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SOCIAL EMOTIONAL LEARNING AND EDUCATION TECHNOLOGY

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Abstract— Social and emotional Learning abilities are said to be indicators of how well a person adjusts to his or her environment, adapts to change, sets positive goals and, ultimately, how successful she or he will be in life. Happiness, empathy, emotional stability and positive attitude are some traits that can help a child to grow up to be a responsible and sensitive human being. Social Emotional skills also affects the overall learning of a child. Schools are the cultivating ground to develop such habits and mindsets that help students achieve highest levels of measurable success in life. This is more so as we need to not only teach SEL explicitly but also weave it into the fabric of today's technologically advanced teaching learning systems.

Technology can play a pivotal role in implementing SEL in the classroom. There are numerous tools available today which can easily be mapped onto the core SEL skills and competencies.

SEL can be implemented in a variety of ways in the classroom. It can be done through performing everyday simple activities using high level IT tools such as AR, VR and AI.

This article intends to define Social Emotional Learning and the need for teaching SEL in schools and classrooms. Also it explores the possibility of using Education Technology to foster these skills and how it can enhance the overall success of the students.

Keywords— Social Emotional Learning, SEL competencies, Technology in SEL, SEL implementation

I. INTRODUCTION

According to CASEL (CASEL 2012) Social and emotional learning (SEL) is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

Combining these skills with academic development using technology creates high-quality learning experiences and environments that empower students to be more effective contributors in their classrooms today and in their workplaces

and communities tomorrow. (<https://edtechmagazine.com/k12/n.d>)

According to a study published in the NCERT journal National Early Childhood Care and Education Curriculum Framework, 2014, "appropriate positive environment will ensure cognitive, linguistic, social, emotional, psycho- motor development for all individuals." (Pandya 2014)

Therefore, it is imperative to frame and develop SEL competencies such a way that they meet the needs of the students and the teachers in today's communities.

There is increasing awareness among education bodies of various countries about the need to integrate SEL into the curriculum. SEL has been widely implemented in the education systems of the United States and parts of Europe. Although the Draft National Education Policy has laid the foundations of incorporating SEL in the educational framework, it is yet to be implemented as a mandatory part of the K-12 curriculum. (Resource Human Development 2019)

Only recently, the CBSE, has announced through various circulars to schools across the country to inculcate life skills in students through various student centered activities. The happiness curriculum launched by the Delhi Government is a classic example of adopting life skills and competencies in the education systems. (Kundu 2018)

There are a few private organizations in India who are already working towards promoting SEL in Indian schools. The Mind and Heart Education is an organization that helps children across 700 schools in India to support more productive and sustainable communities. The Teachers foundation of India launched the Indian Social and Emotional Learning framework in January, 2019.

Traditionally schools would delegate the task of ensuring the wellbeing of a child to families and communities. However new age studies have found that this is best done through effective classroom instruction, student engagement in positive activities in and out of the classroom, and broad parent and community involvement in program planning, implementation, and evaluation. (CASEL 2012)

Also according to a research study published in the Journal of public health in the UK, school-based programs of social and emotional learning therefore have the potential to help young



people acquire the skills they need to make good academic progress. (Public Health England 2014)

Teachers are responsible for transforming the classrooms into safe, inclusive and happy learning spaces. Thus, they need to be self-aware, socially connected, be responsible decision makers and possess good relationship skills. These characteristics can help in the implementation of SEL in a sustainable way in the classroom.

According to a global survey conducted by the Economist Intelligence Unit (Anon 2019) of 762 educators across 15 countries it was found that 79% believe positive emotions to be “very” or “extremely” important for helping students achieve academic success, and 77% believe that emotional well-being is “very” or “extremely” important for the development of foundational literacies such as reading and mathematics. These findings suggest that most educators believe that emotions are foundational to learning.

