Holistic Teaching and Learning Environments for Well-being

A Handbook for Teachers Based on Classroom Stories and Practices across Asia and Europe
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For over two decades the ASEF Classroom Network (ASEFClassNet) has been providing capacity-building opportunities for collaborative teaching and learning and a platform to explore the potential of education technology and the role of Education for Sustainable Development (ESD) in secondary, high, and vocational schools in ASEM Partner countries.

In 2022, the ASEFClassNet Team chose to focus on the topic of “Holistic Teaching and Learning Environments for Well-being” to address the adverse long-term effects of the COVID-19 pandemic on schools, teachers and students and to empower teachers and educators to create Holistic Learning Environments and working towards quality education for all (SDG4).

According to UNESCO’S International Bureau of Education, a “Holistic Teaching” approach seeks to fully activate all aspects of the learner’s personality such as intellect, emotions, and imagination for more effective learning. A Holistic Learning Environment has the power to help learners build meaningful connections, a strong sense of identity, and self-confidence which are essential for long-term success. However, the concept is still relatively new, and more discussions and capacity-building opportunities are needed to integrate it fully into a school’s environment.

This Handbook was co-developed by the ASEFClassNet team together with a community of ASEFClassNet teachers and educators from Asia and Europe. It aims to support K-12 teachers across both regions and beyond in their professional development journey through practical insights from classrooms. The Handbook is based on five key thematic elements that emerged from experiences and stories by ASEFClassNet participants:

1. Teaching Social and Emotional Skills (SES)
2. Inclusion in Digital Education
3. Resilience and Grit
4. Relationship Building
5. Active Learning and Engagement

Teaching is more than just delivering knowledge and tracking learning outcomes. As the COVID-19 pandemic has shown, teachers have to
constantly re-define and adjust their roles and responsibilities in the teaching and learning setting to support their students’ overall progress and well-being. They have to rethink and adapt their strategies and methodologies to create not only an effective but also a compassionate teaching environment.

In this Handbook, we present meaningful classroom teaching and learning stories from Asian and European schools. The five chapters also include insight articles written by academic experts which help the reader to better understand the thematic significance of each topic addressed.

We hope that this publication will help teachers acquire fresh ideas, new knowledge, and inspiring perspectives to enhance their teaching styles and create learning environment that are conducive for their students to navigate the uncertain and complex world we live in today.

Ambassador Toru Morikawa
Executive Director, Asia-Europe Foundation (ASEF)
The Handbook “Holistic Teaching and Learning Environments for Well-being” is based on the outcomes of the ASEFClassNet2022 School Collaboration project “Holistic Learning Environments for Innovative Teaching and Learning” as well as teaching experiences and practices from ASEFClassNet educators across over 40 Asian and European countries. It serves as a tool to inspire secondary school teachers to enhance their pedagogical competencies and to create holistic teaching and learning environments – in a physical and virtual setting.

The Handbook includes contributions from secondary and vocational school teachers as well as academics covering five central themes that the editors identified to be crucial in the context of holistic teaching and learning:

1. Teaching Social and Emotional Skills (SES)
2. Inclusion in Digital Education
3. Resilience and Grit
4. Relationship Building
5. Active Learning and Engagement

Each theme is introduced in a dedicated chapter that consists of expert insights from academics and real-life stories by teachers. Practical tasks and reflection exercises deepen the understanding and knowledge on the theme and invite the readers to apply the concepts in their own context.

The Handbook begins with a general introduction on the topic by Professor Ee-Ling Low from the National Institute of Education (NIE), Nanyang Technological University (NTU) in Singapore.

The first thematic chapter “Teaching Social and Emotional Skills (SES)” starts with expert insights from Dr Edizon Angeles Fermin from the National Teachers College in the Philippines. While reflecting on his personal teaching experiences, he introduces key findings of the recent Survey of Social and Emotional Skills (SSES) which was initiated by the Organisation for Economic Co-operation and Development (OECD) in 2021. In the following articles, six K-12 teachers share how they embed teaching SES in the daily curriculum and highlight key factors that impact how students perceive and internalise SES, including the likes of empathy and compassion.
In the chapter “Inclusion in Digital Education”, Steven Zelko from the AccessAbility Hub at La Trobe University, Australia, provides his insights on how The Principles of Universal Design can serve as a useful framework to address inclusion in virtual teaching and learning settings. While he advises educators to keep their own context in mind, he shares two case studies that help teachers apply the framework in their own classrooms. Four teachers then illustrate through personal recounts how they ensure that all students feel heard and included, and describe digital tools as well as day-to-day teaching practices they use to embrace inclusion in a digital education environment.

In the chapter “Resilience and Grit”, Dr Hülya Kosar Altinyelken from the University of Amsterdam in the Netherlands explains the concepts of resilience and grit and how both relate to one another. She also presents academic studies that focus on the connection between resilience, grit, well-being, and academic success, and how schools and teachers can promote these qualities among their students. Three Asian and European educators subsequently share how they consciously develop lessons for their students to practice building resilience and grit.

The thematic chapter “Relationship Building” highlights examples of teaching practices that five teachers from Asia and Europe adopted to create good teacher-learner relationships and ensure their students’ well-being. The insight article by Dr Dana Rad and Dr Tiberiu Dughii from the Aurel Vlaicu University of Arad in Romania focuses on the aspects of a “sense of belonging” for building meaningful relationships between teachers and students and how a holistic teaching and learning environment ultimately contributes to students’ better learning outcomes. The authors also provide recommendations for relationship building in a pedagogical setting and guidance for educators in better designing the teaching and learning environment.

The Handbook closes with the chapter on “Active Learning and Engagement”. Professor Pushpanadham Karanam from the Maharaja Sayajirao University of Baroda in India introduces a theoretical framework on Active Learning and Engagement and suggests pedagogic strategies on process enhancement. Seven teachers illustrate in their stories and exercises their pedagogical approaches and showcase good practices for applied learning from their classrooms.
This Handbook for secondary school teachers was developed and made possible with the support of educators from over 40 countries and several institutions in Asia and Europe. It is the key outcome of the 3-month long ASEFClassNet School Collaboration project on “Holistic Learning Environments for Innovative Teaching and Learning” in 2022 and the wider ASEFClassNet teacher community.

First, ASEF would like to thank all participating teachers of the ASEFClassNet project in 2022 and the ASEFClassNet alumni. Their daily experiences in the classroom and practical expertise in ensuring holistic teaching and learning environments provided invaluable insights and meaningful stories to this Handbook. ASEF would also like to express its gratitude to the academic experts, who supported the ASEFClassNet project as speakers and who contributed the thematic introductions to this Handbook. The names and details of the project participants and article contributors are included at the end of the Handbook.

This Handbook was jointly conceptualised and edited by Leonie Nagarajan, EQator, and members of ASEF’s Education Department and ASEFClassNet Project Coordinators Jyoti Rahaman and Angie Toh. ASEF would also like to acknowledge the other members of its Education Department, Reka Tozsa and Quentin Fayet, as well as the graphic designer Heiko Seibel for their advice and support during the production process.

Finally, ASEF would like to express its gratitude to the Ministry of Foreign Affairs of the Netherlands and the Ministry of Foreign Affairs of Japan. Their generous funding made the ASEFClassNet School Collaboration project in 2022 and this Handbook possible.
1 Introduction

Thematic Introduction to Holistic Learning Environments
Reimagining education beyond the time of crises and disruptions: Seizing opportunities to realise holistic education

Professor Ee Ling Low
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Introduction

In the recent years of crises and disruptions, which are headlined by the COVID-19 pandemic, the Fourth Industrial Revolution (4IR), the Eastern European war and the energy crisis, nations around the world have demonstrated great resilience and grit to the challenges on the social, economic and mental well-being fronts. A number of policymakers, educationists and sociologists have encouraged the world to seriously ponder about how our next strategies should be to enable our present and future generations to thrive. It is important that we confront the crises and challenges faced as opportunities to rethink and rebuild our education systems. The questions we should ask are: how should we rebuild and what should we reimagine our education systems to be?

While education is a powerful driver of growth and development for a country and the individual (King, 2011; The World Bank, 2022), most policymakers and educators now acknowledge that continuing the way we do will not allow societies to meet the demands of the uncertain and complex future. Most mainstream education systems worldwide have adopted a formal Western structure of the 1700s, where a teacher stood at the head of the matrixed classroom to disseminate knowledge to passive learners, also known as didactic teaching. While it is encouraging to note that pedagogies, curricula, syllabi, the teaching profession and learners have been greatly enhanced and the digital technologies for teaching and learning have advanced considerably, the physical learning space of the classroom has been thrown into irrelevance amidst global school closures experience during the global
pandemic. Furthermore, for decades, many policymakers, schools, teachers, learners and parents have called for the reduction of emphasis on high-stakes assessments as they may not be a good measure of the holistic development and learning of students. The pandemic has forced education systems worldwide to rethink the way we teach, learn and assess.

Finally, an opportunity of global significance has allowed us all to reimagine education and forced us to focus on the higher calling of education which is to cater to the holistic development of all learners, which must span the cultural, physical, intellectual, emotional, social and moral domains (Datnow, Park, Peurach & Spillane, 2022). Rethinking education requires careful and purposeful consideration of the holistic picture of education, where learning is a lifelong pursuit of betterment. I offer three aspects of a holistic environment for a reimagined education system that is pivoted on (1) resilience (2) values-anchoredness and (3) lifelong learning for all.

Education for Resilience

In the past decade, the world has been thrown into great disruptions caused by the Fourth Industrial Revolution (4IR), which affected the nature of jobs and livelihoods (Gleason, 2018; Schwab, 2016; Ryder, 2018). The catastrophic crisis brought about by the COVID-19 pandemic has greatly impacted not just our health and lives but has also a lasting impact on our economies and our mental well-being. The war between Ukraine and Russia has raised global concerns about national sovereignty and further disrupted our global supply chains. Each of these major events has exposed the fault-lines of our societal structures and reminded the world that what we have taken so long to build can be destroyed overnight and forever.

Of these crises and disruptions, COVID-19 has most profoundly disrupted learning for students worldwide. It affected 98.6% or 1.725 billion global learners from pre-primary to tertiary levels in 200 countries (United Nations, 2020). Amidst global and local school closures, it was reported that 24 million children were at risk of not returning to schools (ACAPS, 2020; The World Bank, 2020). While home-based learning (HBL) was available in both developing and developed countries, at least 463 million children did not have access to such remote-learning support during the national lockdowns (The World Bank, 2022). Just as concerning, 96% of children surveyed reported having increased negative feelings towards schooling (ACAPS, 2020). For many disadvantaged and special needs students, schools are places where they could learn and where they could find physical, nutritional and mental safety (Nair, 2020; World Bank Group Education, 2020). It was speculated that for the first 23 months since the start of the pandemic, learners worldwide lagged between 4 and 12 months behind in their education development (McKinsey & Company, 2022). This was not from a lack of trying with many governments, education systems, schools and teachers working tirelessly and sacrificially to provide education by any means. Even for those who had access to remote education, the sturdiness of mental, physical and socioemotional well-being was very much affected (McKinsey & Company, 2022). Families and young learners were not the only ones at risk; teachers were also under great strain to keep learning going. It was a deafening realisation that systems worldwide, whether in developed or developing countries, were not robust enough to withstand the crisis that the COVID-19 pandemic brought.

What are some of the revelations and/or lessons that we have learnt from educational disruptions caused by the pandemic? How may we apply them to present and future crises? At the global level, lessons include the monitoring and mitigating of learning losses from school closures, deploying effective and equitable distance learning strategies, reopening schools safely for all, and planning ahead after schools reopen (UNESCO, 2021). I would like to offer a personal perspective on some of the lessons that I have gleaned from the perspective of an educator who had to lead Singapore’s teacher education efforts then as Dean, Teacher Education in the midst of a historical school closure between April and May 2020.

One, beyond physical fieldtrips, moving learners out of the classroom is indeed possible even though many had argued that teaching and learning can only open in classrooms or lecture theatres. Remote learning has helped some learners to lag too far behind or not lag at all. Two, deemphasising high-stake examinations is possible. During lockdowns, some non-final year examinations were removed from certain levels to ensure health safety and graduation criteria were adjusted in 34% of countries at the primary level and 47% at the upper secondary level (UNESCO, 2021). Some countries even implemented new policies regarding national examinations (UNESCO, 2021). This suggests that the stresses of assessments may be relaxed, supporting the efforts of education systems like Finland’s in the use of mandated standardised testing only at the end of the general upper secondary education (Dickinson, 2019) and not on a year-by-year basis. Three, learners can thrive as self-directed and motivated learners if properly supported
by teachers and personalised learning can be a great help, but we need to acknowledge that learners need social interaction with peers and teachers for their holistic socio-emotional development and especially for their overall character development. Four, while education has long been touted to be a great social levelling force, the pandemic has exposed hidden inequalities in the education system. One well-known example in all countries is that not all learners had access to basic technology (i.e., a computer, mobile devices, Internet connection) to support Home Based Learning (HBL). Five, the well-being of teachers and learners were greatly threatened and with the new roles that teachers were confronted with as a result of the pandemic, any inability to cope would naturally impact their learners. Six, related to the second lesson, the purpose of education rather than the achievements in internationally benchmarked tests of educational achievements need to be brought back to the fore. The first two lessons speak to fundamental issues that many educators, policymakers and education scholars have been lobbying to change for some time.

The latter four lessons hint towards a holistic system reimagination. It is not suggested that the wheel be completely reinvented but it is a clarion call to acknowledge that reimagination is more than merely tweaking individual components, including learning environments, assessments, syllabi, curricular and lessons. These are educational tools that follow our conceptual foundations of education. For education to benefit future generations, it needs to be resilient, which is “the ability to adapt and thrive in an environment despite experiencing adversity” (Masten, Best & Garmezy, 1990). Amidst the adversity of crises and disruptions, education needs to be adaptable such that learning continues uninterrupted, the joy of learning must persist, and education systems are resilient enough to support the needs of every learner, regardless of their demographic or socioeconomic backgrounds. The building of a resilient education system “could mean ensuring protocols are in place for safe and supportive in-person learning, and ensuring plans are in place to provide remote options that support the whole child at the system, school and student levels in response to future crises” (McKinsey & Company, 2022, p. 16). Building resilient education systems that are flexible and responsive to the changing local and global landscape is the first essential component of a holistic education goal.

Values-anchored Education

The second aspect to creating a learning environment that encourages holistic development is one that is anchored on values. We do need assessment as a diagnostic tool to measure students’ learning goals (i.e., assessment of learning) but more importantly, we should use assessment to personalise the learning experience for our students (i.e., assessment as and for learning). Assessment and evaluation tools help educators to customise their teaching to the specific learner needs. What, however, must ultimately guide educators are their values that serve as a moral compass.

Values must be taken seriously as they are integral to the sustaining and betterment of one’s well-being. Values are the guiding principles that allow one to make and prioritise good decisions in seeking improvement in one’s life (Haste, 2018 as cited in Organisation for Economic and Co-operation Development [OECD], 2019). While it is important for education to help learners develop their cognitive competencies, values must be imparted to learners so that they may use them as a moral compass as they mobilise their skills, knowledge and competencies to meet the complex demands of the future (OECD, 2019). Values are vital in serving as a motivation for lifelong learning (which is the third aspect I will propose) and agency: in framing personal well-being, good personhood and citizenry; in endorsing and supporting societal and human values that promotes societal well-being; and for moral agency (OECD, n.d.). As learners become values-anchored individuals, they will inevitably be important contributors to the progress and sustainability of a nation (OECD, 2019; see United Nations’ Sustainable Development Goals [SDGs], specifically Goal 4 and Target 7, as cited in Manzoor, 2019). Values are the principles and beliefs that guide and influence a person’s choices, judgements, behaviours and actions for the well-being of the individual, society and environment (OECD, n.d.), providing them with a compass that guides the individual with a sense of moral direction (Scoffham, 2020).

It is therefore important for the holistic development of learners to develop the right values. Acquisition of values is important, in part to make good decisions as individuals, and also to protect themselves in ensuring that they possess overall wellness (i.e., physical, mental, cognitive, social, emotional and even cyber), and for them to grow into good local and global citizens who contribute positively to their nation and the world. Teachers must be guided
by values in their use of pedagogy and have the right dispositions to nurture students’ holistic development and overall well-being. Rather than seeing values as simply part of the curriculum, education systems must deliver the content and competencies that learners need for the future while inculcating good values in them that will allow them to utilise these competencies well. If values guide the purpose of education, we can be assured of values-anchored learners who will impact society in significantly beneficial ways.

Lifelong Education

The next aspect to holistic education is one where we must re-evaluate the “lifespan” of education. Traditionally, the runway is segmented into pre-school, primary/elementary, secondary/high school and tertiary education. Tertiary education, that is, undergraduate and graduate, was seen as the certification that defined a person’s career. The disruptions stemming from the technological advancements of the 4IR showed how this was fundamentally erroneous. Supporting this are surveys conducted by the World Economic Forum. Employers were asked what top-10 skills they preferred employees to possess in the years 2015, 2020 and 2025 (Table 1).

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<td>2. Coordinating with others</td>
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<td>5. Negotiation</td>
<td>5. Coordinating with others</td>
<td>5. Creativity, originality and initiative</td>
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<td>8. Judgment and decision-making</td>
<td>8. Service orientation</td>
<td>8. Technology design and programming</td>
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Table 1: Top-10 Skills Preferred by Employers (World Economic Forum, 2016, 2018, 2020)

The change between the years is stark. While some skills moved up or down, most skills were completely replaced or have to be merged with others. This suggests that the needed skills, knowledge and competencies, will change every 5 or so years. These gathered responses prove that having a certificate
that defined one’s career is detrimental to the individual, companies and nations. It strongly suggests that the traditional paradigm of front-loading education is vastly inadequate. This is further solidified with the pandemic which called for the need for more flexible ways of studying and working.

Lifelong learning needs to be high on the priority of education stakeholders and educators, and education systems have the responsibility to develop a lifelong learning disposition and habit of mind in every citizen, whether they be young students or mature adults. A case in point is how Singapore has embarked on its fifth education phase, aptly dubbed as the Learn for Life initiative (Low, 2022). It is an initiative that encompasses not only K–12, secondary and tertiary learners but also adult learners who wish to upgrade their skills or consider a career switch. This is carried out through the SkillsFuture Singapore (SSG) initiative, which seeks to assist in providing adults with relevant professional development courses and programmes (Low, 2022). Interested individuals are further encouraged through roadshows, financial subsidies and the provision of SkillsFuture credits (i.e., SGD1,000 per citizen) to pay for SSG-recognised PD courses and programmes.

While lifelong learning has often been seen in an individual’s learning journey from the formative to adult years, it may also be seen from a systemic perspective. If we map an education system onto a continuum, it must begin with teacher education, progressing to teacher professional development and, ultimately, to enhancing student learning outcomes. For high-quality holistic education to exist, there must be a high-quality teaching force made up of professionals who have undergone rigorous teacher education programmes, who have strong personal and professional values and character, whose well-being is well taken care of by the system and who are well respected by society. Research provides the evidence of strong associations between quality teachers and quality student learning, showing that high-quality and committed teachers provide healthy and Holistic Learning Environments.

There has also been a recognition of the need to prepare teachers beyond a COVID-19 world (Darling-Hammond & Hyler, 2020) by seizing the opportunities to strengthen educator preparation programmes that not only increase teacher efficacy but also teacher retention rates (Podolsky et al. 2016). In Singapore, the SSG initiative is also extended to Singapore educators through the SkillsFuture for Educators initiative and a number of other support structures that promote PD for teachers (Low, forthcoming; Low & Chua, in press; Tan & Low, in press). Furthermore, teacher well-being must be an important factor when we consider that teachers are role-models of lifelong learning to our children, making them a significant factor for enacting holistic education. In one of my recent studies, it was found that factors contributing to teacher commitment to the system and to students included opportunities for growth, professional dignity, balanced workload, positive work relationships, and a sense of work environment safety (Low, Goh & Tan, 2022).

