

Social Emotional Learning in the COVID-19 Pandemic: Opportunities and Challenges

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Abstract

Social emotional learning (SEL) has become a consensus in the global education community. SEL has become an important way to promote students' adaptation to 21st century learning, life and future work, and to enhance the quality of students' overall development in the context of COVID-19 pandemic. Although training programs have been launched in many countries, SEL is currently encountering new development bottlenecks. The present study discusses how to solve the problem of monolithic SEL subject perspectives, the dilemma of declining learning outcomes in online education, and the limitations in the development of educational effectiveness and assessment tools. Based on evidence-based education, the future direction of SEL development could optimize of SEL curriculum based on educational neuroscience, improve the sense of real interaction and feedback of SEL online teaching medium and emphasize the scientific and localization of SEL assessment methods.

Keywords

Social Emotional Learning, COVID-19 Pandemic, Online Education

1. Introduction

With the advent of the VUCA (Volatility; Uncertainty; Complexity; Ambiguity) era, social competition is becoming increasingly fierce and uncertainty is flooding daily learning, work and life. Under the influence of the COVID-19 pandemic, devastating and unpredictable pandemic situations may have negative physical and psychological effects on most people. On the one hand, studies have shown a significant increase in the prevalence and burden of major depression and anxiety disorders globally (Penninx et al., 2022), which already seriously threatens people's mental health level. On the other hand, UNESCO has de-

clared COVID-19 to be the worst disruption of global education in history, with the inability of young to congregate in physical spaces due to school closures and site restrictions, affect their learning and developing with social skills (Santomauro et al., 2021), which further exacerbates the risk of developing mental illness. At present, the cultivation of scientific and innovative talents is a new goal and challenge for education in all countries (Abdulla et al., 2020). Technological and innovative talents require not only higher-order thinking skills, but also the ability to resist external risks in the long term and to maintain a balanced and harmonious development of people and the environment (Weare, 2010). As a result, social emotional learning (SEL) has become a global consensus in education (Jagers et al., 2019; Weissberg et al., 2015). This review provides researchers with new perspectives for their future work in SEL that clarifies the current obstacles encountered and cultivates comprehensive talents to withstand the risks of the external environment, especially in the context of the epidemic.

2. Impact of COVID-19 on Social Emotional Learning

Over the past 20 years, SEL as an important way to facilitate students' adaptation to 21st century learning, life, and future work, and to enhance the quality of their overall development. SEL is defined as the process by which people acquire, apply knowledge, attitudes, and skills related to understanding and managing emotions, setting and achieving positive goals, understanding and empathizing with the feelings of others, building and maintaining positive relationships, and making responsible decisions. There are five dimensions: self-awareness; self-management; social awareness; relationship skills; and responsible decision-making.

Established SEL assessment models included three categories (Shiner et al., 2021) focusing on behavior patterns of individuals, such as the OECD Social and Emotional Skills Instrument (Kankaraš & Suarez-Alvarez, 2019); focusing on a particular skill, such as the Social and Emotional Competency Assessment (Davidson et al., 2018) and the Behavioral, Emotional, and Social Skills Inventory (Lechner et al., 2022); and the comprehensive assessment model, the Social and Emotional Nationwide Assessment (Pancorbo & Laros, 2017; Primi et al., 2016). Results from Meta-analyses and educational neuroscience suggested that individuals' social emotional competence was malleable and that SEL interventions were effective in improving social skills, attitudes, behaviors, and academic performance (Elouafi et al., 2021; Fischer et al., 2010; January et al., 2011).

SEL is crucial for the long-term development of students during COVID-19 pandemic. First, SEL increases an individual's psychological immune factor, enrich an individual's social support system, and avoid psychological disorders. Secondly, SEL enhances the overall development of individuals and foster innovative talents, and empathy is an important predictor of daily creativity (Dostál et al., 2017). Finally, SEL promotes more pro-social behavior among members of society as well as a positive overall social climate. Studies have shown that the level of empathy shows a significant positive correlation with the level of eco-

conomic development of the country (Yan et al., 2017).

3. Challenges Facing Social Emotional Learning

SEL programs that have been launched in multiple countries, however, SEL is currently encountering new development bottlenecks.

3.1. Homogenization of Disciplinary Perspectives

Jones et al. (2017) described the conflicting results in the current SEL research because of the lack of precision in both conceptualization and measurement of SEL. It is not neglected that there are differences among instructional theory, pedagogy, integration with the academic curriculum of SEL. A single disciplinary perspective is not sufficient to address the current limitations of field development. Thus, the dilemma of SEL development involves not only pedagogical curriculum development, but also requires newer empirical evidence supporting educational neuroscience, as well as the platform support of educational technology to provide guiding ideas in multidisciplinary and cross-fertilization development.