II. SEL COMPETENCIES

There are 5 core competencies defining SEL; self-awareness, self- management, social awareness, relationship management, and responsible decision making (Brackett and Rivers 2014). These can be better represented by the figure below:



Fig. 1. The CASEL wheel, (Source:CASEL,2017)

The five core competencies can be are covered in more detail below:

SEL Competency	Core Features(Collaborative for Academic Social and Emotional Learning 2016)
Self-awareness Be fully aware of one's strengths, weaknesses, values and feelings.	- Identifying emotions - Accurate self-perception - Recognizing strengths - Self-confidence

	Self-efficacy
Social Awareness: Be aware of others emotions and needs and show empathy and understanding for others.	- Stress management - Self-discipline - Self-motivation - Goal-setting - Organizational skills
Self-Management: Learn to manage emotions and behaviors and collate activities to achieve positive goals.	- Perspective-taking - Empathy - Appreciating diversity - Respect for others
Relationship skills: Establish positive, healthy relationships by resisting inappropriate behavior, resolving conflicts and taking help from others when required.	- Communication - Social engagement - Relationship-building - Teamwork
Responsible Decision Making: Make decisions taking into consideration ethics, social norms, the overall impact on academic, social and environmental factors	- Identifying problems - Analyzing situations - Solving problems - Evaluating - Reflecting - Ethical responsibility

These social and emotional competencies have positive effects on the students overall academic performance, behavioral patterns; students had a better perception of life and achieved higher levels of success generally.(Taylor et al. 2017) Also social and emotional competencies have been found to be a more significant determinant of academic attainment than IQ.(Public Health England 2014)

CASEL(Collaborative for Academic Social and Emotional Learning 2016) has provided a well-defined rubric to implement and assess SEL in schools:

1. Build Awareness, Commitment, and Ownership: Build a task force to foster SEL awareness and create a vision.
2. Create an action plan: Collate resources, identify the need areas, develop an implementation strategy and evaluation system.
3. Strengthen key role players, the teachers: Provide teacher induction and training programs.
4. Promote SEL for students: Develop an approach that is coordinated and encompasses all the aspects of SEL.



5. Provide assessment to enhance the ongoing SEL programs: Create a system of assessment that quantifies the achievements made by implementing SEL and also identifies areas that need improvement.

III. MAPPING CORE SEL COMPETENCIES

The core SEL competencies can be further categorized in to skills that can be mapped on to everyday classroom activities.



Fig. 2. SEL in the classroom skill set

Using technology complements our efforts to foster SEL in the classroom. According to the world economic forum, using technology in SEL can bridge the gap between theory and implementation by providing a platform for learners to communicate and collaborate thus bridging any socio-economic, racial or geographical gaps.

Education Technology provides a low-cost solution to implement SEL, thanks to the invention of cloud computing, artificial intelligence and virtual reality. For examples the game-based educational approach can be used to develop skills such as positive peer collaboration, responsible decision making and complex communications. Game based learning solutions like Minecraft Education Edition also promote Empathy by helping the children model real life problems.

There are various adaptive tools such as One Note and Moodle Cloud which provide learners with self-paced learning solutions. They help improve student's confidence and engagement due to personalization of content. It also encourages students to take charge of their learning by examining their own progress and understanding of concepts. (McGraw Hill n.d.) Immersive reader, a reading tool, uses proven techniques to improve reading for learners irrespective of their ability. It helps enhance classroom learning experiences for slow learners making them stress free and helping them set positive goals.

Relationship skills is another core SEL competency which can be addressed with tools such as Skype in the Classroom and Empatico. These are platform independent communication tools which help connect classrooms across the world providing opportunities for students to interact with peers across the globe from within their geographical location. They also help foster collaboration, and help build up long lasting human relationships.

Video tools like Flip Grid help enhance student voice in the most versatile ways. The teacher creates a grid which is basically a video prompt addressing an educational or a social topic/issue and shares the code with the students. The students then log in using the code and voice their opinion on the given topic. The app can be used to foster kindness, gratitude, raise awareness about social issues or used as a language tool.

Educational technology also provides various collaborative tools like office 365 and Google classrooms which help build an array of SEL competencies. Digital Story telling tools such as Sway, Zimmer Twins, Story bird, slides carnival among others foster creativity and help students realize their strengths.

All these tools are free of cost. They are easily adaptable across all ages and classrooms thanks to powerful AI enabled technology.

IV. CONCLUSION

Cultivating Social emotional Learning in schools can go a long way to build better communities, cities, counties and the world a better place to live in. But as of today, a significant shift in our approach to adopting SEL is required¹. It has to encompass raising academic achievement and improving schools.

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¹ (DePaoli et al. 2017)



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