Conclusion: Working Together to Seize Opportunities

This article has listed a few lessons that we have learnt from this tremendously challenging experience. The lessons I seek to understand deeper are those of how to build a resilient, values-anchored and lifelong education system that will enable our learners to be ready for an unpredictable future. As with any education programme, what we learn is merely knowledge unless we start to apply those lessons in real and practical ways. Our education systems, and society, can “use this moment to consider how to build better systems for the future. This may involve both recommitting to the core fundamentals of educational excellence and reimagining elements of instruction, teaching, and leadership for a post-COVID-19 world” (McKinsey & Company, 2022, p. 19).

The crises and disruptions that we have experienced have also provided us with an invaluable chance to put into effect the transformations we have wanted for the education for so long. I encourage all educators, parents, learners and other education stakeholders, including industry partners and the community, to consider how to build a better tomorrow by starting with reimagining education. It is through ”[w]orking together [that] donors and investors, school systems and districts, principals and teachers, and parents and families can ensure that the students who endured the pandemic are not a lost generation but are instead defined by their resilience” (McKinsey & Company, 2022, p. 21). If we can strategically bridge and buffer the cultural, political, and technical environments while managing diverse stakeholders, we can better manage the environments they inhabit (Datnow, Park, Peurach & Spillane, 2022) and bring about a collaborative “building and (re)building [of] systems to sustain academic rigor and to support holistic student development” (p. 54).
As educators, we have the responsibility and the high calling to ensure that we provide our learners with a holistic education that develops their whole being. It is a mistake to think that we are working alone or just within our school. There is a whole education ecology which is connected with other aspects of society that forms an entire ecosystem. As a fraternity and society, locally and internationally, we have to help each child reach his or her fullest potential and in doing so, contribute to building resilient nations globally. This is a work in progress as I try in my current capacity as Dean of Faculty Development to nurture teacher educators who can produce teachers capable of providing holistic education for all their students, through inspiring learning, transforming teaching and producing research that can help inform our nation’s education policies and practices.

Recommended Readings and References


Introductions
Thematic Introduction to Holistic Learning Environments


Thoughts from Educators

“At the height of remote learning during the COVID-19 pandemic, the term "environment" could only be fluid, let alone the term "holistic". It inevitably led to questions such as: Can the space at home or wherever students attend their online classes be considered an environment? Is it even possible to have a learning environment without other students? And could, whatever is left of this so-called environment, be "holistic" when it has been downgraded into a two-dimensional learning experience? In this context, I believe that a “Holistic Learning Environment” could only be provided through the acknowledgment that there is much to learn outside the limitations of school.”

Roma Estrada
English Language and Literature Teacher
Manila Science High School
The Philippines
2 Teaching Social and Emotional Skills (SES)

2.1 Expert Insights
2.2 Stories from Asia and Europe
2.3 Good Practices
2.4 Reflection and Exercises
Teaching Social and Emotional Skills (SES)
Chapter Introduction

Self-awareness and awareness of other people’s emotions as well as empathy towards oneself and others are pivotal for building meaningful social relationships. Scholars found that the development of Social and Emotional Skills (SES) at an early stage strongly influences the creation of such relationships and social, personal and professional outcomes. SES also determine how people are able to adjust and cope with various situations and changes throughout their lives.

This chapter begins with expert insights by Dr Edizon Angeles Fermin from the National Teachers College in the Philippines. While reflecting on his personal teaching experiences, he introduces key findings of the recent Survey of Social and Emotional Skills (SSES) which was initiated by the Organisation for Economic Co-operation and Development (OECD) in 2021. The survey points out five domains of SES that are crucial for the students’ development and that help K-12 educators to structure the learning goals of SES: engaging with others, open-mindedness, collaboration, emotional regulation, and task performance.

In the following six stories, K-12 teachers share how they embed teaching SES in the daily curriculum and highlight key factors that impact how students perceive and internalise SES such as empathy and compassion. Lenka Žigon from the Biotechnical Centre Naklo in Slovenia gives the reader a glimpse through her classroom window and explains how she connects nature and well-being in her class activities. Ivan Ong from Woodlands Secondary School in Singapore adapts the concept of “S.P.I.C.E” by the Academy of Singapore Teachers into his classroom teaching. S.P.I.C.E. stands for Social, Physical, Intellectual, Community and Emotional teaching and learning elements. April Lee, also from Woodlands Secondary School in Singapore refers to Maslow’s Hierarchy of Needs and describes how students can self-actualise when their basic needs are met. Aleksej Peržu from Vilniaus Aleksandro Puškino Gimnazija in Lithuania focuses on the role of design and the arrangement of furniture in the classroom and how both influence teaching styles, strategies and methodologies. Readers are invited to a reflection exercise on the objective and impact of different classroom layouts. Then, Mark Wilkinson from The Junior and Senior School in Cyprus introduces his Monthly Kindness Calendar and encourages other teachers to create their own calendar with students to bring appreciation and happiness to everyday school life. The chapter closes with a story by Daiva Vašnorienė from the Kaunas Waldorf School in Lithuania whose students express themselves through art and create abstract “mood sketches” of the day.
Therese will always remind me that the teaching of Social and Emotional Skills (SES) is indeed equally important as teaching the other learning domains.

Among the students in my 10th grade English class a lifetime ago, Therese definitely stood out. She would often come to class late seemingly unprepared and hesitant to take part in group tasks. For about a month into the new school year, I took note of such pattern of engagement. Mindful of the possibility that I might have missed out on some information about her, I reached out to her guidance counselor and former teachers. I was shocked and at the same time moved to have learned that she was grieving the tragic loss of her father. Narrative data showed her great concern over the uncertainty of continuing her studies and how her family would survive. At a time when access to student financial assistance was scarce, she was acutely aware of the gravity of her problem. She was in a state of crippling insecurity.

It would have likely caused her more stress if I had taken the route of immediately issuing her a warning slip for unacceptable behaviour. This would have been followed by a conference with her parent or guardian and likely, a recommendation to undergo a behaviour modification programme. It would have led to an unimaginable level of fear, frustration, and maybe even the feeling of failure. Instead, I decided to introduce a journal writing routine through which every learner is given the space to articulate insights based on select thematic prompts. All of these were grounded on the real-life applications of our course readings and activities.

Through their narratives, I have gained appreciation of the complexity of the various emotional states of my learners. Our exchanges on paper have taught me that they were trying to manage their responses to specific realities especially at the level of their emotions. Their decisions, actions, and reflections became instant materials of inspiration. They gave me insight into how I could address their specific needs more responsively – by providing resources that matter to them, by designing tasks that let them exercise the power of choice, and by allowing them to analyse their individual and collective experiences. One very touching point of our journey that year was the moment when Therese replied to my feedback on her entry about the courage to move on. Below the note I wrote in response to her entry, she wrote, “Thank you for making me and my classmates feel we will never be alone.” It changed me forever.

Since then I became more keen that it was my personal and professional responsibility to reach out and understand my learners in the best possible ways. Aside from the journal writing routine, I added a 10-minute huddle at the beginning and end of the week. The first huddle was focused on what was keeping them busy or bothered without anyone telling others what to do. They simply had to listen and once in a while inquire how they were coping. At the end of the huddle, each small group agrees to take on the shared mission of reaching out to one another and provide some form of reasonable help where possible. Meantime, the end-of-the-week huddle was reserved for expressing gratitude and promise. I soon realised that as a result of the routines in place, my students were working more efficiently on their tasks, expressing more openly their ideas, and providing sincere feedback to their peers. Best of all, Therese was already engaging with more eagerness.

Indeed, when we create safe and healthy spaces and opportunities that enable learners to understand themselves especially their emotions better, they will also engage better in learning processes. The level of comfort they enjoy through and from such provisions significantly shapes their openness to formulate empowering decisions, to take informed risks, and to take responsibility for their actions. The powerful relationships formed out of these not only enable the child to gain self-confidence and eventually, self-mastery. More importantly, they yield habits of inclusion rooted in the value of empathy and the ethos of care. As the child expands his or her repertoire of social behaviours these habits contribute to the development of a consciousness for diversity, equality, and equity that are essential to tackling the realities of a constantly changing world. And in turn, such consciousness forms part of the tapestry of memories that spell out individual and collective transformation.

On the other hand, the conditions that make those spaces and opportunities accessible and relevant induce reflection and responsiveness among teachers. They find themselves designing and delivering learning on the
basis of actual concerns, issues, and circumstances that dramatically affect every learner. While they have actually prepared a scope and sequence of learning items for an entire class, they find themselves in need of implementing them with the mindfulness for adaptive and differentiated learning. Aside from focusing on knowledge and skills, they learn to pay attention to emotions and attitudes that make a lot of difference in the total learning experience. Instead of simply regarding each learning area as a content area, they also learn to turn each discipline into a platform for well-being.

Such emphasis on the value of designing and delivering learning spaces and opportunities premised and focused on SES was at the heart of the Survey of Social and Emotional Skills (SSES) initiated by the Organisation for Economic Co-operation and Development (OECD) in 2021. The report provides the impetus for strengthening SES within the greater discourse of adaptive, resilient, and innovative education especially as the world continues to experience various disruptions and complexities. It states:

“In an increasingly fast-changing and diverse world, the role of social and emotional skills is becoming more important. A faster pace of living and a shift to urban environments means people need to engage with new ways of thinking and working and new people. Ageing and more diverse populations and the dismantling of traditional social networks place additional emphasis on people’s sense of trust, co-operation and compassion. Rising complexity and the increasing pace of technological change call for the ability to act independently and to adjust to changes on-the-go.” (Office of Economic Cooperation and Development, 2021, p. 4)

The SESS global report presents an integrated view of five domains of SES that should matter to those concerned with child development.

As a pioneering global initiative in gathering data from learners, parents, and educators on the SES of children ages 10 and 15, the full report defines each of the domains and the skills constituting each of them. For purposes of this introductory article, the focus of discussion will be on the following key findings concerning these domains that are relevant to the work of K-12 educators.

1. Younger students tend to report higher levels of social and emotional skills. For such reason, teachers can maximise the opportunity afforded by early childhood environments to raise the level of self-awareness of learners. Sociability, assertiveness, and energy which all constitute the SES domain of engaging with others are crucial skills that should be given attention as early as possible.
Mindful of such finding, it is essential that play-based learning and exploratory experiences be prioritised in teaching young children. They make young children more comfortable in connecting with peers and adults as they make sense of an exciting world of possibilities. Aside from the joy that play-based learning brings, children who play more are capable of growing to become more self-regulated, cooperative, considerate, friendly, and socially competent (Daubert, Ramani, and Rubin, 2018). These characteristics lay the foundation of learning the other SES.

There are several classification systems of play ranging from those that describe the number of children engaged in an instance of play all the way to the complexity of rules involved. One type of play that is central to the work of those who promote the teaching of SES is called social play. It enables young learners to discover prosocial behavior that leads to their awareness of others’ emotions (Whitman, 2018). This in turns yields an expanded perspective that builds empathy. By realising that not everything is the same about everyone, social play lessens the chances of children becoming self-centred. Consistent exposure, therefore, to social play is a clear pathway towards enhancing young children’s SES.

2. Students’ SES differ by social background and gender. Accounting for learner diversity within formal and informal learning settings is a primary focus of learner-centred education. While the report articulated that students from advantaged backgrounds have higher SES than their disadvantaged peers, every school is in need of building and sustaining a learning climate that fosters not only equality but more importantly, equity.

There is much sense in teaching SES viewed from the vantage point of equity. When young people realise that their teachers and caregivers help them overcome forms of inequity that may prevent them from engaging in learning experiences well, they develop trusting relationships that influence their sense of purpose and belonging. This, in turn, eventually drives them to learn and practice the skills needed to realise their individual and community aspirations (Collaborative for Academic, Social, and Emotional Learning, 2022).

It will therefore matter for children with their various backgrounds to learn SES through role play, team problem-solving, and simulations of various social settings. As they engage in these opportunities with much regard for their essential similarities more than their differences, they will be able to interact with empathy, trust, and cooperation. These three constitute the SES domain of collaboration which may also be taught effectively through situational learning. It can help children in combining individual emotional experiences and group-level emotional regulation (Mänty, Järvenoja, and Törmänen, 2020). When they are provided with spaces that value their “I” messages in order that the “We/Our” perspective becomes more defined, children are able to enjoy connecting with significant others, especially their peers.

3. Students who regard themselves as highly creative also report high levels of intellectual curiosity and persistence. These “star” students, when afforded the chance to share roles in shaping and running learning experiences can have an enhanced level of self-efficacy and a positive influence on their peers.

It thus makes sense that meaningful negotiation between children and adults be practised in classrooms not only to satisfy their curiosity and persistence but more importantly, to support their growing command of creativity and agency. For instance, learners can be engaged in developing classroom management rules and routines that are framed as “Oath of Champions” or “Code of Heroes” which are student-led symbolic articulations of practical expectations on cooperation, discipline, and engagement. Meantime, negotiating processes and products of assessment prompts learners to take a more active role in defining ways by which they can demonstrate their creativity, originality, and collaboration skills.

Taking charge of their own experiences without disregarding authority is crucial to teaching children responsible freedom in the performance of responsibilities. This is why the SSES looks at learner motivation, responsibility, self-control, and persistence as components of the SES domain of task performance. Being inextricably linked, it will be beneficial for both learners and teachers to see how they all come alive in project-based learning (PBL) contexts.

PBL enables learners to analyse collaboratively the complexity of a particular problem. It provides the motivation to look for viable solutions that everyone in a team can support, thereby introducing learners to the principle of collective accountability (Baines, et.al., 2021). This can go a long way in enabling learners to take control of their decisions and actions as they know that they will not just affect themselves but more importantly others.
4. Students’ perceptions of a competitive school climate and high adult expectations are related to higher psychological well-being. The disposition to be competitive appears to be working miracles for children as they work towards mastering SES. When they are made aware of clear goals and are provided with the chance to be guided in creating their individual and team game plans, they have higher chances of performing well, eventually also achieving better.

It is therefore crucial for the home and the school to be in agreement insofar as learning expectations and the measures and methods associated with them are concerned. The partnership that exists between these two influential institutions is so valuable to children’s attempt to manage their various emotional states as they engage in learning. It must be recalled that stress resistance, optimism, and social control are all necessary in making the SES domain of emotional regulation possible.

It is likely that children will encounter fear, frustration, and failure at significant points in their learning journeys. Some of these spring from stressful expectations from their own caregivers especially parents, (Salavera, Usán, and Quilez-Robres, 2022). Too much of unrealistic expectations can dampen learners’ views of their capabilities and competencies. It is therefore a valuable imperative for parents and teachers to optimise moments of pressure as opportunities to assure learners that they will constantly rally behind them. In this way, their grit and courage become even much stronger.

Meanwhile, learning environments that use reward systems that are premised on both individual and collective achievements are able to create ecosystems of co-operation more than competition. This means that learners are strongly encouraged to put in as much effort and initiative as they could because they are conscious that by working together, everyone will be pulled up and achieve more. When complemented by parents and guardians who undergo training from the school on fostering the winning attitude of a team, the school prevents a typical rat-race learning calendar from happening and instead roll out an exciting expedition-like curriculum year where collective wellness is very much valued.

5. Some of the skills have an implicit positive impact on individual and societal outcomes. While their ultimate effect will become more manifest much later because they need to be constantly practised, SES train children to become open-minded adults. The consistency that should accompany the teaching of SES is key to ensuring that when learners mature, they transfer their essential understandings of how the quality of their relationships can bring them more fulfillment or frustration.

Such SES domain of open-mindedness requires curiosity, tolerance, and creativity. These can best be mastered in immersive learning environments such as communities, work places, and other social settings where learners get to test their brewing ideas, initial assumptions, and even emerging solutions. It thus makes sense if learners get to be exposed to real-life settings where the competencies they learned through learning areas come alive. A simple trip to a farm not only makes them more curious about plant and animal growth. When designed properly, it may even be an opportunity to test ideas on how certain farming procedures may be improved.

Immersive learning, even if it is done with the aid of virtual and augmented reality technology can help learners integrate several SES in a variety of social settings. It is a strategic direction that schools should pursue if social development were to become a centerpiece of all learning (Gurbutt, et.al., 2019). Even in mediated learning environments, technology must be regarded as an alternative to closing down gaps and distances between and among learners, communities, and other spaces for social interaction. What is important is that in these opportunities, learners are afforded a latitude of freedom to design their preferred pathways of experience through the coaching of inspiring teachers.

There is much reason and rhyme for K-12 schools to adopt the SES model provided by the SESS. Aside from highlighting the relationship of the big five domains that include engaging with others, open-mindedness, collaboration, emotional regulation, and task performance, it puts emphasis on three compound skills of critical thinking, meta-cognition, and self-efficacy that are necessary in ensuring adult productivity and social responsibility.

In the coming years, educators will continue to grapple with the idea that there will be future disruptions that will potentially reshape learning and teaching experiences. Leaders will refocus the philosophy, vision, and mission upon which their learning institutions are founded. This will necessitate adjustments in the way spaces of and approaches to learning are configured. They will also demand shifts in orientation towards the engagement of other development stakeholders at the levels of policy,
2.1 Teaching Social and Emotional Skills (SES)

Expert Insights

process, and programme. Parents and other caregivers will look for more fun and less frustrating ways that will make their children ever more ready to face emerging realities.

But one thing that will surely endure is the fact that learning SES is inseparable from learning cognitive and affective abilities. It is our key towards sustaining and of course, celebrating the essential features of learning and teaching that are undeniably human.

References


Thoughts from Educators

“One of the key responsibilities of a teacher is to facilitate a positive type of discipline in the classroom, and to motivate students to become the person they want to be. A teacher has to support students to respect themselves with the values they believe in and to build their learning and life journey based on their benevolent values.”

Rika Rachmita Sujatma
Principal
SMA Negeri 1 Kalijati
Indonesia
Teaching Social and Emotional Skills (SES)

Stories from Asia and Europe

2.2

A view through my classroom window

Lenka Žigon
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We live in a very challenging time. There is a lot of unpredictability, and we experience changes in our society almost every day. We have recognised that we all are very fragile – nature, humans and other beings. Our future depends on us, especially on how we cope with these constant changes. At the same time, some of these challenges, such as natural disasters or the outbreak of the COVID-19 pandemic in early 2020, have certainly made us more humane.

Next to guiding and supporting students during their academic learning journey, teachers have an equally important role in educating young people at school how to tackle contemporary problems. Therefore, it is important to build a school environment that enables the well-being of both teachers and students. Only in such environment can we expect good results of social, mental, physical, intellectual, and emotional development of every person who is involved in the teaching and learning process.

When I think about the elements of a Holistic Learning Environment for my students, this question comes immediately to my mind: How can I help my students face and tackle the demands and challenges of everyday life? We must prepare young people to be able to take charge of their own lives.

A healthy environment is an integral part of daily life at my school. Education for sustainable development is embedded in our school curriculum, and we aim to build students’ awareness and learning activities which are connected to nature and well-being.

Kindness is the first step in this process. I always try to begin my school day with a great amount of energy and optimism: a big smile on my face and a loud, encouraging good morning greeting. We have plants along all school corridors and a green wall in the school lobby, which creates a relaxing and joyful atmosphere in the school building. At my school, we also focus on learning healthy eating habits. The school has its own kitchen and a friendly dining area. Most meals are freshly prepared, even the milk products such as cheese and yoghurt. We are lucky because our school owns some cows and has a small milk production facility. Fresh milk products are delivered straight from our school workshops. We are aware that this is a very special environment, and you can imagine that students enjoy eating their meals in school. When they long for something special, they can visit the school shop and buy snacks there, e.g., biscuits, an ice cream, or a drink. Even these products are mainly prepared in the school bakery workshops.

Looking through the school windows or taking a walk on the school compound during breaks is a very calming exercise. At one side of the school campus is a small fishpond which is surrounded by different green plants. At the other side is a horse stable. Some students take part in riding lessons after school. I think this is a wonderful opportunity. We all know how animals can have a positive effect on our mood. Besides that, research suggests that horses may have a sixth sense that can identify anxiety, stress, and fear in humans, thus helping individuals to identify these emotions in themselves.