3.2. Declining Learning Effectiveness in Online Education

In the midst of an unprecedented public health and education crisis, online education has become an indispensable form of instruction. However, 92% of youth have a negative view of online learning, exhibiting an emotional tone of sadness and fear. Furthermore, although social emotional education would allow distance online education to compete with traditional educational environments and reduce disparities in educational opportunities by improving the online experience, the poor construction of facilities for distance education in districts technically hinders the equitable distribution of educational opportunities. Further, there is a lack of appropriate online education distance platform courses (Katzman & Stanton, 2020) to enhance the self-efficacy of educators in online teaching and learning, and school districts need to identify and provide more appropriate resources for educators (Yang, 2021).

3.3. Testing Power of Educational Assessment

Limitations in the interpretation of SEL educational effects and the development of assessment instruments were encountered. The assessment of SEL is considered challenging due to individual differences, such as response style, bandwidth-fidelity issues, and lack of convergence between measures (Abrahams et al., 2019). In recent years, it has also been noted that the long-term effects of SEL interventions and the amount of effect on student skill enhancement are too small and need to be reconsidered for positive developmental trajectories (Hart et al., 2020). Questionnaire-based self-reports using validated psychometric scales and triangulation are currently the usually used assessment methods for measuring social emotional competence, but they are not mature enough in terms of evalu-

ation criteria, evaluation content, evaluation methods, and evaluation instruments, especially in terms of the lack of localized evaluation indicators and tools suitable for each country.

4. Future Directions

Under the guidance of evidence-based education (Evidence-based education), SEL could emphasize on evaluating educational interventions to prove their effectiveness, and more attention is paid to practice research, development, and evaluation of SEL.

4.1. Optimization of SEL Curriculum Based on Educational Neuroscience

Considering the differences in cognitive developmental characteristics of different student populations, the proportion of learning content can be adjusted, and the operational mechanisms of interventions can be elucidated by empirically testing which core components is critical to program effectiveness (Lawson et al., 2019). The increase in non-sustainable event conflicts brought about in the context of the epidemic is accompanied by a large number of emotional experiences and affairs arrangements that lead to a decrease in the emotional sensitivity and frustration tolerance of individuals. The OECD social emotional competency measure “empathy” is an important indicator of social emotional competency, and understanding the emotions of others is the basis for trust and cooperation, which requires individuals to put themselves in the shoes of others based on their own experiences. Evidence from brain-based teaching and learning in the context of cognitive neuroscience provides more direct and concrete guidelines for SEL development (Table 1). Educational neuroscience-based SEL is guided by the laws of brain learning and follows sustainable “quality education” learning goals that balance cognitive, social emotional, and behavioral learning goals. For example, Brain-targeted Teaching (BTT) explores the relationship between emotion and learning, and addresses the influence of emotion on learning. LIBRE, Mindup, and the Social Skills Improvement System Classroom Intervention Program (SSIS-CIP) also emphasize emotional content, arguing that learning should be designed to nourish the “whole brain” and that each learner’s learning should be optimally “individualization” of each learner.

4.2. Improving the Sense of Authentic Interaction and Feedback in Online Education

Kamei and Harriott (2021) discussed SEL in a virtual environment into three domains: cognitive regulation, emotional competence, and social skills. The three competencies are developed in a balanced manner to optimize learning outcomes. Online learning forces students to learn under very different conditions than when they are in school, fragmenting the conditions under which the three competencies occur and resulting in a greater need for social and emotional

Table 1. SEL models, courses or programs based on educational neuroscience.

Model/Course/ Program	Purpose	Content
BTT	1) Establish the emotional connection to learning 2) Develop the physical learning environment 3) Design the learning experience 4) Teach for the mastery of content, skills, and concepts 5) Teach for the extension and application of knowledge 6) Evaluate learning	Emotional processing, attention network; Teaching route; Learning and memory; Creative thinking; Formative feedback evaluates brain goals
LIBRE	Aim to change learners' worldview and develop social emotional capacity	Critical inquiry, Mindfulness; Empathy; Compassion
Mindup	Improve self-regulation, build resilience to stress, and develop a positive attitude in school and life	Getting focused; Sharpening your senses; It's all about attitude; and Taking mindful action
SSIS-CIP	Promote positive social behavior based on evidence from cognitive neuroscience	10 units on skills such as cooperation, self-control, responsibility, advocacy and empathy

support for online learning than ever before. It has also been shown that individuals with higher emotional perceptions in online learning environments tend to be more attached to their peers (Han & Johnson, 2012). To create a more authentic online learning environment, a positive and beneficial cycle needs to be established by improving online learning platforms that can be optimized for interactive platforms, Nearpod timely feedback interactive platform, Kahoot game-based classroom interactive platform, Virtual Environment for Social Information Processing (Russo-Ponsaran et al., 2021) have been developed with good feedback. In the future, we can consider how to realize the one-stop building of interactive and teaching platforms, and how to introduce monitoring strategies to contact the concentration of attention through the support of neurofeedback technology, so that students and teachers can monitor the learning status, adjust the status, and improve the learning efficiency.

