- **Social Learning Theory** asserts that behavior is learned from the environment and evaluating consequences by watching the behavior of others (Bandura, 1978). Understanding our actions and potential consequences is important for decision making and problem solving. For example, children who grow up watching aggression and violence are more likely to engage in aggression and violence themselves. Similarly, children who see prosocial behaviors are more likely to engage in pro-social behaviors. Providing positive role models through peer video modeling helps to build these pro-social behaviors.

- **Social Cognitive Theory of Self-Regulation:** Bandura (1991) also believed that humans control their own behavior through self-regulation. This includes self-monitoring your own behavior and evaluating the effects of your behavior (i.e. the consequences) on the environment and on others. This affects our morals, values, relationships, emotions, and stress management.

- **Social Problem-Solving Theory** asserts that social problem-solving involves a process of acknowledging or noticing a problem, defining the problem, brainstorming solutions, evaluating possible solutions, making a decision, and reflecting on the outcome of the solution and learning from that for future decisions (D'Zurilla & Nezu, 1990). The ability to effectively navigate social problem-solving is linked to ability to manage stress and regulate emotions.

- **Cultural Competence** is the process by which we learn to respectfully and effectively respond to people from different backgrounds including culture, language, class, race, ethnicity, and other diversity factors (Gallegos, Tindall, and Gallegos, 2008). Cultural competence is a not a theory but a set of behaviors, policies, and attitudes that allow people to work and learn in a diverse environment. There are 5 components of cultural competence that need to in place: 1) everyone must value diversity; 2) people should have the opportunity to self-evaluate their own cultural competence; 3) awareness of the dynamics when different cultures interact; 4) cultural knowledge must be across the institution; and 5) having programs that teach diversity and cultural awareness.

- **Emotional Intelligence Theory** is how we process our own emotions and emotions in others (Brackett, Rivers, & Salovey, 2011). It involves the ability to identify and express your emotions and the emotions of others, using emotions to facilitate thought, understanding emotions, the language of emotions, and emotional signals, and being able to manage emotions to reach goals. Individuals with higher emotional intelligence are more likely to be effective and have success in school, work, social interactions, and with their own personal development.

Professional Development

SEL is not just for students. Educators own SEL and well-being is one of the strongest predictors of the success or failure of SEL implementation and relationships with students

(e.g. Schonert-Reichl, 2017). It is important that educators buy-in and believe in SEL and in fact, most do, and they believe that the skills can be taught and that SEL can have a positive effect on student outcomes (Bridgeland, Bruce, & Hariharan, 2013).

Videos can help eliminate distracting information and help teachers to focus on what is relevant compared to other professional developmental approaches (Marsh & Mitchell, 2014). Video-based professional development is more cost-effective and makes learning more available to staff throughout the year. This can be especially beneficial when there are high turnover rates and in special education where teacher schedules may be more demanding (Wehby, Maggin, Moore Partin, & Robertson, 2012)

RethinkEd's SEL evidence-based professional development series brings expertise from educators, administrators, psychologists, social workers, professors, and policy makers. On-demand training modules are designed to promote a collaborative and community-based approach, ensuring that all students reach their full potential.

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Summary of RethinkEd's SEL Research

Student Outcomes

In a study with 21,259 students in the 2020-2021 school year, the students who engaged in the RethinkEd SEL platform (SEL group) showed significantly more improvement in all SEL competencies compared to the students who did not engage in the platform (Control group) using the RethinkEd Student Self-Assessment.

	Responsible Decision Making	Relationship Skills	Social Awareness	Self-Awareness	Self-Awareness	Total Score
SEL Group	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.1$)
Control Group	Significant Improvement ($p<0.5$)	No Significant Improvement	No Significant Improvement	No Significant Improvement	Significant Improvement ($p<0.5$)	No Significant Improvement

› Student SEL competencies improve more for students accessing the SEL platform.

In the same study, educator rankings of students using the RethinkEd Classroom Rating Scale also showed significantly more improvement for the students who engaged in the platform (SEL group) compared to those who did not (Control group). Significant DECREASES in Self-Regulated Learning and Understanding Norms were observed for the Control group.

	Relationship Skills	Responsible Decision Making	Self-Confidence	Emotional Awareness	Emotional Regulation	Self-Regulated Learning	Perspective Taking	Understanding Norms
SEL	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.5$)	Significant Improvement ($p<0.1$)	Significant Improvement ($p<0.5$)	Significant Improvement ($p<0.1$)	No Significant Improvement	Significant Improvement ($p<0.5$)	Significant Improvement ($p<0.5$)
Control Group	No Significant Improvement	No Significant Improvement	No Significant Improvement	No Significant Improvement	No Significant Improvement	Significant Decrease ($p<0.1$)	No Significant Improvement	Significant Decrease ($p<0.1$)

› Educator ratings were higher for students accessing the SEL platform.

Educator Outcomes

In a study with 1,090 educators, those who completed RethinkEd SEL professional development modules (average of 29) rated **lower on all 21 items of teacher burnout** than those who completed less 0-4 PD modules.

Teacher Burnout Scale (Siedman & Zager, 1986) scores

- Completed SEL PD: Average Burnout = **28 – Few Burnout Feelings**
- No SEL PD: Average Burnout = **31 – Strong Feelings of Burnout**

Significant differences between the 2 groups were observed for the following 7 items on the Teacher Burnout Scale:

- I dread going to school. ($p<.05$)
- I wish people would leave me alone at work. ($p<.05$)
- I feel sick to my stomach when I think about work. ($p<.05$)
- I feel ill at work. ($p<.05$)
- I feel frustrated at work. ($p<.01$)
- I dislike going to my job. ($p<.01$)
- I am weary with all of my job responsibilities. ($p<.05$)

In this same study, teachers who completed the PD **rated themselves higher in school connectedness** than those who did not complete the PD. The 2 groups were the same for perceived teaching efficacy.

Teacher Subjective Well-Being Scale (TSWQ) (Renshaw, Long, & Cook, 2015) (Average Sub-Score)

- **Teaching Efficacy**
  - SEL PD: 13.51
  - No PD: 13.51
- **School Connectedness**
  - SEL PD: 13
  - No PD: 12.74

› Educators completing SEL PD report lower burnout and more school connectedness.

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Parent Perceptions

77 parents completed surveys regarding their perceived relationships with their child and their child's SEL competencies and significant differences were observed between Elementary and Secondary parent ratings.

Child-Parent Relationship Scale (CPRS) (Pianta, 1992) – Significant differences ($p<.01$) between Elementary and Secondary parents with Elementary parents reporting better relationships.

Closeness

- Elementary (mean = 29.5)
- Secondary (mean = 27.3)

Conflict

- Elementary (mean = 15.25)
- Secondary (mean = 19.35)

The Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2001) – Significant ($p<.01$) differences between Elementary and Secondary parents with Secondary parents reporting more problems.

Externalizing Problems (i.e. hyperactivity and conduct)

- Elementary (mean = 4.6)
- Secondary (mean = 7.5)

Internalizing Problems (i.e. emotional and peer-related)

- Elementary (mean = 3.8)
- Secondary (mean = 6.8)

Total Difficulties Scores: Elementary (mean = 8.5), Secondary (mean = 14.2)

› Parents of Elementary students report better relationships and SEL competencies than parents of Secondary students.

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