I am very happy that a Holistic Learning Environment has always been an educational objective alongside cognitive growth at my school. I can clearly see this had a great impact on boosting social, emotional, and cognitive skills of my students. My colleagues and I are also developing some lessons outside the classroom, where students are exposed to different sport and nature related activities. I believe that in a school environment with nature, committed teachers and friendly peers, students will surely learn how to navigate in today’s complex world and solve the diverse challenges that are coming along their way.
Teaching Social and Emotional Skills (SES)

2.2 Stories from Asia and Europe
To create a Holistic Learning Environment for my students, I take reference from the acronym “S.P.I.C.E” used by Academy of Singapore Teachers for staff well-being and adapt it into my classroom teaching. “S.P.I.C.E” stands for Social, Physical, Intellectual, Community and Emotional.

**Social:** There must be a positive classroom culture where students and teachers feel safe to be in. I will always ensure classroom expectations are communicated and agreed upon by students at the beginning of the year and continue to enforce them throughout the year. There must be a positive teacher-student and student-student relationship. Mutual respect is key, and students must be involved in decision making in the class.

**Physical:** The physical aspect can be seen from two perspectives: physical well-being of students and physical setting of the classroom. It is important that students are given small breaks in between segments of the lessons to consolidate their learning or to do some stretching and breathing exercises. This helps them to maintain a certain level of concentration. In terms of physical space, a classroom needs to be clean for students to feel invited to learn.

**Intellectual:** Lesson preparation and enactment is crucial to ensure effective classroom teaching and learning. I like to refer to LeAnn Nickelsen’s 4 steps Instructional Cha-Chas to conduct my lesson: Chunk content to smaller segments for better engagement, give students time to Chew (process) their learning, constantly Check (assess) their learning and finally Change (Differentiated Instructions) my instructions to ensure students meet the learning targets for the day.

**Community:** There is the popular saying that it takes a village to nurture a child. Building a close relationship with parents and other stakeholders are important to get to know my students better and explore opportunities for them in finding their aspiration.

**Emotional:** Students’ mental well-being is crucial, and the outbreak of the COVID-19 pandemic has only further emphasised its importance. Daily check-in helps to have a quick check on their well-being. I have learnt to stop asking “Why didn’t you...” and ask more of “What happened?”. I also begin my lesson with some positive notes or openly share with my students how I overcome my own problems to teach them coping mechanisms.
The students’ needs pyramid

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Head of Department for Character & Citizenship Education
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In my experience to create a Holistic Learning Environment for students, my approach follows two broad areas:

1. Students’ needs (deficiency and growth needs)
2. Well-being domains where I can contribute to through my lessons

A Holistic Learning Environment means that students not only learn, but they thrive in what they learn, with a positive well-being that would motivate them towards excellence and in the process spur the self-directedness in wanting to explore more. By creating an environment that meets their needs and at the same time provides sufficient opportunities to nourish them in each of the well-being domains, it would be holistic in its nature.

Meeting students’ needs

Referring to Maslow’s hierarchy of needs, students can self-actualise when their basic needs are met. Here are some simple ways how I attempt to meet the needs of my students in the classroom.

Addressing well-being domains of students:

In a Holistic Learning Environment, other than meeting the needs, I aim to address students’ well-being through intentional planning such as the following:

1. Physiological needs: Together with my colleagues, we would always ensure that our students turn up in school in a state where they are ready to learn. There is a small pantry by the side of the classroom and hungry students may help themselves to little bites, so that they are able to stay focused during the lesson.

2. Safety needs: I build rapport with them and create opportunities for students to work with each other to forge friendships. The tone of the lesson is safe, allowing them to speak up and ask questions when they are in doubt. I also make sure I respect my students as individuals and treat every question posed seriously.

3. Esteem needs: Having a positive self-esteem is particularly helpful towards academic excellence. Therefore, to build their self-esteem, I create opportunities for oral presentations and showcases of successful work, which would build a sense of pride. We also get students who have done well in tests and exams to share their backstories, which would also build self-esteem. Students who did not do well can do a reflection and aim for improvement. Every small improvement is celebrated in class.

4. Cognitive needs: I teach the subject Nutrition and Food Science. Therefore, in the lesson, we always link the subject to their future aspirations and career options. I also make sure new knowledge is taught to them. I give my students opportunities to critique their peers’ work and value-add to the work of others by applying their knowledge. I emphasise on life skills and social and emotional competencies other than theory to get them to see learning from a holistic point of view.

5. Self-actualisation: We frequently organise projects to get students to apply the knowledge they learnt towards improving humanity. For example, they can prepare a recipe/meal plan for the under-privileged in the community or compile a recipe book that we can offer to the elderly in the community to help them to eat more healthily.
Teaching Social and Emotional Skills (SES) Good Practices

1. Safety and a supportive environment
I try to build a good rapport system and a good supportive peer network among the students to help each other in their learning of concepts. A buddy system is put in place for them to look out and assist each other. Also, a strong rapport and teacher-student relationship is forged to enable them to open up to me when they have queries.

2. Connectedness, positive values, contribution to society
In my lessons, I try to help them connect to the bigger frame of purpose and see the relevance of the subject. I usually design a project for them to apply positive values to work in teams and contribute to society through the theme of “improving humanity”.

3. Learning, competence, skills and employability
This domain builds students’ confidence and competence and allows them to be future-ready. Here, I intend to help them understand the skills they need to demonstrate in order to thrive in the future working world. On top of theoretical knowledge, I will get students to research on the career options that the subject can lead them to.

4. Agency and resilience
This is the most important domain for students to develop. I design learning tasks that require students to brainstorm and present their work through verbal communications and there are frequent reflection activities for them to review the difficulties encountered. They can then suggest how they can do better the next time. The habit of mind will train them to be more resilient in future.
Creating a personal environment adapted to students’ needs was always a priority at my school. The fact that students spend most of their time in classrooms should motivate both school management and teachers to facilitate a learning environment that supports students’ well-being and helps build up their resilience and grit. There are many ways how we can create a holistic teaching and learning environment. Let’s begin with a very practical example: the choice and arrangement of furniture in classrooms. Over the past years, layout and interior design of schools and classrooms have significantly changed. In the case of my school, we replaced the traditional desks for two students with personal desks. These personal desks can be easily moved around in the classroom or, if wished, joined with other desks to jigsaws. Teachers are now able to conduct their lessons in a more dynamic and engaging way, and students can collaborate with any of their peers. Those who wish to work in teams can move their desks together. Others might prefer to sit alone when they need to concentrate, and this is fine.

The significance of classroom furniture and seating arrangements for teaching and learning

Furniture is not only an integral part of the classroom environment; it also serves as an important teaching and learning tool: the design and arrangement of furniture in the classroom influences teaching styles, strategies and methodologies. Likewise, furniture has an impact on how students can focus, engage and collaborate with each other. Flexibility, mobility and ergonomic features of furniture play a crucial role to ensure that today’s classrooms are more dynamic and engaging.

Teachers can choose from a myriad of different seating arrangements for their classroom, moving away from the traditional layout and teacher-centred class to a more student-focused class that encourages discussions and group work. Be it the auditorium, seminar, cluster format, or face-to-face – there is no right or wrong decision. The best seating arrangement is one that supports your teaching style and learning objectives, and that takes into account factors such as class size, age of students, shape of the classroom or external distractions (e.g., noise level).

Do it yourself!

How do you arrange your classroom and why? Take a few moments and think about different classroom layouts. Which classroom layout would be more conducive for certain subjects and learning objectives? Which set up would promote student-to-student interaction and teamwork, which one fits better the format of teacher-based instructions and presentations? Do class size and the age of students influence your selection?
The Clusters

This classroom layout enables ...

This classroom layout is challenging when ...

It is well suited for the following scenario:

The Horseshoe

This classroom layout enables ...

This classroom layout is challenging when ...

It is well suited for the following scenario:

The Grid

This classroom layout enables ...

This classroom layout is challenging when ...

It is well suited for the following scenario:

The Roundtable

This classroom layout enables ...

This classroom layout is challenging when ...

It is well suited for the following scenario:
2.4 Teaching Social and Emotional Skills (SES)
Reflection and Exercises

The Runway

This classroom layout enables ...
________________________________________________________________________
________________________________________________________________________
This classroom layout is challenging when ...
________________________________________________________________________
________________________________________________________________________
It is well suited for the following scenario:
________________________________________________________________________
________________________________________________________________________

The Stadium

This classroom layout enables ...
________________________________________________________________________
________________________________________________________________________
This classroom layout is challenging when ...
________________________________________________________________________
________________________________________________________________________
It is well suited for the following scenario:
________________________________________________________________________
________________________________________________________________________

The U-Shape Plus

This classroom layout enables ...
________________________________________________________________________
________________________________________________________________________
This classroom layout is challenging when ...
________________________________________________________________________
________________________________________________________________________
It is well suited for the following scenario:
________________________________________________________________________
________________________________________________________________________
My classroom layout enables ...

This classroom layout is sometimes challenging when ...

But I overcome these challenges by ...

It is most suited for my students and me!
The Kindness Calendar

Mark Wilkinson
Chemistry and Science Teacher
The Junior and Senior School
Cyprus

Well-being of students is essential for their learning. For well-being to be embedded within a learning institution it is important to look at a triumvirate approach, which involves children, teachers and parents or caretakers.

My school’s focus in the medium term is to encourage our students to “take their learning home”, while at the same time allowing parents or caretakers to support learning from home. Well-being starts with kindness, and we have introduced a Kindness Calendar that is shared on a termly basis with both students and parents or caretakers. This gives us a daily focus on small acts of kindness that may involve reinforcing friendships, reaching out to find new friends, looking inward to appreciate the person that you are or being kind in the home environment.

The Kindness Calendar is published on the school’s website and on posters around the school. It is one of the first things we refer to during morning registration and these ideas of kindness are reinforced during school assemblies and on an ad-hoc basis during lessons throughout the day. The outcome is that kindness becomes a regular point of discussion throughout the school day. Teachers are able to point to kind acts and reward them. They can also identify unkind acts within the scope of the kindness calendar, which takes away some of the antagonism of a behavioural management policy. The (anecdotal) outcome is that the school seems calmer and the children happier because we are all aware of the positive impact that kindness can have on our everyday lives.
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<td>Ask your classmates about their holidays</td>
<td>Find out the names of at least 2 people that you do not yet know</td>
<td>No waste Wednesday – think of the planet</td>
<td>Be kind to somebody – pass on the kindness of others</td>
<td>At home, help lay the table and clear up afterwards</td>
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<td>Brighten somebody's day with a joke</td>
<td>Tell a staff member about something kind that you saw during break time</td>
<td>Greet the bus driver on your way to school</td>
<td>Random acts of kindness day</td>
<td>At home, arrange some family together time</td>
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<td>Listen wholeheartedly to others without judging them</td>
<td>Join in with a different group of friends at play time</td>
<td>Count your blessings – list all the kind things that others have done for you</td>
<td>Give a compliment to as many people as possible</td>
<td>At home, turn off digital devices and really listen to your family</td>
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<td>Thank a friend for always being there</td>
<td>Make an extra special effort to be cheerful</td>
<td>Notice when you are hard on yourself and try to be kind instead</td>
<td>Learn a new skill from a friend and teach them one of your skills</td>
<td>At home, plan something fun to do as a whole family</td>
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<td>Use all the kind things that others have done for you</td>
<td>Congratulate someone for an act that may go unnoticed</td>
<td>Help keep the classroom clean</td>
<td>Treat everyone with kindness – including yourself!</td>
<td>Give your family a big hug</td>
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**Say it with colours**

Daiva Vaišnorienė  
Information Technology Teacher  
Project Coordinator  
Kaunas Waldorf School  
Lithuania

Students have very different personality traits and temperaments. Temperamental differences play a big role in the learning process and how students adjust in school, interact in class with their peers and the teacher, follow instructions and approach specific tasks. As a teacher, I can help my students develop specific skills, but it is hard to help them control their own temperament.

There is no good or bad temperament, but as a teacher, I need to know how to respond and engage all my students in a sensitive way, no matter if they are shy, active or angry. Research has shown the strong relationship between a students’ temperament, her/his academic achievements in school, acceptance by peers and overall well-being. Therefore, it is very important to find a way and use the right methods to help students integrate better in the school environment – for their own well-being and others.

I think open tasks are a meaningful exercise where students can express themselves freely with and show their creativity and skills. In my case, I teach Information Technology subjects for students from grade 7 to 12. During the lessons, we learn to use tools to edit documents, spreadsheets, basics of digital drawing and create web pages. We do programming, 3D modelling, and video editing. Students are very excited when they succeed with a task.

As a practical example, in the 11th grade, my students learn 3D modelling with an online tool called SketchUp for Schools. The task is to create a monument under the theme water. The students should use at least five geometric shapes such as an oval or triangle, and have one lesson to complete their design. Take a look how they accomplished the assignment with their own individual styles, expressing different moods and creative traits!
Thoughts from Educators

“I always start my lessons with an icebreaker and invite students to fun activities such as guessing games, puzzles, picture stories, short video clips, etc. Icebreakers create happiness and laughter and release students’ tension before the class starts. The activities are not only developed by me, but also by my students. They are very useful to find out how students feel at the moment. To ensure privacy, I often use Mentimeter as students are shy when their name appears on the screen. Another simple but effective option is to ask them to draw their feelings using emoticons. Most of the time, all of them are willing to honestly share and explain their feelings to their friends. I do this because I want them to know that I do care about their well-being and emotions, and not only focus on my teaching targets and learning objectives. I join these exercises and also draw to share with my students how I am feeling.”

Lilis Musyarropah
English Language Teacher
School Coordinator of ASPnet
SMP Lbschool Kebayoran
Indonesia
3 Inclusion in Digital Education

3.1 Expert Insights
3.2 Stories from Asia and Europe
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Inclusion in Digital Education
Chapter Introduction

Inclusive education is invaluable for providing quality education and building better societies. Inclusive teaching and learning practices are important for ensuring well-being and equity among students in both physical and digital learning environments.

In the second chapter, Steven Zelko from the AccessAbility Hub at La Trobe University, Australia, provides experts insights how the principles of Universal Design can serve as a useful framework to address inclusion in teaching and learning and shares two case studies based on real-life scenarios.

Four teachers then illustrate through personal recounts how they ensure that their students feel included and heard and what digital tools as well as day-to-day teaching practices they use to embrace inclusion in Digital Education. Juliette Bentley, former Teacher at Mt St Michael’s College in Australia and now Education Innovation Specialist with Datacom, recommends several pedagogically effective digital tools that drive inclusion in education and encourages teachers to become digital bowerbirds. The stories by Cristina Drescan, English and German Teacher at the Lucian Blaga Upper Secondary School in Romania, and Anneleen Heuleu, Language Teacher and Internationalisation Coordinator at the Onze-Lieve-Vrouwccollege in Belgium, highlight how digital tools can open opportunities to expand on Social and Emotional Learning (SEL) and Service Learning (SL), and serve the common good. On the other hand, Zhananur Kassimova, English Language Teacher and Teacher Moderator at the Nazarbayev Intellectual School in Kazakhstan, shares the negative impact of distance learning on her students’ overall language performance and behaviour in the classroom. The chapter also includes a list of popular tech tools and applications which ASEF ClassNet teachers and participants recommend their peers. It closes with an exercise that invites teachers to create their own Digital Inclusion Checklist, based on six guidelines presented in the publication A Handbook for e-Inclusion: Building Capacity for Inclusive Higher Education in Digital Environments.
Mrs Robinson's English class always came after lunch on a Thursday. I had been a voracious reader from a small age but lately the thought of opening a book terrified me. It was not so much the reading part that caused my heart to race, that had always been an unmitigated joy, but the standing up and reading aloud in front of the whole class. For some reason I could not take the pretty words in my head and make them pretty as they came out of my mouth. And this really confused clever 10-year-old me.

It was not till after I had finished a degree in English Literature that I came to learn most people read in a different way. That words on a page were letters in a particular order that people recognised, and not the shapes and my own little guessing game. The world, it seems, was not created with me in mind.

What I hope to illustrate over the course of this article is that whilst my experience going through and becoming part of the education industry in Australia may be specific, the principles and practices that outlined below are broad and can be applied to most, if not all, levels of learning across the globe.

Now often when we talk about inclusion, the first thing that comes to mind is overcoming a physical impairment – a ramp to a doorway, a book printed in Braille, or a sign language interpreter alongside a speaker at an event. But what I had was one of those invisible conditions, not so easily seen, or so easily overcome. The World Health Organisation (2022) reports that over 1 billion people across the globe live with some form of disability. This is further exacerbated by the uneven distribution of both educational and assistive technologies. As illustrated in the World Report on Disability, this distribution not only leads to worse outcomes for individuals, but entire economies (World Health Organisation & World Bank, 2011). As educators, how do we deal with the dilemma that we have to teach for something that we cannot readily recognise, but also that might be systematically prohibiting? Inclusive practice can address both.

A working definition of inclusion in education comes from the landmark US Rehabilitation Act created in 1973, “No otherwise qualified individual with a disability … shall, solely by reason of her or his disability, be excluded from … participation”. Historically this has been done by trying to add things on to pre-existing resources so it “makes them accessible” (Equal Employment Opportunity Commission, n.d.). An example of this would be the sign language interpreter standing alongside a speaker at an event mentioned earlier. Another would be a computer programme like JAWS, which is a piece of software that makes it possible for a person with low vision or blindness to interact with a computer. In the first instance, the interpreter not only makes it possible for folks who are hard of hearing to participate in the conversation as it is happening but humanizes the process creating a world with that person in mind.

We will return to this example later while discussing case studies on practical approaches to accessibility, but it is worth noting with this definition of inclusion, digital equity, or access to the technology needed to overcome disability, should also be paramount. Next, we will deal with the harder question of inclusivity:

Why should the engagement of one person matter to the experience of the group? This common critique of the implementation of these principles into education is: Are the efforts worth the outcomes? Is all the work required to change the material for one student justified?

There is a quote I use often to answer this question: “Overspecialise, and you breed in weakness. It is slow death” (Oshii, 1995). Coincidentally this comes from a sci-fi film about the rise of humans with cyber implants, and the line is uttered by a being that is more machine than human, but the point still stands. Currently our education practice is overspecialised. It caters for a specific type of reading, both literally and figuratively, and fosters a specific type of thinking. And with the narrowing of thinking, we narrow potential, not just for the one student but for all. A useful example of this, and something discussed further in the second case study, is the bonus effect this has on the entire classroom. The use of closed captions not only provides equity for a student who requires them, but actually enhances the experience for a student who might not need them. So, what we see is that inclusivity is less
to do with short-term outcomes for individuals, and more about broad stroke possibilities for everyone.

Now that we have the why of inclusion, we must address the how. The “how” starts with a concrete framework to model the approach. This framework was created in the late 1990s by a working group of architects, product designers, engineers, and environmental design researchers funded by the National Institute on Disability and Rehabilitation Research and the U.S Department of Education. They called it The Principles of Universal Design (NCSU, 1997). As we explore this framework with specific examples that may not address all forms of inclusion, I advise educators, who are reading the article, to keep their own context and scenarios in mind to translate and apply the learning and understanding accordingly.

The Principles of Universal Design

They are broken up into seven distinct categories:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

This article will focus on the first four principles as they are generally in the scope of educators.

1. Equitable Use

a. Provide the same means of use for all users: identical whenever possible; equivalent when not
b. Avoid segregating or stigmatising any users
c. Provisions for privacy, security, and safety should be equally available to all users
d. Make the design appealing to all users

Let us look at a brief example. You are my English teacher, Mrs Robinson, and you have handed out a book for your students to read aloud to the rest of the class. The immediate question from the application of the first principle is: can all the students use the book that you’ve handed out? If not, what other formats would be required so all users can access the material? Does the alternate format create a stigma around the student who requires them? And does that specific alternate format even appeal to that user? These legitimate questions based only on the first principle can seem daunting, but we will demystify the process a little.