4.3. Promoting the Scientific and Localization of SEL Assessment Methods

An effective and fitting assessment method is a key link to improve the curriculum and test the educational effectiveness. In terms of assessment content, a specific index system is formed with the local cultural background. Multi-information formative and summative assessments are added from educational assessment process. The SEL assessment method based on new technologies is used to emphasize the quantification and real-time nature of data under comprehensive as-

assessment in the situation. For example, direct assessment methods can quantify how individuals feel, think, and behave in different contexts through online assessment systems. For example, the SELweb online assessment system assesses students' performance on emotion recognition, perspective taking, social problem solving, and self-control tasks by presenting different emotional expressions, story narratives, and task demands (McKown et al., 2021).

5. Conclusion

In conclusion, the present review revealed that the development of SEL faced with homogenization of disciplinary perspectives, declining learning effectiveness in online education, and testing power of educational assessment in the COVID-19 pandemic. Furthermore, future studies on SEL should promote adaptive functioning of students and to facilitate the incorporation of social emotional skills under the epidemic. It also presents the challenges in the field development, technical support, and assessment approaches of SEL and improves the challenging tasks of SEL based on evidence-based education in the hope of furthering the enrichment and development of the SEL field in the future.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Abdulla, A. M., Paek, S. H., Cramond, B., & Runco, M. A. (2020). Problem Finding and Creativity: A Meta-Analytic Review. *Psychology of Aesthetics, Creativity, and the Arts, 14*, 3-14. <https://doi.org/10.1037/aca0000194>
- Abrahams, L., Pancorbo, G., Primi, R., Santos, D., Kyllonen, P., John, O. P., & De Fruyt, F. (2019). Social-Emotional Skill Assessment in Children and Adolescents: Advances and Challenges in Personality, Clinical, and Educational Contexts. *Psychological Assessment, 31*, 460-473. <https://doi.org/10.1037/pas0000591>
- Davidson, L. A., Crowder, M. K., Gordon, R. A., Domitrovich, C. E., Brown, R. D., & Hayes, B. I. (2018). A Continuous Improvement Approach to Social and Emotional Competency Measurement. *Journal of Applied Developmental Psychology, 55*, 93-106. <https://doi.org/10.1016/j.appdev.2017.03.002>
- Dostál, D., Plháková, A., & Zášková, T. (2017). Domain-Specific Creativity in Relation