Firstly, you want to look at the material you are handing out and look at the format. Is it a handwriting on a piece of paper? Is it a book? It is an electronic document? Are you speaking to the student directly? Now, does the format unknowingly disadvantage anyone? If you handed out a book you would be putting a person with dyslexia at a disadvantage. If you are giving a talk, a person who is deaf would not be able to follow along. So, how do you overcome what seems like a no-win scenario? Often you regress to a format that allows for maximum flexibility, which leads us onto the second Universal Design principle.

2. Flexibility in Use

a. Provide choice in methods of use
b. Accommodate right or left-handed access in use
c. Facilitate the user’s accuracy and precision
d. Provide adaptability to their user’s pace

Now, the question is how do you create a resource that allows for equitable use as well as user flexibility?

Let us go back to our scenario. A hardcopy book is a single approach format – you hold the book, you look at the words, and discern their meaning. There is little to no flexibility in this resource, in fact it could be argued the resource requires inflexibility to engage with. How? A lack of consistent light, for example, would make the resource wholly unusable. Of course, this could be said for an electronic alternative, but listening to the material does not require a torch or a streetlamp through a window, which leads us onto the design.
3. Simple and Intuitive Use

a. Eliminate unnecessary complexity
b. Be consistent with user expectations and intuition
c. Accommodate a wide range of literacy and language skills
d. Arrange information consistent with its importance
e. Provide effective prompting and feedback during and after task completion

In the seminal article, *The Tall Office Building Artistically Considered*, pioneering architect Louis Sullivan outlined the now famous phrase “form follows function”. “All things in nature have a shape, that is to say, a form, an outward semblance, that tells us what they are, that distinguishes them from ourselves and from each other” (Sullivan, 1896).

As Sullivan (1896) illustrates, the shapes of things should tell us what the thing is, and thus what it does. So, how can we apply this to inclusivity? Besides the obvious need to keep things simple and consistent, there is a clear overlap with the previous principle. If something has a simple design, there is more room for user preference. As Sullivan would say, the form does not get in the way of the function, or in this case, the preference. A resource designed without consideration for user preference is designed without function. We will return to this during the case studies below.

The last point of the principle bares considering as well. Effective and timely feedback ensures that the task can be navigated without the need for guessing or assistance. Little to no guesswork is a sign of simple and intuitive design. This may seem counterintuitive to this next principle though, as it calls for redundancy of information.

4. Perceptible Information

a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information
b. Provide adequate contrast between essential information and its surroundings.
c. Maximize “legibility” of essential information
d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions)
e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations

Whilst there is little research on the overall impact of multimodal approaches of education on students with disabilities, we can glean some useful information from tangential research where two or more different methods are used in conjunction. In a study done with instructions for learning a second language (Chang, 2011), researchers had their experimental group both listen to and read the new language, whilst the control group only read the language. What they saw was a significant increase in both listening and dictation scores for the experimental group. This suggests that when your student is stimulated by multiple points of contact (reading and listening) the resonance increases. These studies also suggest that listening whilst reading is also crucial for language acquisition and development.

Now we have a framework for addressing the possible scenarios we might face in creating educational resources, we can look at case studies that will help us explore how to apply them. The case studies will involve a brief outline, then a breakdown of solutions at the institutional level, then at the educator level, and lastly at the student level. This order should also be the preferred approach when applying the principles.

Note: whilst these case studies were developed at a tertiary level, the principles and application are applicable to both primary and secondary education as well. Also, it is understood that the technology-focused solutions may marginalise those who do not have easy access to the equipment, but the focus is less about the solutions and more about how the principles are applied. The key purpose of these case studies is to help teachers reflect on their understanding of the Principles of the Universal Design based on real scenarios.

Case Study #1

A student came to study at the university who had an interesting learning disability. She was able to read text on the page perfectly, but if you asked her what she had just read, she had no idea. Her recognition of words was fine, but her comprehension and retention were non-existent. Prior to her arriving at the institution, in order for her to study she would have to read the text into an audio recorder, then play the audio clip back whilst reading the text at the same time as she was listening. With the average workload, the study time required for this student to complete the reading component of the subjects she was between 35 to 48 hours per week. This was obviously not sustainable.

Now, how do we deliver a solution that normalises her participation? Current best practice is to provide a universal design solution at an institutional level that makes her situation invisible and wouldn’t require the student to disclose her impairment. What does the solution look like? We would need to go back to her core material, turn it into something she can both read and listen to from the time she gets it, and reduce any requirement on her to make the documents viable herself. This can be one of two ways.

The first would be to involve the teacher, and possibly the publisher, who created the content and establish whether what they were delivering in a format that is already accessible or is easily made accessible. Often this is not the case. Document creation can be done in free word processing programmes like LibreOffice, which allow for headings and structure to be embedded for those who need to listen to the document and discern implied elements. If we reflect upon the first and second principles outlined above, we see that this would meet both the equitable use principle, and it would create flexibility.

The second way of handling this from an institutional or school level would be to engage with an alternative format service. Either an in-house specialist or a fee-for-service external provider can take different resources and turn them into other accessible formats. In this case study, the document would be processed using an Optical Character Recognition (OCR) programme in order that it can be further manipulated in a word processing programme (LibreOffice). Two of the preferred free options for OCR programs are Capture2Text and SimpleOCR. Once the hardcopy document was scanned into the OCR software, it would be exported to the word processor in order to be cleaned up, then presented to the student. This would again meet the first and second principles as it would provide both equitable use and create flexibility.

If your institution or school does not have a specialist in-house or capacity to outsource, and is unable to handle document conversion, it may fall back
onto the student to convert the material themselves. Note: this will most likely breach the first principle of universal design as it unduly disadvantages the student (as was the case with this student initially).

A possible workaround for the student to handle the conversion herself may be to engage with the software mentioned above, or alternatively to use mobile phone apps to expedite the process. The Microsoft Office app for both Android and Apple has a built-in OCR feature that will allow the smartphone to be used to scan books and printed text. This is a great solution for a student or staff member who is going into a library and wants to scan text immediately without having to use a computer or use a flatbed scanner.

Case Study #2

During the move to the online working environment due to COVID-19 lockdown restrictions, many students who were either deaf or hard of hearing struggled with the transition. Typically, a student who is hard of hearing would rely on lip-reading to fill in the gaps but through a combination of poor microphones, lack of technology solutions, and mask wearing, these students were finding it almost impossible to simply listen to their classes, let alone participate. Reflecting on the principles, this isn’t an equitable experience for this student.

To meet the Universal Design principles in this scenario, at an institutional or school level, any video material that viewed online should be accompanied by closed captions, and a transcription that sits with the video file. There are two methods that can be applied here. The first would be to script all video content prior to it being produced. This would ensure the transcription is word-perfect, and the student would have it at the time of the video’s release. The second solution would be to use a third-party platform to generate both the closed caption and transcript during the live session. As per the previous case study, this would make the hard of hearing student’s impairments invisible and they would be able to carry out their studies on parity with their peers. This, however, requires a larger financial investment during learning material creation and does not fix the issue of old content that is being reused.

An alternative institutional solution would be to review the content after creation and employ either human and/or artificial intelligence generated closed captions. This again can be done by in-house media specialists or outsourced to third-party companies. A school-level solution for this would be using Microsoft Stream, which offers highly accurate AI-generated transcriptions that can be edited by the user. This requires a Microsoft license to gain access to but also makes dealing with legacy content much easier.

Lastly, a possible solution for students having to deal with content that does not have transcriptions, and if they do not have any institutional support, would be to use free online transcription tools. For live lectures, the student can couple Microsoft OneNote and the Microsoft Translator app for Android/Apple for smartphones to create real-time transcriptions inside their notebook. For videos that have already been captured, the free solutions are somewhat limited (editeddy.com is a great free option but is currently only limited to English), but websites like Otter.ai provide robust platforms for notetaking as well as transcribing audio content. The web version of Microsoft Word also has an accurate transcribe feature available, but this would rely on a user license for the Office suite.

Conclusion

So, what have we learned over the course of this article?

– Accessibility has less to do with adding things on and more to do with regressing back to simpler modes of delivery that provide equity, flexibility, and are simple and intuitive.

– That inclusivity does not necessarily mean additional labour to accommodate a minority of students. That 1 in 7 people globally live with some form of disability (World Health Organisation, 2022) and that means creating resources with them in mind.

– That catering for different ways to approach learning resources does not diminish engagement but enhances it.

– That holistic practice is less about following rules and more about applying guidelines.
In closing I want to leave you with a quote from Mark Twain that encapsulates the need for inclusive action leading to inclusive thought:

“Travel is fatal to prejudice, bigotry, and narrow-mindedness, and many of our people need it sorely on these accounts. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the earth all one’s lifetime.”

References


 Become digital bowerbirds

Juliette Bentley
Former Teacher
Mt St Michael’s College
Australia

After teaching for over thirty years, I find a deepening satisfaction in this wonderful vocation. With each year comes a more nuanced appreciation of the significance of the role I play in nurturing my students’ learning and self-actualisation. I have a particular interest in making sure that my students know how I appreciate them and how important they are in my classroom. The best way I know how to make this clear to them, is to differentiate as much as I can by using inclusive practices. An inclusive learning environment is essential for a young person to feel safe, to know that their effort will be rewarded. It may not result in high marks but the satisfaction of a personal best, or a better understanding of strategies to help them learn. Sometimes when effort has been lacking, other needs have come into play, and I need to accommodate them equally. An inclusive learning context needs trust and frankly, that also comes down to an investment in the rapport and relationship of the teacher and student.

There are days where, for various reasons, both internal and external work is slow, or a student is distracted. These are days where the teacher’s experience and resilience kick in and the intention for the lesson needs to pivot. I read the situation and where I can, I articulate my understanding of their present mindset and either, negotiate an approach to the learning at hand or elicit an alternate arrangement for completion. Once upon a time early in my career, I might have forged forward in my lesson so that I would complete my part of the transaction, but I would have ended the lesson alone with students who had not engaged and who would have simply learned that they didn’t matter as much to me as my end goal. By visibly or verbally recognising where my students are, I am according them respect, and they in turn respect my efforts as a teacher who has their learning as central to the lesson. This flexibility is made possible because I use technology to underpin the resources which I create for them.

Digital applications have provided a wealth of tools to support my efforts. I am a digital bowerbird and am constantly exploring pedagogically effective digital tools to support students. I find that creating resources using Google Workspace for Education and Adobe Creative Cloud Express allow me to produce easy to use resources but equally allow my students to become creators rather than consumers in their learning. Working with chunked tasks in a hyperdoc that they contribute to, builds accountability, creativity, and an understanding that bite sized tasks can lead to a body of learning. They explore ideas, explain ideas and then apply them in a current context. Building a sense of pride in their own work is crucial and by using digital applications, such as Adobe Creative Cloud Express, Google Workspace for Education, Flipgrid, StoryJumper, and collaboration tools in Microsoft 365, they can share their work publicly or within their class groups.

These tools allow for easy collaboration and sharing, and an authentic audience motivates students to edit carefully and consider applying their understanding of visual literacy, an area where they are unconsciously competent. The results are visually professional looking and students feel empowered to share their knowledge and understanding. Both the resources and outcomes work with Microsoft 365 and integrate effectively across platforms. You can hear me talk about how I use Adobe CC Express by visiting Episode 60 of the Adobe Inject Creativity Live YouTube broadcast, by clicking this link:

Watch Juliette’s presentation here

The slides can be found here

To further support my students, I create slide decks with both written and narrated instructions. I make screencasts of extended texts or discussions around topics so that there is no excuse for missing work. Students can preload the work we will cover in class to prepare for engaging confidently in the lesson or revisit it when they are more able to focus. These resources are kept both in the College’s learning management system and on Google
Sites made specifically for the class and unit. I also use the Open Dyslexia font so that those in my class who struggle with reading do not feel singled out and because it is normalised, students feel less of the 'otherness' that they might otherwise feel.

Creative Cloud Express (formerly Adobe Spark) also allows teachers to create mindfulness videos, which I believe are most effective when students hear their teacher's voices. I created a few tutorials for the ASEF 2020 project that you may find helpful and they can be found here:

Another tool that I have found useful is the Microsoft Teams Reading Progression program which can be found in the Assignments tab in Teams. It helps me to develop my students' reading capacity, identifying words students have difficulty with, which I then share with them one-on-one. In addition, using technology in this way allows students of all abilities to share their understanding in a range of ways. I also use www.genially.com and www.edpuzzle.com to name a few more proven applications.

One pedagogical practice which has proven to be successful is the Harkness Discussion strategy and I have created teaching resources for this in the Adobe Education Exchange where you will find an explanation and resources:

Digital tools, websites, Google Earth Projects, Microsoft Immersive Reader and Dictate, and blending traditional and digital pedagogies, help me reach my students on multiple levels. The student created artefacts provide evidence for a nationally held record of adjustments, and parent teacher
interviews where progress can be discussed. I apply the SAMR model where possible so that the students’ learning experience is redefined and where possibly, they are empowered to confidently demonstrate their understanding, as active participants in the classroom.

Become digital bowerbirds, play and explore and revisit what it is like to be a learner struggling! Step beyond your comfort zone! Move through the same spectrum of experience that your students do, from unconscious incompetence to conscious incompetence, conscious competence and then the flow of unconscious competence where everything comes easily! Engage with Twitter and build a professional learning network! Gather micro credentials offered by the providers of the technologies you use! You will learn so much from them and from others who, like you, are passionate about their craft!
“A Holistic Learning Environment should make the students feel safe and confident. Once we empower our students, it affects the confidence of the whole class as all students can show their potential, talents, and personality in front of others. It also opens their awareness of their capabilities that they can offer to the world. This is the key responsibility of an educator. Unfortunately, many students experienced emotional breakdowns and lost motivation in learning because of the limited face-to-face interactions with their peers and teachers during the pandemic. Students are looking for warmth and emotional support, and as a teacher, I think I must help them find this support mechanism with digital modes of learning, even beyond the pandemic.”

Paula Quilitano Vidal
ICT Teacher
International School of Laos
Lao PDR
Inclusion in Digital Education

3.3 Good Practices

Sneak behind classroom walls

Looking back at the time during the COVID-19 lockdown, one of the low bandwidth teaching strategies I found to be well received by my students was the use of printed learning material accompanied by a voice recording. I recorded a voice message, reading and explaining through the printed material, and sent it to students using an instant messaging application (WhatsApp). My students then listened to my recordings and instructions while going through the printed learning material. My students appreciated the recordings as it helped them understand difficult text passages, and the recordings were easily accessible on the phone. Of course, this was only an option as my school allowed to give out physical copies.

Syafiq Ridauddin Raduan
Design and Technology Teacher, Maktab Anthony Abell, Brunei Darussalam

Students really like to use technology to learn and study about new things. One of my favourite online tools in the classroom is Plickers Cards. This tool only requires one smartphone for the teacher. Each student has a personalised card that looks like a QR code. The teacher shows a question on the screen and students must select the right answer (A, B, C or D) using their cards. The teacher then “scans” the students’ cards with the phone camera and can quickly assess the results and where students need more help. I think this tool changed a lot in my classroom: all students now participate in the lesson; I can ask questions and engage all students at the same time. And, of course, the tool helps me to quickly evaluate my students’ knowledge and understanding.

Aleksej Peržu
Science and Biology Teacher and Vice-Principal, Vilniaus Aleksandro Puškino Gimnazija, Lithuania
When I conduct online classes, I usually start my Google Meet lessons with Classroomscreen. Classroomscreen has several great online tools from creating background photos, timers, and noise alarms to managing group discussions. A simple activity, such as the selection of a nice background photo, can serve to set the stage and create a warm and cozy learning environment. It acts like a springboard to get students talking about a specific topic and to get the ball rolling. This is crucial when conducting language lessons. Also, cooperative group work always brings about the feeling of success to students. Everybody can somehow contribute to a mini-project and keep in touch with classmates on a specific task ensures social and psychological well-being. When using the basic version, there are several free tools on the internet where students can collaborate and create mind maps. For example, I often used Mindmeister. With different levels of English and subject knowledge, I recommend my students using Simple Wikipedia when they conduct initial research and collect data. Lastly, a well-facilitated competition is fun and ensures certain excitement among students. During the COVID-19 lockdown, I created and organised scavenger hunts with an online platform called Goosechase. It allows you to control the missions, the time, the locations, and the participants, and has a few other experiential learning features.

**Janos Blasszauer**  
English Language Teacher, Batthyany Lajos Gimnázium, Hungary

I try my best to engage students with various kinds of teaching strategies and methods. When I introduce a new lesson, I use songs, videos, audio recordings, texts, stories, etc. Especially for audio-visual materials, YouTube and Instagram can be great learning sources. A fun way to get students participate in activities is Wheelofnames. By spinning a wheel, a random word, phrase, or name will appear to start an action. For example, by including the names of students in the wheel, one can randomise who speaks first or about which topic.

**Lilis Musyarropah**  
English Language Teacher and School Coordinator of ASPnet, SMP Lobschool Kebayoran, Indonesia

I like to use apps and digital tools in my class to make it more interactive and fun. In general, I prefer to create my own materials so that I can test them beforehand, but one can find many digital activities online that are shared for free usage. These are some of the Web 2.0 tools that I frequently use, for example: Wakelet is a good tool to manage students’ portfolio or homework as they can collect, share, and organise content on different topics. Kahoot is great for online live evaluations in the form of quizzes. I also use Book creator and Storyjumper with my students for collaborative writing activities. We have written many stories together. Both Wordwall and Liveworksheets are useful learning apps to check students’ understanding of the lesson and to design grammar, vocabulary and speaking activities. For me, all these tools are conducive for a holistic teaching and learning environment because they make our lives as teachers easier, and learning becomes fun and challenging: I see my students more motivated to participate in the lesson when technology is embedded creatively and in an inclusive way in the classroom.

**Andreea Goldschmidt**  
English Language Teacher, Școala Gimnazială, Comuna Puchenii Mari, Romania

As a Chemistry teacher, I love when my students can learn concepts through practical experiments. If there is no lab nearby, game-based learning is also a very meaningful way to learn new skills or issues. One can even use games as a kind of formative assessment. I like to use Quizizz to revise topics with my students. I also like puzzle games such as Tarsia where students can explore and demonstrate knowledge and complete a goal within a limited time given.

**Tham Jia Ying**  
Chemistry Teacher and Subject Coordinator, Desheng School International, China

To make my lessons more interesting, I try to include playful games and visual activities. These stimulate students’ creativity and give them the freedom to share their views and learn from others. Simple but effective tools to get students engaged are word cloud makers such as Tagxedo or Worditout.

**Liudmila Akhrameeva**  
English Language Teacher, Lyceum 14, Russian Federation
Digital ideas that promote inclusion

Cristina Drescan
English and German Language Teacher
Lucian Blaga Upper Secondary School
Romania

The COVID-19 pandemic made me, just like all teachers worldwide, acquire new skills overnight. No doubt, we accepted a compromise, being put on a slippery slope.

Before the pandemic, we warned our students to spend less time online. During the lockdown, it was the opposite. Students had to stay wired, be online, and spend long hours on the screen. As a consequence, 20% of students stated that their mental health has significantly worsened, 85% experienced difficulties in focusing, 76% could hardly maintain a routine, 55% did not know whom to address with their mental health problems, and 91% were affected by stress and anxiety. Besides the students, teachers were affected severely by the pandemic, too. Over 60% of teachers experienced for the first-time online teaching. More than 40% of teachers struggled with the increased workload, stress and keeping their students motivated and engage. However, without engagement, motivation, and socio-emotional development there is no learning.

With teaching happening again on-site now, things have changed. Tech tools and IT gadgets are not anymore considered only as attention-getting devices. They have proven to be and became a daily, necessary tool to ensure that content can be taught, and students can remain connected with each other. If used appropriately, they enable inclusive Digital Education environments on different levels. Here are two of my practices:

As an English teacher, the Thanksgiving celebrations, for example, give me a good opportunity to expand on Social and Emotional Learning (SEL). Each class starts with a moment of mindfulness and relaxation: while listening to instrumental music with closed eyes, learners must think about three people they are thankful to and three things they are grateful for. Then, in alphabetical order, they are asked to send each other a personalised “Thank you” message on the phone. Everybody has to reply to the messages received. The impact is immediate: smiles and grateful faces. They also must write a message with three positive traits to each classmate. Not every person is brave enough to share their thoughts in person, so technology can assist with including everyone.

Another example is Service Learning (SL) which is of great value as learning goals and curriculum are interwoven with practical skills and the common good. We are not learning for the learning’s sake, but strive for a community-engaged, meaningful, and efficient education. Therefore, we are currently designing a digital activity that is meant to serve and include the local community. We are working on QR codes to be placed next to important monuments in our town to educate locals and tourists.

Well-being is a major factor to school performance and mental health. Summerfield argues, stress is mostly triggered by heavy workloads, lack of control, class sizes, and poor collegial relationships. Rebuilding a sense of community and a strong teacher-student bond are crucial to well-being and quality instruction.

References

1 The data is from a survey conducted by Active Minds, a USA based non-profit organisation, supporting mental health awareness and education for young adults. Detailed information about the data can be found here: Student-Survey-Infographic.pdf (activeminds.org)
2 The data is taken from a survey conducted by School Education Gateway, a European online platform for school education. More information is available here: Survey on online and distance learning – Results (schooleducationgateway.eu)
3 There is no learning without prepared, motivated learners | World Development Report 2018: Learning to Realize Education’s Promise (worldbank.org)
4 What is Service Learning or Community Engagement? | Center for Teaching | Vanderbilt University
5 How to foster Wellness in your International School Community – ManageBac.
Inclusion beyond technical means

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I am an English teacher at a school for students with high intellectual potential in Science subjects. The students come from different socio-economic backgrounds. One of my priorities is to maintain equity in the classroom. Some students come from rural environments and schools where they had limited access to learning opportunities during the pandemic. Unfortunately, the negative impact of distance learning and online classes can be seen in these students' overall language performance and behaviour in the classroom. Other students, mostly those in urban areas, were privileged to get private tutors who helped them learn English and enter the school with strong language skills. The continued personal engagement and social interaction made a big change.

For example, one challenge which my colleagues and I faced after the lockdown was a general lack of attention as well as a poor understanding of instructions, especially among those students who joined in the first grade. We soon realised that it was partially an issue of low English proficiency. Our goal was then to create short, clear instructions when conducting a lesson, and to always follow up by Instruction Checking Questions (ICQ). Other students are visual or kinaesthetic learners who better understand and learn by using body movements and interacting with their environments. In this case, we even acted the instructions. All of this requires careful preparation that sometimes took hours browsing through various course books and resources to fit my students’ needs.

Without doubt, the Digital Education environment has brought a lot of advantages and progress to teaching and learning. At the same time, some inclusive practices and issues that go beyond the technical means can be easily overlooked when conducting virtual classes.

Do it yourself!

What are your good practices for inclusive Digital Education? What are the areas where you have to look beyond the technical means? How can you make virtual, blended and hybrid education more inclusive?

Reflect on your own experiences and note down your ideas. With the help of these five guidelines, you can create your own checklist for inclusive Digital Education:

Guideline 1: Develop awareness and continuous self-reflection
Guideline 2: Get to know and adapt to the needs of students
Guideline 3: Diversify pedagogical practices and ensure accessibility
Guideline 4: Diversify content
Guideline 5: Create an inclusive learning climate (with belonging & agency)

1 The following five guidelines are adopted from the publication A Handbook for e-Inclusion: Building Capacity for Inclusive Higher Education in Digital Environments (Slootman, Altes, Domagała-Zyśk, Ia Rodríguez-Ardura, Stanojev, 2023). This publication offers in-depth information, plenty of resources and practical tips on the topic: https://einclusion.net/wp-content/uploads/sites/43/2023/02/E-Inclusion_Handbook-04-02-2023-12_02_14_617.pdf
Example for Guideline 3: Diversify pedagogical practices and ensure accessibility

Ensure that your materials are perceivable, operable, understandable, and robust

- Clear instructions are provided
- Language is understood well by everyone
- Plain language is used
- Use of technology is well explained and new technological applications are well introduced
- Digital content works in a variety of web browsers and devices

I present the digital content in multiple formats so it can be perceived in different ways (also by students who are blind, deaf, colour-blind, or dyslexic).

- Images have text descriptions
- Filenames are descriptive
- Closed captions and transcripts are included
- Strong colour contrast

I provide multiple options for navigating and interacting with the digital content (via mouse, keyboard, touch gestures or voice comments).

- Clear structure of table of contents, title and headings
- Link names are descriptive
- Keyboard accessibility checked
- No flashing content

Make feedback accessible, understandable and constructive to every student

- Formative (feedback oriented) assessments is prioritised over summative assessments (grade oriented)
- (Group-) feedback on the classroom dynamics is provided regularly
- Online assessments are accessible without barriers through the assessment form

Do it yourself!

Your Checklist for a more Inclusive Digital Teaching and Learning Environment

Get more inspiration for the checklist here and also add and complete the list with your own ideas.

Do formulate inclusive learning goals

- Every student knows and understands the learning goals
- Learning goals are adapted to special needs of individual students
- Underserved students have been involved in the process of formulating learning goals

Your recommendation ...

The outbreak of the COVID-19 pandemic has brought all of us a lot of challenges. Being a language teacher, my biggest regret and challenge was that international school exchanges were no longer possible. School exchanges were always a highlight of the year. During these moments students got out of their comfort zone, opened up to different cultures and made new friends, got to know themselves better and developed their personality, and met teachers as “normal” humans. While speaking in a foreign language because there was no other option, they realised that there was more to life than pursuing best grades in English or French.

We were lucky that our school found another school that was willing to switch from real life exchanges to online meetings. Our virtual sessions helped us overcome the long, lonely quarantines. Our students chose several topics that we tackled throughout the school year. Many of them focused on how young people could tackle the current difficulties and grasp opportunities in their daily lives. Once a month, we organised an official meet-up session, and in between we motivated our students to reach out to their peers and engage in private conversations. And that was what most of them did with great enthusiasm!

Although our students were many miles apart, they discovered their similarities and identified common issues. In fact, it sometimes seemed that the distance made it easier for them to share and discuss private and intimate topics. Their experiences also opened doors for building better relationships in the classroom – among the students and between the teacher and the students. I got the feeling that my students trusted me more because they felt that our language classes followed a higher goal and were not only driven by performance-oriented objectives. Also, the students did not feel that they had to hide anything in front of each other. As they paired up to prepare joint contributions for the online sessions, they personally connected.

It goes without saying that we could not wait to meet and organise a “real” school exchange. However, this virtual experience has shown that one can overcome certain restrictions with a creative approach. Of course, I love to teach my students to be good communicators in different language, but I also want to teach them that there is more to explore and achieve than an extended vocabulary repertoire. We need to discover what is behind sentences and what is behind the screen. It is all about what you do with what you know.

There is more to explore: Behind the screens

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Do it yourself!

Happy to be back – again in face-to-face settings and “real life”! We might not miss a lot from the time behind the screens, hidden behind “virtual curtains”. But in some cases, the online stage allowed us to be more inclusive and connect with each other in a new, surprising way. What kind of opportunities for inclusion did you explore through the virtual classroom and how can you continue and build up on these positive experiences?
“Teachers skilled in the integration and use of technology in the classroom are able to make a change in the life of their students. Students need access to digital knowledge for their learning and knowledge journey and to create networks and interact with each other. Digital inclusion empowers students to become more critical citizens and to be prepared for future challenges in their personal life and the society.”

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4 Resilience and Grit

4.1 Expert Insights
4.2 Stories from Asia and Europe
4.3 Good Practices
4.4 Reflection and Exercises
Resilience and Grit

Chapter Introduction

Resilience and grit are instrumental for accomplishing personal and professional goals and for achieving success in the long term. However, teaching these skills, which are closely related to motivation, determination, and endurance, is not easy and requires different pedagogical approaches than teaching subject content such as Mathematics, Science or Literature. It takes careful design to develop teaching materials and classroom activities that encourage students to reflect on, be aware of and build up self-motivation and strength of character to face and solve diverse challenges in life.

In her expert article, Dr Hülya Kosar Altinyelken, Assistant Professor at the Faculty of Social and Behavioural Sciences at the University of Amsterdam, The Netherlands, explains the concepts of resilience and grit and how both relate to one another. She also presents academic studies that focus on the connection between resilience, grit, well-being, and academic success, and how schools and teachers can promote these qualities among their students.

In the following three stories, Asian and European educators share how they consciously create an environment for their students to practice building up resilience and grit. Syafiq Ridauddin Raduan, Design and Technology Teacher at the Maktab Anthony Abell School in Brunei Darussalam, believes that mistakes are good lessons learnt and gives examples how she helps students to overcome the negative perception and fear of making mistakes. Niclas Törnbladh, Head of the ICT and Media Department at Nova Gymnasium in Sweden, points out the importance of early preparedness and the need of building up capacity among teachers and students to tackle future challenges and unpredictable disruptions in the education sector. At the end, Tan Shi Min, English Language Teacher at the Syed Ibrahim Secondary School in Malaysia, reflects on her experiences of producing a theatre piece with students during the COVID-19 lockdown and how she and her students realised the almost impossible task with much resilience and grit.
Resilience and Grit

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Introduction

There is ever-growing awareness and concern about social, emotional, and behavioural problems faced by K-12 students that can compromise their social and academic performance and healthy development into adulthood. According to the World Health Organisation, globally, one in seven 10- to 19-year-olds experiences a mental disorder. Depression, anxiety, and behavioural disorders are among the leading causes of illness and disability among this age group (World Health Organisation, 2021). Experts have suggested that a number of social changes that have occurred in the 21st century might be negatively influencing mental health symptoms in current generations of young people and contributing to a persistent rise in the mental health burden. These include increases in income inequalities, the rate of single parenting, screen time, internet and social media use, and academic pressure and competition within contemporary school settings (see Bor et al., 2014). These alarming trends underscore the need to find effective interventions to enhance children's social and emotional competency, and to facilitate their academic learning.

Within this context, resilience and grit have received a lot of attention in the academic literature, popular press and among educators. The recent popularity of these concepts within educational debates has been particularly influenced by two books: Paul Tough’s How Children Succeed: Grit, Curiosity, and the Hidden Power of Character in 2013, and Angela Duckworth’s Grit: The Power of Passion and Perseverance in 2016. The interest in resilience and grit was galvanised by expectations that they can positively affect students’ skills in coping with demands and support their academic achievement. Both concepts were also listed as key learning domains by UNESCO and Brookings Institute in their influential report, Toward Universal Learning: What Every Child Should Learn (Learning Metrics Task Force, 2013). The report confirmed that although learning goals are context specific, children and youth need to develop a set of common knowledge and skills. Resilience and grit were listed under the domain of social and emotional learning for the post-primary level and described as “the ability to overcome failures and persist, even when it is difficult to do so. It refers to having a positive attitude and understanding that one can learn from failures and mistakes” (p. 20). According to the report, children and youth need to be equipped with such “universal” sets of skills and competencies so that they can cope and thrive in an increasingly globalized and competitive labour market.

This article focuses on the relevance of resilience and grit for K-12 students, and seeks to address questions such as: How are resilience and grit defined, and how do they relate to one another? Why has there been such emphasis on resilience and grit in education? Is there any empirical evidence that resilience and grit predict well-being and academic success? How can schools and teachers promote these qualities among their students? With regard to trying to promote these qualities, there will be a specific emphasis on mindfulness interventions in schools, since they have been the most common approach used to enhance resilience among children and adolescents. The article concludes with some critical thoughts on whether a heightened emphasis on resilience and grit leads to individualisation of success and failure, and results in denial or oversight of structural issues that compromise children’s health, well-being, and educational outcomes.

Definitions

Despite being used interchangeably, resilience and grit are different in their nature, and they refer to different qualities. Resilience is defined in various ways, but the term generally refers to “the dynamic process that enables positive adapting to stressors” or the ability to “bounce back” from stressful and negative emotional experiences (Straus et al., 2020). Identification of resilience requires two key judgements: the person must have experienced significant adversity, and the person must be doing OK despite the detrimental life experience. Resilient individuals tend to see challenges as opportunities, and they are convinced that they will ultimately be strengthened by them. They use effective coping strategies and resources (such as social support, and good social skills), engaging less in self-doubt, catastrophic thinking, or victimisation (Ginsburg, 2015). Any factor that helps an individual overcome the negative effects of adversities and to function well afterwards could be seen as part of the resilience process. Academic
Resilience and Grit

Expert Insights

4.1

Resilience has been cited as a predictor of well-being and some studies have found strong correlation between resilience, academic success (Sakiz, 2019; Allan et al., 2014), and self-efficacy (Hernandez, 2019). Resilience was also negatively associated with indicators of mental ill-being, including negative emotions, depression (Jiang et al., 2019a) and anxiety (Worku et al., 2019). Moreover, various studies have found relationships between grit, student engagement and academic success in high school (Duckworth & Quinn, 2009; Steinmayr et al., 2018; Wang, 2021) and middle school (Clark & Malecki, 2019; Dumfart & Neubauer, 2016). Grit is associated with achievement outcomes such as school grades, work performance, programme retention, performance in competitions, and school completion (Duckworth et al., 2007; Eskreis-Winkler et al., 2014). Furthermore, grit was found to be related with low levels of depressive symptoms and high levels of life satisfaction (Jiang et al., 2019b). Adolescents who have passion and work hard for long-term goals are less likely to report being overburdened and cynical at school, and in turn, have fewer depressive symptoms and greater sense of meaning in life (Datu et al., 2019). Another study, by Tang et al. (2020), found that two grit facets – consistency of interest and perseverance of effort – supported resilience in response to school burnout. Their further analysis showed that the role of grit was more pronounced among boys than among girls. When male adolescents were at risk of school burnout, both consistency of interest and perseverance of effort protected them, and they had low levels of loneliness and depressive symptoms.

However, some studies have found unconclusive results for the impact of grit (see Credé et al., 2017). According to Crede (2018) the considerable interest in grit among educational researchers and practitioners is based on four specific claims and assumptions: 1) that grit represents perseverance and passion for long-term goals, 2) that grit is not only an excellent predictor of success and performance but also the secret to success, 3) that grit is a stronger predictor of success compared to others, and 4) that interventions designed to raise the grit level of students are likely to succeed. Nevertheless, Crede (2018) argues that these claims are either untested or are directly contested by empirical evidence.

Enhancing resilience and grit in the classroom

How can teachers fulfil their dual purposes of teaching their students content while also developing their abilities to persevere through challenges? Research suggests that building a mastery goal-oriented school culture...
(Park et al., 2018), forming high commitment to educational goals (Tang et al., 2019), building high educational aspiration (Tang et al., 2020), and holding a strong life purpose (Hill et al., 2016) are practices for developing grit among adolescents that are supported by research evidence. Despite such enthusiasm about grit and resilience, educational interventions so far have produced mixed results for increasing grit and resilience. Teachers’ own beliefs, capacity and motivation are important in effectively implementing interventions or practices that aim to promote these qualities among students. Sanguras (2017) suggests that teachers can relatively easily incorporate the following strategies in their classrooms.

**Integrating a growth mindset:** Although IQ has been highlighted as a key predictor of academic success, scholars and educators increasingly argue that learning should be understood from a motivational perspective. From this perspective, an important predictor of success is grit, which requires a growth mindset. Growth mindset is the belief that intelligence and the ability to learn are malleable, they are not fixed, and they can be improved through practice, hard work and consistent effort. When children learn how their brain changes and grows as they learn, then they are much more likely to persevere, since they do not believe that failure is a permanent situation. Such an understanding refutes the fixed mindset, and the belief that “you either have it or you don’t”.

**Goal commitment:** High commitment to a goal encourages individuals to work towards their goal and to be persistent and consistent in their efforts (Duckworth, 2018). Teachers can engage in a number of exercises with their students in order to support them in reflecting on and identifying their short and long-term goals, why these goals matter to them, and how they could reach these goals. Helping students to set and develop an appropriate long-term goal for their education and providing the supportive environment to accomplish that goal may enhance their level of grit. This, in turn, may promote their engagement and achievement in school.

**Role modelling:** Students can be introduced to historical figures or people in their immediate environment who have demonstrated passion and perseverance while pursuing their goals. Readings or discussion topics can be chosen accordingly.
Reflective exercises: Students can be invited to reflect on the qualities that are associated with resilience and grit, by contemplating their presence or absence in themselves or in others. For instance, they can write about someone who they know exemplifies or (does not) resilience and grit, and reflect on how and why, and the implications thereof.

Measuring grit and resilience in the classroom: Teachers can measure their students’ grit and resilience using available tests. After students complete the tests, a general discussion can be facilitated on the qualities of grit and resilience. The Grit Scale, for instance, is written in simple and accessible language so that teachers can discuss the results with their students. Such awareness might motivate students to cultivate the required characteristics for their well-being and success. Teachers can ask students to rate themselves one item at a time, and then brainstorm ways that they could increase their scores. Resilience and grit can be also context dependent. Is their score higher in one class than in another? Or higher in one activity compared to another?

Mindfulness in education

Introducing mindfulness practices has been one of the most popular targeted interventions to enhance the resilience and cultivate the well-being of students in educational settings around the world, through programmes such as Inner Kids, Inner Resilience Program, Learning to BREATHE, Mind Up and Mindful Kids (Albrecht et al., 2012). Jon Kabat-Zinn is credited with mainstreaming mindfulness in the West. He has referred to mindfulness as “the art of conscious living” and described it as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 2005, p. 4). Another definition of mindfulness refers to being aware “of what is happening in our present experiences, observing with compassion, insight, and an intention to create joy” (Rotne & Rotne, 2013, p. 21).

Most individuals behave on autopilot, believe their thoughts, react based on their emotions and feel stuck in the past or in the future. Such attitudes can create more stress and suffering. Mindfulness is a process of taming the brain and paying attention to life in a certain way. Mindfulness practices exercise the brain in such a way that it modifies the structure and functioning of the brain and allows it to function in a healthier and more optimal manner. By doing so, mindfulness enhances resilience. Typical mindfulness-based curricula for K-12 students include:

Age-appropriate mind-body practices that aim to increase focused attention, social competencies, and emotional self-regulation. Curricula lessons that target awareness of inner/outer experiences include focused attention on breath and sensory experiences; awareness of thoughts and emotions; movement practices; and caring or kindness practices (Meiklejohn et al., 2012, p. 298).

The most commonly utilised interventions incorporate mindfulness-based stress reduction and mindfulness-based cognitive therapy. Programme delivery models are varied, as practices are implemented in school and after-school settings, as well as within the community, and research settings. The length and frequency of lessons and the duration of the mindfulness programmes differ in accordance with student age and the setting. Several programmes have been implemented on a school-wide scale.

The growing interest in mindfulness has been galvanised by research evidence demonstrating the positive effects of mindfulness on a wide range of outcomes. Studies have linked mindfulness to decreased anxiety, depression, and irritability (Baer et al., 2006), reduced symptoms of stress and gloom (Brown et al., 2007), and a decline in overthinking, worry, excessive stress, and concentration problems (Carmody & Baer, 2008). More specifically, participants in the interventions targeting K-12 students report feeling calmer, less anxious, and less reactive (Beauchemin et al., 2008; Semple et al., 2009), more skillful responses to difficult situations, and increased empathy and understanding of others. Regularly practicing mindfulness also strengthens students’ self-regulation capacity. They develop attentional control through repeated and intentional focusing, sustaining, and shifting of attention (Bogels et al., 2008; Flook et al., 2010).

Conclusions

Critics have also raised important questions regarding education’s turn toward resilience and grit, and to what they call the “therapization of education” (Branila, 2012). They have argued that such an approach focuses on building the skills of young people so that they can respond with more resilience to the difficulties and traumas they face. By doing so, educators...
encourage children to bare their vulnerabilities and bounce back from the challenges and adversities in their lives, but without addressing the larger systemic issues that make them vulnerable in the first place (Evans & Reid, 2014; Hess, 2019). Furthermore, resilience discourses in education and psychology often emphasise achieving good outcomes, positive adaptations or success despite serious threats to adaptation or development. The factors that lead to such success are frequently linked with the internal motivation and capacity of the individuals. Yet, defining resilience in such ways leads to the individualisation of societal problems and locates them in children (Branila, 2012), rather than targeting the structures that lead to educational inequalities, exclusion, and discrimination.