- to the Level of Empathy and Systemizing. *The Journal of Creative Behavior*, *51*, 225-239. <https://doi.org/10.1002/jocb.103>
- Elouafi, L., Lotfi, S., & Talbi, M. (2021). Progress Report in Neuroscience and Education: Experiment of Four Neuropedagogical Methods. *Education Sciences*, *11*, Article No. 373. <https://doi.org/10.3390/educsci11080373>
- Fischer, K. W., Goswami, U., Geake, J., & The Task Force on the Future of Educational Neuroscience (2010). The Future of Educational Neuroscience. *Mind, Brain, and Education*, *4*, 68-80. <https://doi.org/10.1111/j.1751-228X.2010.01086.x>
- Han, H., & Johnson, S. D. (2012). Relationship between Students' Emotional Intelligence, Social Bond, and Interactions in Online Learning. *Journal of Educational Technology & Society*, *15*, 78-89.
- Hart, S. C., DiPerna, J. C., Lei, P. W., & Cheng, W. (2020). Nothing Lost, Something Gained? Impact of a Universal Social-Emotional Learning Program on Future State Test Performance. *Educational Researcher*, *49*, 5-19. <https://doi.org/10.3102/0013189X19898721>
- Jagers, R. J., Rivas-Drake, D., & Williams, B. (2019). Transformative Social and Emotional Learning (SEL): Toward SEL in Service of Educational Equity and Excellence. *Educational Psychologist*, *54*, 162-184. <https://doi.org/10.1080/00461520.2019.1623032>
- January, A. M., Casey, R. J., & Paulson, D. (2011). A Meta-Analysis of Classroom-Wide Interventions to Build Social Skills: Do They Work? *School Psychology Review*, *40*, 242-256. <https://doi.org/10.1080/02796015.2011.12087715>
- Jones, S. M., Barnes, S. P., Bailey, R., & Doolittle, E. J. (2017). Promoting Social and Emotional Competencies in Elementary School. *The Future of Children*, *27*, 49-72. <https://doi.org/10.1353/foc.2017.0003>
- Kamei, A., & Harriott, W. (2021). Social Emotional Learning in Virtual Settings: Intervention Strategies. *International Electronic Journal of Elementary Education*, *13*, 365-371.
- Kankaraš, M., & Suarez-Alvarez, J. (2019). *Assessment Framework of the OECD Study on Social and Emotional Skills* (109 p.). Organisation for Economic Co-Operation and Development (OECD).
- Katzman, N. F., & Stanton, M. P. (2020). The Integration of Social Emotional Learning and Cultural Education into Online Distance Learning Curricula: Now Imperative during the COVID-19 Pandemic. *Creative Education*, *11*, 1561-1571. <https://doi.org/10.4236/ce.2020.119114>
- Lawson, G. M., McKenzie, M. E., Becker, K. D., Selby, L., & Hoover, S. A. (2019). The Core Components of Evidence-Based Social Emotional Learning Programs. *Prevention Science*, *20*, 457-467. <https://doi.org/10.1007/s11121-018-0953-y>
- Lechner, C. M., Knopf, T., Napolitano, C. M., Rammstedt, B., Roberts, B. W., Soto, C. J., & Spengler, M. (2022). The Behavioral, Emotional, and Social Skills Inventory (BESSI): Psychometric Properties of a German-Language Adaptation, Temporal Stabilities of the Skills, and Associations with Personality and Intelligence. *Journal of Intelligence*, *10*, Article No. 63. <https://doi.org/10.3390/jintelligence10030063>
- McKown, C., Kharitonova, M., Russo-Ponsaran, N. M., & Aksu-Dunya, B. (2021). Development and Validation of a Shortened Form of SELweb EE, a Web-Based Assessment of Children's Social and Emotional Competence. *Assessment*, *30*, Article ID: 107319112110460. <https://doi.org/10.1177/10731911211046044>
- Pancorbo, G., & Laros, J. A. (2017). Validity Evidence of the Social and Emotional Nationwide Assessment (SENNA 1.0) Inventory. *Paidéia (Ribeirão Preto)*, *27*, 339-347. <https://doi.org/10.1590/1982-43272768201712>
- Penninx, B. W., Benros, M. E., Klein, R. S., & Vinkers, C. H. (2022). How COVID-19

- Shaped Mental Health: From Infection to Pandemic Effects. *Nature Medicine*, 28, 2027-2037. <https://doi.org/10.1038/s41591-022-02028-2>
- Primi, R., Santos, D., John, O. P., & De Fruyt, F. (2016). Development of an Inventory Assessing Social and Emotional Skills in Brazilian Youth. *European Journal of Psychological Assessment*, 32, 5-16. <https://doi.org/10.1027/1015-5759/a000343>
- Russo-Ponsaran, N. M., McKown, C., Karls, A., & Wu, I. Y. (2021). Psychometric Properties of Virtual Environment for Social Information Processing, a Social Information Processing Simulation Assessment for Children. *Social Development*, 30, 615-640. <https://doi.org/10.1111/sode.12512>
- Santomauro, D. F., Herrera, A. M. M., Shadid, J., Zheng, P., Ashbaugh, C., Pigott, D. M. et al. (2021). Global Prevalence and Burden of Depressive and Anxiety Disorders in 204 Countries and Territories in 2020 Due to the COVID-19 Pandemic. *The Lancet*, 398, 1700-1712. [https://doi.org/10.1016/S0140-6736\(21\)02143-7](https://doi.org/10.1016/S0140-6736(21)02143-7)
- Shiner, R. L., Soto, C. J., & De Fruyt, F. (2021). Personality Assessment of Children and Adolescents. *Annual Review of Developmental Psychology*, 3, 113-137. <https://doi.org/10.1146/annurev-devpsych-050620-114343>
- Weare, K. (2010). Mental Health and Social and Emotional Learning: Evidence, Principles, Tensions, Balances. *Advances in School Mental Health Promotion*, 3, 5-17. <https://doi.org/10.1080/1754730X.2010.9715670>
- Weissberg, R. P., Durlak, J. A., Domitrovich, C. E., & Gullotta, T. P. (2015). Social and Emotional Learning: Past, Present, and Future. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of Social and Emotional Learning: Research and Practice* (pp. 3-19). The Guilford Press.
- Yan, Z., Su, J., & Su, Y. (2017). Increasing Empathy in Chinese College Student: A Cross temporal Meta-Analysis. *Psychology: Techniques and Application*, 5, 10.
- Yang, C. (2021). Online Teaching Self-Efficacy, Social-Emotional Learning (SEL) Competencies, and Compassion Fatigue among Educators during the COVID-19 Pandemic. *School Psychology Review*, 50, 505-518. <https://doi.org/10.1080/2372966X.2021.1903815>