According to Hess (2019), instead of focusing on alleviating the symptoms of an unequal system, such as hopelessness, low self-esteem, low academic expectation, and motivation, we must focus on the root causes of these phenomenon and address them accordingly, at the systemic level. Such a shift requires a critical stance toward the structures and system. For instance, studies have confirmed the negative impact on children’s mental health of having a highly competitive, examination-based educational system. Resilience and grit literature or the related interventions focus on how children can survive and cope within such an educational system, instead of questioning the basic tenets and detrimental effects of such a test-based accountability system. Slater (2022, p. 5) noted that:

“If an individual fails to exhibit resilience, their responsibility and self-sufficiency are brought into question, threatening the subject’s perceived legitimacy and full inclusion within the social order. Any social suffering a subject experiences in the face of their failure to be resilient can be attributed to their own failure of character and determination, the accountability for which rests on the individual rather than the state or society.”

An important omission within the resilience and grit literature is the context within which success or failure occurs. Kim (2016) argued that grit thinkers have much to offer to educators, but for this to happen, they need to include structural opportunity factors in their analysis, and they need to recognize that individual outcomes are mediated by both individual and structural constraints. These critics make an important contribution to the debate, by highlighting that success and failure should not be individualised, and that systemic issues should also be addressed. Having said that, all children experience some degree of stress and alienation, and academic learning is a process that requires perseverance of effort, particularly in the face of challenges and setbacks. In that regard, supporting children’s resilience and grit would make important contributions to their development and academic success. The debate needs to move away from a polarised view of whether to invest in children (agency) or in the educational systems (structure). In order to promote inclusion and equity of educational opportunities for new generations, we must simultaneously invest in empowering students and also transforming social, economic and educational structures that compromise their well-being and success.

**Recommended Readings**


**References**


Resilience and Grit
Expert Insights


Mistakes are good lessons learnt

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Making mistakes is an inevitable part of learning. We often hear the phrase: learn from your mistakes! However, let us be honest to ourselves: nobody likes to make a mistake. Yes, we will learn our lesson during the process but in the moment of failure, we do not feel good. The same goes to our students. Our fear of failure is said to be directly linked to our own perceived self-worth. Once students leave school, they are faced with the harsh judgement of society which is more unforgiving towards mistakes. Therefore, it is important that students are equipped with the resilience and ability to learn from their mistakes at an early stage so they can pick themselves up when they encounter future challenges. We need to normalise the fact that everybody makes mistakes, and these are lessons learnt. This will not only benefit the students’ well-being at that moment but also prepare them for the real world.

It often seems challenging to overcome students’ negative perspective on making mistakes. I believe this perspective was established by prevalent practices of traditional teaching methods. One of it is public shaming. It used to be common for teachers – and in some educational and cultural contexts still is – to highlight a student’s mistake and punish her/him as part of the classroom management technique. Some teachers hope that a punishment would motivate students to do better. However, doing so is just cementing the idea that students should avoid making a mistake at all costs, otherwise they face negative consequences. The result, however, is that students do not wish to make an attempt at all.

Changing students’ perceptions towards making mistakes is a slow process. One must introduce a culture in the classroom where it is safe to make mistakes and where reflection is encouraged. Such culture is not only created by the teacher, but also the students. If there is one thing that is good to practice, it is empathy. As teachers, we are so used to being at the front delivering lessons, but we are rarely on the receiving end. Teachers must be mindful of their own teaching practices and students have to develop and demonstrate empathy.

As a teacher, I first need to know how I can manage my students’ responses and behaviour in class. I believe that it is crucial to set ground rules for communication and interaction from day one in class. These ground rules should be kept simple and easy, and the most important one is to respect your peers. For example, we can often observe that students laugh about or even mock others during conversations and discussions. I believe that a teacher should immediately correct this behaviour before it becomes the norm. Those students who are affected might otherwise build up fear of speaking and prefer to stay quiet in the future. Likewise, from time to time, students might hear teachers say: I have taught you this many times already, why you are still giving the wrong answer? Such question holds little value and is diminishing the student’s effort. The teacher’s focus is on the mistake instead of the outcome. To move forward, we, as teachers, must shift the direction and rather respond: I noticed that you are still weak at this part, we should focus on improving that. I try to practice these ideas consistently, even if takes time to change mindsets and behaviour of students in class. However, as students mature, they become more accustomed to the culture and eventually be less afraid of making mistakes in the learning process.

Having said that though, we should keep in mind that it is easy to fall into the trap of false positivity when trying to create a safe learning environment for our students. Simply telling students encouraging words when they are faced with challenges does not fix the underlying issue. In order to avoid masking the root cause, it is best to practice honesty: the first step to learn from your mistake is to acknowledge the mistake. Teachers should do this by allowing their students to identify their mistakes and be honest without putting down the students’ efforts. Only then students will feel encouraged to move forward and mistakes become good lessons learnt.
The snowstorm protocol

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In late 2019, my school developed a new snowstorm policy. It was not yet tested, the policy was just a paper product at that point: How do we continue teaching when students and teachers are unable to go to school due to bad weather?

I live in a region in Sweden where winter storms and snow fall can be quite intense and paralyse public transport systems and daily life. Who would have thought that this policy was implemented only a few months later – not because of a snowstorm but a global pandemic which had a major effect on all our lives!

This new virus had the same impact as a winter storm. We were not allowed to meet in larger groups as the normal classroom situation requires. We acted really quickly and invoked the so-called “Snowstorm Protocol”: The technical solutions were Google Classroom, Google Meet and Chat and that worked really well. However, the endeavour was to boost morale and tweak the ways of teaching to accommodate each and every student’s situation. Luckily, most of our staff and students were blessed with good internet connections at home. Furthermore, our school provided each and every student with a laptop computer, even though it took a while before everyone got the hang of it. Teaching Digital Design was not that difficult to adapt to in the online environment but a few of my colleagues really struggled, for example those who taught Dance and Theatre.

For almost two years our students were affected by the pandemic and the variety of restrictions that came with it. During this whole time there were no lecturers from outside school, no field trips, no visits to museums and art galleries and no trips abroad. Living very close to the Danish border, this last restriction had a huge impact on our international work because our closest airport is in another country. We had to cancel many student exchanges with partner schools in the Czech Republic, Italy, Greece, Slovakia, Turkey and a few other countries.

Gearing up with full protection and litres of hand disinfection, we were finally able to meet in very small groups during the warmer months when the virus was considered to be less contagious. All of us definitely learnt the lesson to appreciate the social nearness normal school days provide and how quickly something which we have taken for granted can suddenly disappear. And if a real snowstorm occurs, we have trained and showed resilience for over two years in a scenario with many physical restrictions and lockdowns. We will be better prepared.

Niclas Törnbladh
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The virtual theatre

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Syed Ibrahim Secondary School
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One of my students’ favourite English activities are drama classes. During the COVID-19 lockdown these classes were difficult to carry out. I did not want to disappoint my class and took up the challenge of staging a drama in the form of a “Sketch Video Project”. But how could we do that when students stayed away far away from each other? To make things worse, most of them had limited internet connectivity due to socio-economic and geographical reasons. In addition, it was hard to get students to meet via Google Meet or Zoom at an agreed time outside school time, as some of them were sharing gadgets with their other family members. The students also worked at different paces. Some needed more time to get familiar with the technology or to practise their lines.

While checking and evaluating various options, I decided to incorporate the concept of asynchronous collaboration via multiple free data-saving applications and online platforms. Most of my students had a smart phone so I could tap on this opportunity. To start off, I moved all activities to WhatsApp, which the students already knew and used as a daily application. The brainstorming of the storyline, the casting, as well as the coaching for script writing, pronunciation training, acting and video editing – everything was done through WhatsApp. Knowing that each student worked at a different pace, I broke down the project into smaller achievable tasks so that students could record their parts at their own convenience.

For stage videos and audio clips submissions, the students submitted their recordings through Telegram. As the videos and audio clips were short, everybody could easily send and submit her/his work in an organised manner through specific groups and folders. The students also commented on each other’s acting.

Looking back, indeed, we used very basic (yet appropriate) tech methods, and the outcome obviously differed from an actual performance on stage. However, together with my students, I made the impossible possible and produced a theatre piece – even in time of school closure. This embodies for me resilience and grit: to make full use of available, yet limited resources you have, to demonstrate creativity and commitment and come up with an alternative plan and output which you can be still proud of and learn from.

Take a look at Tan Shi Min’s video where she explains the workflow. You can check it out on YouTube at this link: https://youtu.be/NIp28ZNF0F4
“It is impossible to become a successful teacher if you do not demonstrate resilience and grit. These are crucial skills for both professional and personal life and it takes time and practice to develop them. Without them, teachers are not able to show patience and persistence when supporting their students' learning journey and to earn their parents' respect.”

Valentina Vasilkova
English Language Teacher
Zhukovsky English School #3
Russian Federation
5 Relationship Building

5.1 Expert Insights
5.2 Stories from Asia and Europe
5.3 Good Practices
5.4 Reflection and Exercises
Teaching is more than a just job: it is a profession that builds relationships and human connections between two individuals (the teacher and the student) and groups. A teacher can have a lifelong impact on a student. The type of relationships a teacher nurtures with students not only has the power to shape students’ motivation for learning and affects how they perform academically, it is also foundational for their social skills development.

This chapter illustrates examples of teaching practices that five teachers from Asia and Europe adopted to create good teacher-student relationships and ensure their students’ well-being in class. It begins with expert insights by Dr Dana Rad and Dr Tiberiu Dughi, both Associate Professors at the Faculty of Educational Sciences Psychology and Social Work Center for Research Development and Innovation in Psychology, Aurel Vlaicu University of Arad, in Romania. The insight article focuses on the various aspects of a “sense of belonging for creating a meaningful relationship between teachers and students and how a holistic teaching and learning environment ultimately contributes to students’ better learning outcomes.

The first real-life story is by Dr Cornelius Young, who is a Teacher for Information Technology and Coordinator for Technology Enhanced Learning at Coláiste Chill Mhantáin, Designated Community College, in Ireland. In his view, good communication and honest dialogue form the basis for a positive teacher-student relationship. Anna Grönlund, English and German Language Teacher from the Gymnasiet Lärkan in Finland, shares her experiences with online classes during the COVID-19 lockdown and how she found ways of making students feel comfortable and safe, connected to each other, and engaged in the virtual environment. Azzaya Sambalkhundev teaches at the Mining and Energy Polytechnic College in Mongolia. She believes in the power of music for creating a relaxed and positive atmosphere in the classroom which helps her students to build relationships and reach their personal learning goals. Vedran Žadanj, Physics Teacher at the Secondary Health and Veterinary School Vinkovci in Croatia, highlights that each voice in the classroom matters for relationship building. During the COVID-19 pandemic, he developed surveys about well-being and daily life and shared these with his students after the regular online classes. In the last story, Mariolina Bono, Teacher at the Liceo Scientifico Statale Enrico Fermi Sciacca in Italy, invites her peers to build a happiness shelf in the classroom. This exercise helps students to not only better understand themselves but also the feelings and experiences of their peers.
Relationship Building
Expert Insights

Relationship Building in a Pedagogical Setting for Holistic Teaching and Learning

Dr Dana Rad
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Introduction

A person's motivation, health, and happiness all increase when they feel like they are part of a larger community. For one to perceive the worth in life and manage really unpleasant feelings, one has to have a sense of belonging. Instead of focusing on differences, one might find commonalities with people and so feel more at home. In this context, as schools strive to raise student achievement, the holistic education idea – the principle of educating the full person in addition to fundamental academics – is gaining ground in learning communities. Several organisations are becoming aware that youngsters want more from their education than simply a solid grounding in the fundamental subjects; they also require community support and the opportunity to grow in their capacity for compassion for others.

The contact between the teacher and students is essential to learning. Student achievement and learner satisfaction have often been proven to increase in instructional settings with frequent and meaningful instructor-student interactions (Cornelius-White, 2007; Chakraborty & Nafukho, 2015; Wit, Wheeless, & Allen, 2004).

The broadest possible development of the full person is addressed through holistic education on the cognitive and emotional levels. It strives towards the greatest level of human development possible (Hare, 2006; Mayes, 2005; Forbes, & Martin, 2004), allowing one to reach their full potential and completely develop those capacities that collectively make up a human being (Hare, 2006; Mayes, 2005; Forbes, & Martin, 2004). The student is positioned as an active, participative, and critical learner within this holistic viewpoint, perceiving and understanding themself in a changing environment and in a range of local and global contexts.

While thinking about teaching and learning tends to focus on what teachers may do to enhance their instruction, the holistic approach is founded on the idea that teaching is a social activity (HALTI; Patel, 2003) which puts relationship-building at the core of teaching and learning activities. The roles that are played by the student and the teacher build up the social activity's core. It is thought that the holistic learner strives for the maximum level of awareness of information and recognises the value that it brings to their life. It is thought that the holistic teacher wants to help the student become a critical, self-assured, autonomous learner and provide them with critical faculties that permit action in real situations. The holistic approach to teaching and learning is defined as the social process of enabling critical learners to claim ownership of the knowledge domain, and its epistemology, and to make knowledge claims or refutations based on that, allowing action in actual conditions. The social relationship between a teacher and student must take into account the learner's personal, professional, social, and human requirements (Masats & Dooly, 2011). These demands include not just the desire to gain information but also the need to be understood, to get praise, to be included in the community of learners, and to satisfy other basic psychological needs (Goh & Burns, 2012).

The success of students in school depends on their interactions with their teachers. Teachers must adopt an intentional strategy to make sure all children and families feel respected and recognised in their classroom in order to develop authentic connections. Good relationships between teachers and students are a crucial component of practices that foster effective learning environments. Trusting connections between adults and students can assist boost self-confidence, motivate pupils, and improve academic performance. In this article, we focus on the aspects of a ‘sense of belonging’ for creating a meaningful relationship between teachers and students. We then provide some suggestions on how to build such relationships that are crucial for creating a holistic teaching and learning environment that ultimately contributes to students’ better learning outcomes.
Since we feel noticed and welcomed by a group, we get a sense of belonging, which is the sensation that our emotional desire to belong has been met. Our growth depends on the early relationships we create with our close relatives. It is one of the reasons young children who do not get enough physical and emotional care later on are vulnerable. Babies who are denied human touch at such an early age, when they are defenseless, experience anxiety and stress. Your body and brain continue to be affected by these emotions. We imitate actions and words, even as young children, to blend in.

We get more attached to our environment as we get older, and our social ecology grows. We conform to the social norms of our environment throughout elementary school, high school, and beyond, and we make close friends that we rely on for social support. We take signals from others as we join each social structure, learning the standards for what is and is not acceptable. These laws let the social structure to exist, and they provide a feedback loop that affects how we see ourselves, including our sense of self as individuals and our capacity for belonging.

We join a group and receive social protection from other group members when we adhere by the rules of the social systems around us. Hence, in an ideal situation, when we have a sense of belonging, we feel welcomed and comfortable being who we are, which makes us feel welcoming of others inside the group.

Regrettably, we frequently do not understand what belonging is until it is gone. We feel uneasy when we start to feel like we do not belong because we no longer experience the physical and psychological safety that comes with being a part of a group. The discomfort may be quite modest (such as failing to connect with anybody at a friend's social event) or traumatic, depending on the situation.

Enhancing students’ sense of belonging at school is essential for their academic achievement and engagement, therefore educational programmes, practices, and research must take this into account (St-Amand, Girard, & Smith, 2017).

Opportunities for progress are fostered by a feeling of community. Abraham Maslow, a psychologist, asserts that until more fundamental needs, such as physiological, safety, belonging, and esteem requirements, have been met, people are frequently unable to pursue cognitive, aesthetic, and self-actualisation wants. To put it another way, those who have had their fundamental requirements addressed should, in principle, be better able to develop physically and cognitively to their maximum potential.

It is important to feel validated for mental wellness. Neurological chemistry drives people to seek social connection and logical validation in a support group. A person’s physical and mental health may suffer if they reject this instinctive programming.

Creating a “Sense of belonging” for Meaningful Relationships

The need to have a sense of acceptance as a group member is known as belongingness. Some people have an “inherent” urge to belong to and be an integral part of something bigger than themselves, especially in educational spaces.

Knowing other individuals is only one aspect of feeling a sense of belonging. It is focused on receiving approval, notice, and support from group members as well as giving other members the same attention.

When individuals attempt to adhere to the rules and norms of the group, the urge to belong to that group can also cause changes in actions, beliefs, and attitudes.

The evidence that instructors have a crucial and influential role in supporting student accomplishment is substantial, with responsibilities spanning from the selection of appropriate instructional methods to the promotion of good and supportive learning environments (Hattie, 2009; Nye, Konstantopoulous, & Hedges, 2004).

A person’s physical and mental health depends on feeling a sense of belonging and the loss of a sense of belonging has been linked in studies to stress, disease, poorer health, and depression.

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Our identity is complex, and we have a strong desire to be recognised for it. It reflects in our need for a sense of community. Yet one thing that the majority of us rarely do is assess our identity to determine which standards and convictions contribute to our well-being and which ones drag us down.
5.1 Expert Insights

Investigating what belonging means to us, realising how we act to fit into particular groups, and learning how to foster a sense of belonging in others are all part of this.

Conclusions and Recommendations for Relationship Building in a Pedagogical Setting

Success in a professional situation depends on one’s ability to establish rapport and win trust right away. Similar to this, teachers must develop their students’ interpersonal and relationship-building abilities to maximise student involvement. We must demonstrate a sincere interest in the educational experiences of our pupils. To do this, we must change our perspective from that of knowledge distributors to that of engagement and learning facilitators. We must put more of an emphasis on inspiring pupils, encouraging involvement, and maximizing their potential. Praise and acknowledgment of accomplishments, as well as taking the time to carefully listen, are simple tactics. This all significantly alter the situation.

According to Sustainable Development Goal 4.2 (Equal Access to Quality Pre-Primary Education), governments throughout the globe seek to ensure that all children have access to high-quality education at all levels by 2030 (Rad et al., 2022). The first step is to sincerely emphasise the rights of children. The next steps are to develop an inclusive culture with a thorough understanding of child development, to invest in teacher preparation, to instil a strong belief in and positive attitudes toward equity in educational services, to develop strong relationships with authentic community support offered by all stakeholders, and finally to adapt curriculum and assessment methods to all educational practices, for a better SDG4 targets accomplishment (Rad et al., 2022).

In terms of organising the learning environment, there are a few recommendations offered in the scientific literature:

- Start the course with a conversation that fosters trust (introductions and icebreakers)
- Clearly state the requirements for discussion participation
- Encourage constructive conversations by using stimulating, open-ended questions
- Test and challenge student concepts by requesting justification or rationale
- Keep an eye on the conversation to ensure fruitful debate and adjust the course as required
- Pay attention to how students construct meaning and validate comprehension
- Promote receptivity to all viewpoints
- Determine where there is consensus and disagreement
- Encourage and support involvement
- Discuss personal significance or experiences
- Make particular suggestions or impart specialised information
- Assist students in identifying and resolving misconceptions
- Make suggestions for additional materials or content; include information from outside sources
- Use analogies and similar themes to link concepts and give abstract thoughts a concrete form
- Share personal stories and observations on the teacher’s own attempts to learn the curriculum
- Regularly provide constructive feedback and guidance
- Deliver information in a clear, efficient manner
- Pose inquiries that elicit thought and cognitive dissonance
- Outline the course’s learning objectives
- Establish guidelines for student engagement and involvement in the class
- As due dates draw near, communicate deadlines for assignments and remind students frequently
- Offer opportunities for active learning that are interesting, pertinent, and appropriate
- Create tests that align with the objectives of learning
- Explain what is expected of teachers’ engagement
- Use a conversational tone rather than an academic one when presenting content
In terms of social presence\(^1\), some recommendations for a holistic approach are:

- **Give students your time; the connections we form with others are the very foundation of our existence**
- **Improve your communication skills, the risk of presumption must be diminished**
- **Accept and celebrate diversity**
- **Listen effectively**
- **Control mobile technology, which can be distracting if users don’t use it properly**

To create an environment where students may explore, participate, and contribute, we must be aware of our students and their personalities in order to understand how this affects their involvement.

We should work to build learning environments that take into account students’ assumptions about the learning process. Although we cannot compel people to learn, we can consistently create an environment that encourages involvement. Nonetheless, despite this relational approach, education may still be difficult and unsettling. Making room for participation and helping students who are uncomfortable with the learning process promotes learning and, ideally, progress beyond the classroom.

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\(^1\) Social presence refers to students’ ability to present themselves as "real people" with distinct characteristics.

**References**


Thoughts from Educators

“Being able to build positive relationships is one of the most important skills in the classroom – for both teachers and students. It is a reciprocal process where teachers and students also inspire each other during the teaching and learning journey. Building and nurturing positive relations gives a sense of meaning to our life as human beings.”

Jieun Yoon
English Language Teacher
Taejeon High School
Korea
The power of honest dialogues

Dr Cornelius Young
Information Technology Teacher
Technology Enhanced Learning Coordinator
Coláiste Chill Mhantáin, Designated Community College
Ireland

One of the most crucial elements of a holistic teaching and learning environment is the positive relationship between teachers and the students. Seeing how students progress and mature during their learning journey is what encourages and sustains teachers in their career. Likewise, a strong and inspiring connection with their teacher helps students develop an intrinsic motivation to learn and excel.

The basis for a positive teacher-student relationship is good communication and honest dialogue. This means that the teacher actively listens to students and considers their opinions, positively affirms students’ efforts, and shows genuine interest in their activities, also outside the academic arena and beyond the classroom. By nurturing open communication channels a teacher contributes to the well-being of students and supports them to develop confidence as learners and self-esteem as people.

A positive teacher-student relationship ensures a warm and welcoming environment where every student feels supported and safe through access to meaningful activities. There is huge value in using teaching methods such as cooperative learning, student-centred learning methods, and project work. All of them focus on relationship building and lead to a positive classroom climate where everyone is engaged and feels appreciated. One area which concerns many students is anxiety about examinations. Open communication and dialogue are especially important during exam periods. The teacher could perhaps also take steps to reduce the stress level and test through less stressful forms of assessment, for example formative assessments, peer assessment and involved students in the identification of their own assessment needs.

Over the past years, well-being has become an important topic in the school context, and teachers and students can address the dimensions of well-being across all subject areas: from healthy eating habits, active lifestyle to even substance abuse. To maintain a powerful and trusted relationship, the conversation must be always respectful and non-judgmental to diverse backgrounds, beliefs and cultures. I think that peer mediation and restorative justice are a great way to introduce student-led forms of conflict management and approaches to bullying.

Of course, communication and open dialogue do not only take place on a verbal level. The school could also focus on improvements in the physical environment to better allow students to express themselves and share their views. For example, displaying and celebrating students’ work on the school compound make daily school life more student-friendly and fun.
I feel despair rising in my throat as I talk to the 25 colourful dots representing my students on my computer screen. “Does anybody have any questions?” I ask, but am met by the usual silence. I realise I have probably lost the students’ attention, and I know I will have to do something to make them feel connected again.

I teach English and German at Gymnasiet Lärkan, an Upper Secondary School in Helsinki, Finland. When teaching foreign languages, social interaction and relationship building is crucial, and that is what I needed to emphasise more. I have to treat my challenge carefully, though, as Finns are not very talkative by nature; forcing the students to talk in front of the whole class might backfire. Therefore, I look for ways of making them feel comfortable, safe and being active orally. Here is one example which worked well for me in the past.

During the lockdown and online classes, we used Google Meet as our common lesson platform. Whenever I wanted the students to discuss something, I divided them into small groups, and let them open a new Google Meet, which I also had access to. When I then visited the small groups one at a time, I noticed much more dynamic than in the larger class set up. When they did not have to express themselves in front of the whole group, they were much more relaxed and active. Another way of making the students feel connected to each other was having them jointly visualise a certain phrase in a photo when they were on Google Meet. For example, when I talked about numerals and adjectives in class, I had them visualise phrases such as “This morning I ate only one green apple”. What sounds simple is a complex activity in a virtual world. To do that, they had to consider how their windows on Google Meet were placed on the computer screen, and how they could interact between their respective windows so that the photo they took of the screen would transmit the phrase. While this kind of activities was fun and very interactive, it had a deeper meaning: they needed to literally relate to each other and each of them could contribute to this common end result.

Anna Grönlund
English and German Language Teacher
Gymnasiet Lärkan
Finland

Connecting the dots behind the screen
5.3 Relationship Building
Good Practices

Music connects

Azzaya Sambalkhundev
Mathematics Teacher
Mining and Energy Polytechnic College
Mongolia

To create a Holistic Learning Environment, it is necessary to set up mechanisms and establish practices that positively affect learning. Music makes us feel good and connects us with each other. Together with my students, I introduced the practice of choosing a melody or song prior to the start of each lesson. It keeps them mentally calm when they enter the classroom. These five minutes of jointly listening to the music are so valuable for setting a positive mood. Creating a joint music list is also a strong bonding activity and offers plenty opportunities to share stories and engage.

Afterwards, once the music has created a relaxed and good atmosphere, I ask my students to think about the purpose of attending today’s class and their personal learning goal. They have to reflect on both points and note them down. Later, after the class, they have to comment on their own (perceived) progress. By taking notes and observing themselves, students begin to consciously learn what they need to do and focus on.

“Many teachers introduce a buddy system in their classroom to build trust and establish strong relationships among students. A step above is the mentoring system, which gives an additional sense of responsibility and motivation to both the mentor as well as the learner. I have even seen students preparing themselves in such a way that they are ready to take up the challenge and mentor other learners in a few weeks.”

Geeta Rajan
Head of International Affairs
St. Mark’s Sr. Sec. Public School
India

Thoughts from Educators
Check-in calls for safe(r) spaces

Vedran Žadanj
Physics Teacher
Secondary Health and Veterinary School Vinkovci
Croatia

Teaching is hardly ever knowledge transfer in itself, nor the popularisation of science alone. It means sharing and listening, creating and collaborating, support to and empowerment of students. It is about nurturing human relationships and building a platform for personal and professional growth – not only for the students but also for the teacher.

During the COVID-19 pandemic and lockdown, it was more than obvious to me that I would need to do more than digitally enhanced video lessons, Google Meet ups or MS Teams meetings to maintain the connection with my students. All these were merely a weak replacement of in-person lessons. So, I took the initiative to develop surveys about well-being and daily life and shared these with each of my students after the regular online class activities. At that time, I taught over 250 students. I had the clear intention to “hear” their voices. I was very determined even if, at that moment, it was incredibly difficult to accomplish.

After analysing the survey results, I decided to offer my students the opportunity of personal online calls in case they wanted to talk about their well-being and expressed the desire to share anything they had it mind. Some of them were interested in knowing how they could better organise their studies and manage their time. Others shared with me their concerns about online classes in general, some spoke about their hobbies or relationships with their peers. Many of them also opened up and talked about the various difficulties their families were going through during the pandemic. There were students who told jokes, and we laughed together. Some students even cried.

The bottom line of my engagement was: each voice mattered. Each student was heard and had the opportunity to share. My aim was to make online periods as personal as possible, to overcome the virtual division and to somehow reach out with a simple statement: teachers do care. Being a teacher means listening and teachers wish to support their students beyond conveying knowledge of certain subjects. Creating the most vivid online sessions with exciting presentations and digital materials is not enough.

When we returned to face-to-face classes, several students approached me and said thank you. This was the biggest reward I could receive: knowing that my efforts meant a lot to them, that they felt safer, more understood and, above all, not forgotten. It was one way of creating a safe(r) space for students during the pandemic.

Do it yourself!

Independent of online or in-person classes, always maintain open and effective communication channels with your students. Students need a “Check-in Counter“, a safe space and platform where they can frequently “check-in” to share their thoughts, concerns and feelings. For Vedran Žadanj, this “Check-in Counter” and platform were his daily surveys with simple yet powerful questions to initiate conversations and show empathy for his students. Here are some of the questions he asked. These questions were partially also used in a larger research study on students’ well-being during the lockdown by the Faculty of Social Science at the University of Zagreb, Croatia.
The Check-in counter for save conversations. Which questions would you ask your students?

1. What are you worried about at this moment and why?
2. How do you handle daily activities?
3. How do you manage and handle your relationship with parents/siblings/friends/romantic relationship?
4. How do you cope with online school obligations?
5. Do you think your computer skills and equipment are sufficient enough to actively participate in online classes?
6. Did you develop any other skill?
7. How do you see your general health during pandemic?
8. What is your thought at this very moment – write it down!
The Happiness Shelf

Mariolina Bono
English Language and Literature Teacher
Liceo Scientifico Statale Enrico Fermi Sciacca
Italy

I have been teaching for more than 30 years and have tried different approaches and methodologies in the classroom. Based on my experiences, the most successful and rewarding ones are always linked to strengthening human relations. It is important to make students feel that they are at the centre of your work.

I spend the first five minutes of each lesson on relationship building and on creating a positive atmosphere in the classroom. Only when I sense that my students are in a comfortable situation, I begin with the lesson. Everything becomes possible and so much more productive then. I also feel that I have accomplished my task as a teacher when I see that my students actively participate because they feel recognised and appreciated.

I always try to focus their attention on positive aspects that they sometimes do not consider relevant. One meaningful activity is an oral gratitude journal, as there is always something in our daily routine which gives a moment of joy. Many people write a happiness journal to note down daily experiences and better understand their feelings. While reflecting on their emotions, it helps them to build a positive outlook towards life, learn appreciation and gratitude and feel more content. The (daily) routine of a happiness journal also calms them down, helps relax and dedicate a few moments to practice mindfulness. After being a teacher for decades, I believe that these five minutes with my students are invaluable, and I do not want to miss celebrating daily short moments of happiness that occurred inside or outside the classroom.

Do it yourself!

Similar to happiness journals, one can use a box or jar and fill it with thoughts on little pieces of paper. Use one corner in your classroom and set up a happiness shelf with your students! Each student can bring a recyclable box, jar, or any other container to school. These can be items from everyday life like an empty cereal box or a marmalade glass: happiness should be part of our daily routine and not reserved for special moments only! Label each container with a question and allow students to put down their thoughts on paper. Dedicate 15 minutes each week and invite students to present the responses of their peers. You can either facilitate a joint reflection or give students some quiet time to digest. This exercise will help your students to not only better understand themselves but also the feelings and experiences of their peers.
The Happiness Shelf

Expiry after 1 week. To be refilled with new food for thought thereafter

- A person who made you happy
- Something that made your life easier
- A piece of music you listened to
- A recent achievement
- A shared moment of laughter
- A person who thanked you
- Your favourite weather forecast
- A nice view outside the window
- A compliment
- A skill or ability you demonstrated
6 Active Learning and Engagement

6.1 Expert Insights
6.2 Stories from Asia and Europe
6.3 Good Practices
6.4 Reflection and Exercises
An active and engaging learning environment in the classroom not only improves learning outcomes but also ensures students’ overall development. It shapes their personality, behaviour and attitude through social interactions and peer-to-peer collaborations.

The last thematic chapter of this Handbook begins with expert insights by Prof Pushpanadham Karanam, Professor and Head at the Department of Educational Administration, Faculty of Education and Psychology, at the Maharaja Sayajirao University of Baroda in India. Based on various academic and online resources, he introduces a theoretical framework for active learning and engagement and suggests pedagogic strategies on how to enhance the process.

The chapter also includes stories and exercises by seven teachers who illustrate their pedagogical approaches to create an active and engaging learning atmosphere in school. Alexia Micallef Gatt, STEM Teacher and Head of the Department for Science Education at the Secretariat for Catholic Education, St. Paul’s Missionary College, in Malta, highlights the importance of applied learning and describes how students can be encouraged to experiment and investigate beyond the classroom. Tham Jia Ying is a Chemistry Teacher and Subject Coordinator at the Desheng School International in China. He believes that fun is one of the key learning motivators, and shares how gamification can support intrinsic motivation among students to learn and excel. Hanz Denzil Villahermosa, an English Language Teacher from Stillman University in the Philippines, created a list of top key practices for active engagement and learning as an inspirational reference for his peers. Likewise, Lauri Hellsten from the Espoon Yhteislyseo Secondary School in Finland invites fellow teachers to look at his work and use resources which he has created for flipped classrooms. Arpita Dutta, a Social Science Teacher at St Mark’s World School in India, points out that decision-making is a crucial component for students to take charge of their learning. Alejandra Cortez Lopez, who is Head of Studies at the INS Barres i Ones School in Spain, emphasises the importance of reciprocity in a Holistic Learning Environment. The last story and exercise in this chapter is by Thuy Hang Nguyen, a Chemistry Teacher at Thang Long High School in Vietnam. Through simple online activities, she shows how teachers can bring their students’ awareness, knowledge, and action in the field of sustainable development to the next level.
Theoretical Frameworks on Active Learning and Engagement

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Professor and Head
Department of Educational Administration
Faculty of Education and Psychology
The Maharaja Sayajirao University of Baroda
India

Introduction

Learning has many dimensions: It is the core purpose of the instructional process, and the heart of any educational organisation. A host of factors contribute to the effective and active learning of students. Classroom activities that are designed by the teachers have to help students understand the purpose of learning and also help in determining the learning approaches. Learning is a social activity where students interact and develop inter-relationships with other learners. It enables socialisation which is the learning process that enhances confidence, courage, and comfort among the students to put their perspectives forward and actively participate in society. Lastly, learning is a cognitive process where students assimilate and accommodate new information, logically connect, developmental models, and derive meaning from it.

Student engagement in the learning process is a necessary condition for active learning. It refers to the wilful participation of the students in all activities of the teaching-learning process. There are three forms of engagement: 1) Cognitive, 2) Behavioural, and 3) Emotional. The presence of all three forms is necessary for optimising active learning. Research has revealed simultaneously the antithetical side of students’ active engagement in learning. Student disengagement could lead to low learning outcomes and achievement, high dropout rates, and learners could be socially excluded (Hancock & Zubrick, 2015; Olson & Peterson, 2015).

This insight article highlights and explains the concept of active learning and engagement with a theoretical framework and elaborates on the ways and means to practice in the classroom processes. It also presents different constructivist approaches that are relevant to classroom practices.

Active Learning and Engagement: Theoretical Framework

The process of student engagement happens when learners are motivated to learn. Students’ active engagement occurs only when they develop effective interconnections with and between the teaching and learning environment (positive teacher-student relationships and peer friendships) and the behavioural patterns of students in an academic institution – such as their participation, effort in learning, attendance and socially exhibited behaviour (Newman et al., 1992; Appleton et al., 2008).

In a broader sense, student engagement in the academic context is a holistic concept that focuses on how students invest their energies and efforts in their work spontaneously and with high motivation. In short, student engagement is a process where purposeful educational activities embrace students and enhance their wilful participation that ultimately results in positive learning outcomes along with the development of curiosity and passion for learning. Student engagement can be categorised into 1) Cognitive engagement of learners, 2) Behavioural engagement of learners, and 3) Emotional engagement of learners (Wimpenny & Savin-Baden, 2013).

1. Cognitive Engagement of learners: Cognitive engagement is a mental process where learners continuously think and establish mental connections to the experiences during the learning process. It is the thinking, reasoning, analysing, and making interpretations. The learner strives to connect his or her existing knowledge with the new knowledge acquired.

2. Behavioural Engagement of learners: This refers to students’ behaviour to pay attention in class, complete work, participate in class discussions and learning activities, respect towards classmates. Students’ participation and eagerness to ask and answer questions demonstrate a high level of behavioural engagement. Asking questions might lead to a fear of not knowing the answer, therefore providing emotional support is an important part of increasing behavioural engagement among students.

3. Emotional Engagement: Emotional engagement is the liking, emotions, and feelings of the learner, or the amount of happiness, motivation, enthusiasm, curiosity, and commitment shown by the students during the learning process. Emotional engagement of students helps take ownership of the learning process and consciously engage in school activities.
Bear et al. (2018) noted that engaged students exhibit certain positive features. They show more interest and attention to studying and participating in various activities compared to their disengaged counterparts who appear to be least interested and passive in studies. Moreover, students with high engagement levels usually attend school regularly and attain higher grades than their peers with low engagement levels. Several researchers also proclaim that academic achievement and engagement are not mere traits and attributes of a learner. They could rather depend on the teaching method of the teacher and the classroom environment (Rimm-Kaufman et al., 2015; Caranfil & Robu, 2017).

Constructivist Approaches for Active Learning and Engagement

Constructivist approaches to active learning assume that knowledge is regarded as constructed. It explains how people know what they know. The basic idea is that the learners construct the knowledge and, in this process, learning, thinking, and development are manifested. A constructivist approach to the teaching and learning process contributes to effective learning and results in learners’ social, cognitive, and moral development. Constructivist classrooms emphasise reasoning rather than recitation and provide learners with greater opportunities to experiment. Constructivist teachers foster autonomy, and self-governance and make students accountable for their learning process. However, they should work to create reciprocal relationships to understand the feelings and desires of their students and encourage them to develop their meanings through lesson exchange with peers (DeVries et al., 1991). “Pro-social behavior (rulemaking, group problem solving, co-operative work or play) leads to advances in social-moral reasoning, which in turn provides better reasons for engaging in social behavior” (Kohlberg, 1976).

Vygotsky’s work on sociocultural learning (1962) states that higher mental functions are necessarily influenced by external factors. The role of social mediation in the learning process is an enabling factor. In the premise of cultural development, a child displays every function twice: first on the social platform and second, on the psychological platform. These functions contribute equally to exhibiting voluntary attention, logical memory, concept formation, and the will development of the child (Vygotsky, 1997). The Zone of Proximal Development (ZPD) plays a critical role in accelerating active learning and enhancing students’ engagement. Vygotsky defines the Zone of Proximal Development as a distance that exists between the actual development level of the individual as determined by independent problem solving and the level of his or her potential development as determined through learning activities under instruction, either by the guide or by the more capable peer (Vygotsky, 1997). It implies that learners learn best when working together with others. The proximal learning zone provides the learners with interesting and culturally meaningful learning experiences, either individually or within groups. It puts forward the idea that once the learner can complete the task jointly, he or she will likely be able to perform the same task individually next time. In the course of that process, the learner’s proximal learning zone for that particular task will have been raised.

What do Students Gain from Active Learning and Engagement?

When students are engaged in learning tasks, they exhibit specific characteristics, and these in turn help enhance motivation. The following figure explains the plausible outcomes of active engagement of students in learning tasks.

![Figure 1: Adopted from A model of task engagement (Lin, 2012).](image-url)
Three important components influence the task engagement of the students: 1) Choice, 2) Control, and 3) Interest. Allowing students to choose from various learning resources, learning spaces, and peer groups based on their learning preferences would enhance their ownership and satisfaction. Control is another important component that describes the learners’ control over their learning pace, information, and exposure. Such control helps students as self-learners. Interest is the learners’ disposition and growth mindset.

Role of the School to Enhance Active Learning and Engagement

The school is the learning context where learning experiences are designed, developed, implemented, and evaluated. The learning experiences provided by the school mold the attitudes, interests, and passion towards various subjects and thus shape students’ personality. Undoubtedly, it could be said that schools have to make a conscious effort to organise the instructions and classroom experiences effectively so that the students acquire desirable cognitive and characteristics of non-cognitive premises in a balanced fashion.

Concerning the specific role of schools in the process of encouraging active learning and engagement of students, the following are important considerations:

School Ethos: The school ethos is a vital factor that builds the foundation for fostering the development of each learner. In addition, it nurtures a proper sense of self-worth, responsibility, and respect for others. The school should take care to develop the qualities of regularity, collegiality, service-mindedness, responsibility, collaboration, and cooperation in the learners. These factors must be effectively reflected in the way the learning environment and the various school activities and are organised.

Teacher Leadership: Teachers need to exercise leadership in creating an engaging classroom environment. Only teachers who are sensitive to their students’ diverse needs can identify and implement effective strategies. Teacher leadership is demonstrated through effective communication, skills in human relations, conflict resolution, decision-making, and time management. Continuous professional development of teachers is the key to teacher leadership.

Family-School-Community Partnership: Family and school are the two wheels for students’ learning and are reciprocal in nature. Schools need to make efforts to understand parents, align partnerships, and ensure that they have meaningful roles to be active partners in their children’s learning.

Learning Spaces: Learning spaces are designated places in and outside the school that are used to conduct formal and informal teaching-learning processes. A well-designed learning space can positively affects the student’s learning. To practice active learning strategies in schools, several learning spaces need to be created to facilitate collaborative and cooperative learning. The emerging area of research “neuroarchitecture” which deals with the complex relationship between the built environment and human responses in the cognitive, socio-emotional, and other physiological domains of human responses, has an important part to play in the development of active learning strategies. Several studies have explored the cognitive task performance of learners and its relation to colour, the height of the ceiling, the design of the room, and lighting (Meyers-Levy & Zhu, 2007; Mehta & Zhu, 2009).

Pedagogic Strategies to Enhance Active Learning and Engagement of Students

There are several active learning strategies that allow students to work and learn in a collaborative classroom environment. In such an environment, teachers play the role of facilitators and mentors. Various cooperative learning strategies such as role-play, think-pair-share, peer teaching, just-in-time teaching, and short demonstrations are some of the activities that activate students’ engagement in the learning process. Here are some pedagogical strategies that have been successfully practiced in schools:

1. Cooperative Learning: In cooperative learning, students work together in small groups to achieve shared goals or complete group tasks. Cooperative learning is a well-recognised potential teaching strategy that promotes socialisation and learning among students from early childhood care to higher education. Cooperative learning enhances teamwork. Teamwork helps each member of a team to learn through collective effort, thus, leading toward collective achievement. Students get the opportunity to reinforce their knowledge through working with others, as they support and are supported at the same time by their partners or teammates. Teamwork stimulates different social skills like cooperation, trust, conflict
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management, etc. Once such skills are developed among the students, they uplift the positive environment of the classroom to its optimum extent which encourages them towards better achievement.

2. Collaborative Learning: Collaborative learning is another strategy used by teachers to engage learners actively in the learning process by allotting them various tasks and assessing their responsibility in learning. Collaborative classrooms are endowed with three general characteristics: the first is to denote the changing relationships between teachers and learners; the second is concerned with how innovatively the instructor approaches the lessons in the classroom; and the third emphasises the structure of the collaborative classroom. Such classrooms, although teachers share authority, inspire students to use their knowledge and be respectful to each other in collaborative learning activities (Tinzman et al., 1990).

To create a conducive environment for effective, cooperative, and collaborative learning, three things are vital. In the first place, students need to feel happy and safe in the classroom environment. Secondly, groups formed for cooperative and collaborative learning should be small in size to ensure the participation of everyone. And finally, the allotted tasks for the group of students should be clearly defined.

3. Game-Based Learning: Game-based learning provides students with an intrinsic learning experience where content knowledge is communicated in a relevant and engaging way through games. Games have been a source of education for a long time. May it be a board game or a digital game, games give an impetus to plan the system of educational actions so that each action gives maximum efficiency to students. It is more a learning than just sporting with students. Learning activities are established in a fun-filled way that gradually teach concepts and lead students to the desired knowledge gain. Image-based learning, collecting data promptly, and a rewarding atmosphere help students learn more effectively. Empirical evidence has proved the motivational function of games. They make learners stay engaged in learning activities over long periods through a series of incentive structures, such as grades, stars, polls, points, marks, badges, and trophies, as well as certain digital gaming mechanics and activities that learners find interesting (Pho & Dinscore, 2015).

Conclusion

Students’ engagement in pedagogic processes is a necessary condition for active and effective learning. Thinking, memory, logic, reasoning, collaboration, partnership, amongst others, are the possible outcomes of an engaging classroom. Research studies have provided enough bases to understand that effective cognitive learning requires affective attributes and improving affective attributes among students is one of the core objectives of any educational programme. A concerted effort is required to develop a holistic academic plan in schools to engage learners in various activities throughout the school year and develop ways and means to establish meaningful connections between the teachers, content knowledge, and learners. The purpose of any educational institution is to invigorate learning and this is a collaborative endeavor.
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References


"My dream school would have “open door classrooms” where students could choose to be involved in different projects. Students have to solve complex problems through an in-depth investigation and intensive team collaboration. They would also need to interact with the local community during the process. I think project-based learning gives them many engaging activities and opportunities to grow up to be well-adjusted and confident adults - ready for the transition into life."

Miguela Fernandes
Computer Science Teacher
Agrupamento de Escolas da Batalha
Portugal
Your home is your lab

Alexia Micallef Gatt
STEM Teacher and Head of Department for Science Education at
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One of my favourite things about teaching science is the ability to make theories and content covered in class come to life through experimentation and investigation. Giving students the opportunity to conduct experiments primarily enables them to observe and prove that what is discussed in class theoretically, really takes place. Experiments and investigations also provide a more hands-on approach to learning science which can particularly benefit students who prefer to learn more actively. Furthermore, it enables students to better understand the work of scientists as well as the scientific process.

Unfortunately, as schools closed in Malta during the COVID-19 pandemic, so did our laboratory. I still remember the date: 18 March 2020. Despite this huge challenge, my colleague Christine Marie Saliba and I were determined to continue conducting our science experiments with students – independent of the physical closure of the school lab. We brainstormed and changed a number of experiments for our students to be conducted at home. The tasks were redesigned to achieve the same objectives as if they were being done in the school lab. Our set of different “apparatus” could easily be found at home such as kitchen utensils and stationery. Students were asked to record their experiments and send videos where they commented on the results and lessons learnt. This allowed us to assess both their lab skills as well as their reasoning regarding the process and outcome of the experiments.

One of my favourite experiments involved students noting the energy content in food. We asked our 12-year-old students to choose three food items and determine which one provided more energy. This experiment would traditionally take place in a lab by burning the food item and noting the temperature change in a test tube filled with water held above the burning food item. However, since students were going to be home, we asked them to set the food item on fire, time how long the item took to burn completely and comment on the size of the flame. Students then had to predict which food item would burn the longest or produce the greatest flame. They also had to observe fair testing by ensuring they used the same mass for each food. It was lovely to receive the students’ videos as we were not able to meet physically during the lockdown. It was also great to see how students involved their family members in the experiment and explained to them what was going on. Other experiments included observing changes of state in water and comparing soil composition between different localities.

It can be perceived as a disadvantage that students were not using proper scientific laboratory equipment. However, we felt that this approach to experimentation enabled students to realise that science is truly alive and visible around them in their everyday life and not just confined to the science lab. In fact, since then, although thankfully we moved back to regular classroom sessions in 2021, we still decided to have a number of adapted experiments done at home.
Gamification as a thoughtful process

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Game-based learning or gamification refers to incorporating game elements into a lesson. The term also describes the process of learning new skills or issues in the context of games. By using this method, an educator can nurture not only the mind of the learner but also help the student to move to a new level of holistic development. Gamification often triggers a student’s interest towards learning with a higher level of engagement in lesson. However, gamification should be a thoughtful process. It is not about “throwing in some games to the curriculum” for the sake of playing. Gamification goes beyond the fun and deeper into learning. If done well, a holistic learner emerges from such a method.

My home country is Malaysia. My previous school in Malaysia encouraged a student-centric approach to be used in our daily lessons. Game-based learning was one of the approaches that the school leadership introduced. All teachers were assigned the task to explore possible game-based learning methods and integrate them into the curriculum, no matter which subject they taught. During the sharing session at the end of the semester, I was amazed by some of my colleagues’ innovative ideas. All succeeded in integrating gamification in their subjects and the feedback from the students was mostly positive. I was very inspired and continued to explore more possibilities of gamification at my new school in China, where I teach Chemistry.

In education, the motivation should always be: learning is fun! When students enjoy the process, they are learning. I believe that this is every teacher’s wish for their students. Instead of highlighting the importance of homework, as a formative assessment, I therefore think it can be more effective if homework and assessment are completed through games. Students will be more willing to complete their tasks. It is a fulfilling feeling to see the reactions of students after playing a game.

Having said that, the implementation of gamification is only then successful if the learning outcomes can be achieved within the schedule, and if, at the same time, the students actively engage and enjoy the knowledge acquisition. Gamification supports intrinsic motivation, and with the rapid development of technology, more educational games and apps will be developed and incorporated into classroom lessons. Of course, it is difficult to ensure that all students engage or enjoy the lesson you plan to the same extent. Students come from diverse backgrounds and have different learning patterns. In fact, I did encounter students who thought that it was a waste of time to learn through games. Therefore, it is particularly important to thoroughly plan the lesson and games so that the learning outcomes are achieved. Without doubt, the preparation of gamification lessons is more time consuming compared to regular lessons. With hectic schedules, teachers may find it difficult to allocate the necessary time and integrate meaningful ideas. The school’s support is crucial here to encourage more teachers, especially the novices, to try this approach in their lessons.

Once a teacher decides on using the gamification method, the design and choice of game are crucial as these decide on the efficacy of learning. Currently, I use some game-based app. With the help of e-gadgets and technology, such as Quizizz, I conduct a quiz to revise a topic. This can be used as a formative assessment. Some games can be also planned without the aid of a gadget. For instance, I used a puzzle game such as Tarsia and the treasure hunt concept where students work in teams and complete a knowledge goal within a limited time. These games promote collaboration, teamwork and peer-to-peer sharing and learning.

If teachers would like to use interactive game elements and gamification in their teaching practices, I recommend starting with a small, simple idea. It can be as basic as a 10 to 15-minutes game, instead of designing and conducting a whole period. Before and after the game, the teacher plays a significant role to guide the student and to ensure the success of gamification by encouraging students to jointly reflect on the process and take aways.
“Every class has both very active students and students who are more reserved and who will hardly raise a hand to answer a question or ask for help. It is crucial for teachers to get to know each student individually and to involve everyone in activities. We need to encourage all students to participate so they are not afraid of making mistakes. By trying to relate the topic of every lesson to my students’ lives, I hope I can help them to develop the confidence and competence of active participation.”

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My Top 10 Practices for Active Learning and Engagement

Hanz Denzil Villahermosa  
English Language Teacher  
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The Philippines

1. Theatre-based Approach to Language Teaching  
Theatre and role play can help tremendously in teaching in the new normal. With limitations in social interaction and engagement, activities that require students to explore and express help in boosting interest and engagement in online teaching and learning.

2. Provide authentic context  
It is important to achieve relevance and authenticity in the delivery of competencies and standards in teaching and learning. Using examples and scenarios that are culturally relevant make learning more meaningful and impactful to learners.

3. Do not monopolise the talk, allow for sharing and co-creation  
With distance learning at play, students have to be encouraged to actively take part in their learning. Teachers have to provide them the necessary skills for self-study, research, and be active contributors in the discussion and interactions in the class. Teachers should merely facilitate learning and not monopolize teacher talk throughout classes.

4. Understand the generation you talk you  
A 21st century teacher should strive to understand the generation of students at present. Repack your lessons in an appealing manner to heighten the level of engagement of your students in the various activities and tasks they need to accomplish.

5. Find ways of creative arts opportunities  
Since extra-curricular activities are hampered by the pandemic, platforms for creativity and expression are encouraged. Make sure to give your students the creative freedom to express certain activities using their creative strengths and skills.

6. Select your Online Meeting Platforms wisely and use it moderately  
In distance learning, synchronous sessions are essential to monitor progress and check on students. Use Zoom or Google Meet to interact and discuss important lessons – but in moderation.

7. Integrate video lessons and short infomercials for diversity  
Make sure to vary your mode of delivering and introducing a certain topic/lesson. Sometimes, a short yet informative video clip and infomercial for students to watch and learn breaks the ice and makes the change!

8. When it gets complex, put it down in a slideshow presentation  
To facilitate comprehensive discussions on important competencies it is usually best to use slideshow presentations that students can download for their own use and study later.

9. Get all your students on board through interactive assessment applications  
Highly interactive applications such as Mentimeter or Slido make teaching and learning more fun and engaging as it gives students real time assessment activities that entice their interest.

10. Do not hesitate to use social media  
Some activities should require students to make use of their adeptness in social media just like tweeting, posting an Instagram story, or using Facebook as a way to simulate social virtual interaction and develop digital literacy among them.
The flipped classroom

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I have been developing flipped learning in Finland for almost a decade. In flipped learning, the shift in focus changes from the teacher to the student. In the classroom we are trying to enable students to achieve their best, and valuable classroom time is wasted if it is mainly used for the distribution of knowledge. Students vary in their skills, knowledge, and interest. We should deliver teaching in everyone’s zone of proximal development, and this is not possible in the traditional classroom.

I have been doing my own learning videos for Physics and Math for the upper secondary school levels that are free for anyone to use. I have also been developing with other teachers textbooks that support flipped learning for the Finnish curriculum. Why did I take the initiative? In my view, a holistic approach to learning means to give students the space and time to learn at their own pace with the help and support from the teacher and their peers.

I made an English presentation on flipped classrooms and my work. I hope it will be useful and inspire other teachers.

Check out Lauri’s Presentation here!
The decision-making map

Arpita Dutta
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At my school we believe that students are able to take the needed risks necessary for their growth when they feel safe, valued, and heard in the classroom. The more at ease they feel, the greater the potential for success in school and beyond. Consequently, the classroom must be a healthy environment to ensure success. Students need to see themselves as part of the classroom. They need to understand that what they are learning is relevant to the real world and deepen their understanding by interacting with the content being taught. A key component for students to take charge of their learning is to be involved in decision-making. We try to enable and engage our students as much as possible to make decisions, so that they feel more invested in their choices. This ranges from a variety of decisions depending on the content. A shared ownership helps students be involved.

Do it yourself!

A person takes thousands of decisions every day – deliberately and subconsciously. Decision making is about taking responsibility and good choices. There are easy and difficult decisions, there are decisions that have a small impact and others can be lifechanging. To make responsible decisions, we need to apply critical thinking, reasoning and sometimes also problem solving and interpersonal skills – especially if our decision affects others in our environment. Decision making teaches self-awareness, self-management, and relationship skills. Create with your students a decision-making map!
What are the decisions a student makes every day, starting from getting ready to school, being active in class to completing homework after school?

Which decisions can a student make independently, where does she/he need approval?

Are there any intentions, and if so which ones, behind each decision?

Which decisions affect the student alone, which ones have an impact on others?

What are the decision-making processes in the classroom? Who takes the lead, when and on what issue?

Decision 1: What do I wear today?
Decision 2: Which whom do I go for recess?
Decision 3: Shall I be honest that I forgot my homework?
Decision 4: Do I tell the teacher that I still do not understand the answer?
Decision 5: Can I confide in my friend?
Decision ...: What decisions do you make today?
Teach the world what you have learnt

Alejandra Cortez Lopez
Head of Studies
INS Barres i Ones
Spain

Based on my experience, one of the best techniques to stimulate students’ curiosity and enthusiasm is enrolling them in external projects. My school has been working with several organisations and institutions in our municipality over the past years, including the townhall, museums or local community centres.

For example, for over six years, my school has been collaborating with the Museum of Immigration in Sant Adrià del Besòs. Each year, the students were in charge of organising an annual exhibition on different aspects of migration. We cannot forget the fact that most of our students come from a background where their families had to leave their home and came to Catalonia from somewhere else in Spain or the world. The project reminded them of difficulties which their own families had to overcome for them to have a better life.

Our collaboration with the museum also allowed them to not only focus on typical homework which is checked by the teacher. Instead, their ideas and work were appreciated by different stakeholders in the city. They realised that their efforts and results were going farther than the school walls. It motivated them much more and made learning useful in their everyday life. A Holistic Learning Environment means that students both learn, and they teach the world what they have learnt.

Do it yourself!

Dialogues and collaborations among different members of the community – people, organisations and the local government – are crucial to build trust and connectedness and contribute to social cohesion. Community engagement provides lifelong learning opportunities and serves as a catalyst for bringing positive change in society – be it on an economic, social or environmental level. Like the school INS Barres i Ones in Spain, many education institutions maintain active partnerships with other stakeholders in the local community.

Move your Classroom into the community!
Have you already built up your community network? The local community is your interdisciplinary platform and introduces your students to become active participants in society: to learn and to teach the world what they have learnt.
Your plan, your planet

Thuy Hang Nguyen
Chemistry Teacher
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The book *Teach Like a Pirate* by Dave Burgess is not only an inspirational manifesto but also a practical roadmap in my teaching. A Holistic Learning Environment needs a passionate, enthusiastic, and creative teacher who always tries to immerse her/himself in the lesson and who naturally builds rapport with students by observing, asking and listening more attentively. This teacher transforms to be an educator.

I am a homeroom teacher responsible for monitoring our students’ behaviour and for supporting them in academic and non-academic fields. I focus on social topics such as competencies and skills in the 21st century and for Industry 4.0, or practices and behaviour in social networks.

More than this, I also conduct classes for my students to learn about and contribute to the Sustainable Development Goals (SDGs). I recently conducted an online project called “My Style is Sustainability” where we focused on sustainable lifestyles related to energy, food and water consumption, etc. I believe that small changes can make a significant impact on our planet.

We referred to the simple but interesting website Your Plan, Your Planet set up by Google, the California Academy of Sciences, and the Ellen MacArthur Foundation where you can learn about the circular economy, track your own environmental impact and find out how to reduce food, water, and energy waste in your daily life.

Do it yourself!

Check out the website https://yourplanyourplanet.sustainability.google/

Plan and track with your students how each of them can make a contribution to sustainable development and a healthy planet. Students can explore four areas of action and discover simple things how to make a change:

Food: Toss less, save more!
Water: Make every drop count!
Stuff: Manufacturing on the move!
Energy: Power up without maxing out!

Now leverage on this exercise and bring your students’ awareness, knowledge and action to the next level! Encourage them to make a pledge with this template:
Your Plan, Your Planet SDG Pledge

1. List the 17 Sustainable Development Goals.

2. How are you related to these SDGs? How is your personal, daily life connected to the Goals?

3. Your Plan, Your Planet. What impact does your personal, daily life have on the various areas addressed by the Goals? Support your ideas with research and look for facts and figures online!

4. Make a pledge: Are there concrete actions that you could take on a personal level that could make a contribution to the achievement of the SDGs?
“A truly Holistic Learning Environment motivates students to engage through elements such as the arts, music, performance, sports, community relations, debate and leadership skills. It goes beyond a content-based curriculum and focuses on a competence-based curriculum. I am a History Teacher. Learning about history is a way to develop in my students the love for the place they live in, to explore community spirit, and to see their local community as part of the larger society and in a bigger context. This empowers my students to express themselves well with a strong sense of self-esteem and cultivates a whole-person development. They become adults who can manage their lives better and have high emotional intelligence.”
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The ASEF Classroom Network (#ASEFClassNet) connects high school students, teachers & school leaders, teacher trainers, researchers, policy makers and EdTech experts from the 51 ASEM Partner countries. The ASEF ClassNet provides opportunities for collaborative teaching & learning and focuses on Education for Sustainable Development and the potential of education technology in the secondary education sector. Activities of the network include, amongst others, conferences & capacity building programmes for school leaders & teachers, bi-regional school collaborations, research & studies for policy support as well as communication and outreach campaigns to advance knowledge and promote good practices within the secondary school sector.

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The Asia-Europe Meeting (ASEM) is an intergovernmental process established in 1996 to foster dialogue and cooperation between Asia and Europe.

ASEM addresses political, economic, financial, social, cultural, and educational issues of common interest in a spirit of mutual respect and equal partnership. Its foremost event, the ASEM Summit, is a biennial meeting between the Heads of State and Government, the President of the European Council, the President of the European Commission, and the Secretary-General of ASEAN. In addition, ASEM Ministers & Senior Officials also meet in their respective sectoral dialogues.

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