

# Why wellbeing matters during a time of crisis

Wellbeing considerations for a successful post-Covid-19 educational transition





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# IB mission statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.



# **IB** learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

#### As IB learners we strive to be:

#### **INOUIRERS**

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

#### **KNOWLEDGEABLE**

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

#### **THINKERS**

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

#### COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

#### **PRINCIPLED**

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

#### OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

#### **CARING**

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

#### **RISK-TAKERS**

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

#### **BALANCED**

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

#### RFFI FCTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.



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# INTRODUCTION

This paper aims to provide IB stakeholders with a research-informed overview of the main challenges, opportunities and possible strategies to support student wellbeing with the COVID-19 learning disruptions.

Although the wellbeing challenges that IB schools might face during the transition will vary, the current paper is focused on three of the most common aspects encountered by schools during the COVID-19 times:

- Dealing with fear and anxiety
- Managing the feeling of being behind
- Dealing with uncertainty

For each of the above wellbeing challenges there is a discussion around the underlying opportunities, as well as some insights on wellbeing measures to address issues that could arise in the transition stage.

This paper, therefore, combines a set of guiding principles and evidence-based strategies to support student wellbeing during the transition period. The guidance aims to support your current actions in planning strategies for wellbeing in the coming months and beyond.

### PRIORITISING WELLBEING IN A TIME OF CRISIS

Over the past decade, wellbeing has become established internationally as an important goal that contributes significantly to a global vision of a more inclusive, healthy, caring and happy society (Taguma, 2018). The COVID-19 pandemic has accelerated increased awareness and has highlighted the need for immediate actions around wellbeing in school communities. During the COVID-19 crisis, indeed, for many educators, the primary concern has been to keep students well and connected, to address their fears and to boost their motivation for learning.

Before the current crisis, a significant amount of research evidence strongly suggested that there is a bidirectional relationship between wellbeing and learning outcomes. For example, positive student well-being is often associated with strong cognitive functioning, higher level of learning engagement and focus; better mood and behaviour; better mental health; a more pro-social, responsible and healthy lifestyle (Yu, Shek & Zhu, 2018).

In recent months many schools, even schools less experienced in wellbeing, have engaged far more in creating a healthy and safe learning environment remotely, resulting in an increased awareness for wellbeing support. The following discussion and suggestions are intended to support the IB school community members as they continue to foster student wellbeing in the post-COVID-19 transition and beyond.

# CHALLENGES, OPPORTUNITIES AND WELLBEING INSIGHTS DURING TRANSITION

#### Dealing with fear, anxiety and stress

#### The challenges

The rapid spread of the Covid-19 virus has caused concern and fear among adults and children alike: fear of illness; fear of losing their loved ones; fear of being lonely and disconnected; fear of not being academically successful in a remote setting; and fear of the unknown future. While fear is considered a normal reaction to danger, helping us to adapt to the environment, the research has shown that not everyone has the same sensitivity to this type of stimulus (Struyf et al, 2017). An individual's reaction to the risk of infection with COVID-19, for instance, can be highly influenced by the family and social environment, by multimedia messaging and by the types of measures taken in a particular community. Sustained worry and fear may also lead to a heightened level of stress, resulting in complex negative experiences for some. Whilst acknowledging that these individuals will need additional and more sustained levels of support, research has shown that many people, and especially children, are naturally resilient and most will adapt (Masten & Narayan 2012).

#### The opportunities

Anxiety can be counterproductive, but it can also be used in a positive way. It can release an important amount of energy and activate the brain to look for knowledge and solutions, to act and to adapt. For example, concern may activate our curiosity to know more about the virus, about our body functioning and about our thinking and emotions in the face of adversity (Tyng et al., 2017). Becoming aware of our own emotions and our physiological reactions provides a great learning opportunity. Turning our concerns into a fuel to learn new things is an effective strategy to overcome distress. Think of how many learning interests our students might have discovered in the time of crisis about: healthy habits to keep our body in shape; new knowledge about societal crisis and pandemics; government responses to social crises; about social and individual behaviour.

# Wellbeing suggestions

Positively addressing our own fears is a great path to foster authentic learning experiences and resilience. Promoting connectedness among all school community members is key to foster an open and positive dialogue and participation in various wellbeing activities, as suggested below:

- Celebrate resilience and acknowledge that fear and worry are normal human reactions and each individual student, teacher or parent experience them to different degrees.
- Set up networks where students and adults positively interact. Support members of the school community to express their feelings and concerns; dedicate time and space for this in your daily routine, even after the crisis.

- As knowledge can help to reduce fears by putting them in context, provide reliable information about various aspects of the crisis. In the case of the Covid-19 virus, relevant information can be about the virus development, the illness and preventive measures to widen their knowledge about the virus.
- Provide learning opportunities for students so that they understand more about body functioning, illness, the immune system, healthy habits, recognising feelings and emotions.
- If not yet in place, think of engaging school community members in an emotional development programme, to equip them with the necessary skills of expressing, understanding and dealing with anxieties. Explore the benefits of mindfulness and relaxation techniques to release stress and anxiety.
- With all of the above, use a balanced, objective, and age-appropriate approach based on data and reliable research resources: "strategies must strike a balance between breaking through optimism bias without inducing excessive feelings of anxiety and dread" (Bavel et al, 2020).

While many of us have dealt with our anxieties related to Covid-19, we need to recognise that some school members may have more complex experiences. These cases may require further support that exceeds what a school is able to provide, such as coaching and mental health professional interventions. Some students, teachers and parents could be more exposed to difficult experiences, such as:

- working in the health sector, directly supporting Covid-19 measures and interventions.
- having major pre-existing illness or pre-existing mental-health issues
- being more dependent on others (small children; children with special needs)
- experiencing economic hardship or health distress.
- having limited support at home or lack of an appropriate learning environment

A productive role for schools in these situations is to identify those that need specialised support and contact or refer them to the services that best meet the needs of these members of the school community.

# "Lost learning" - managing the feeling of being behind

# The challenge

The global monitoring report conducted by UNESCO has shown that over 190 countries mandated some form of school closure during the COVID-19 crisis, with more than 1.5 billion affected learners (UNESCO, 2020, April 14). It is still early to estimate all the impact elements of school's lockdown during the COVID-19. Recent estimations on the Covid-19 school lockdown are still limited to a certain age group or a geographic area, are using old data and extrapolate assumptions from previous crises. Consequently, some of the estimations might overstate the effects, considering that compared to previous disaster related crises, many schools were able to provide significant online instruction during the Covid-19 lockdown.

Various studies on the impact of school closure in times of previous natural disasters or crises have shown that learning losses are inevitable and require a time of recovery when schools can implement various strategies or programmes to mitigate the impact on the academic performances (Andrabi et al., 2020; Howat et al., 2012; Peek & Richardson, 2010; Gibbs et al., 2019). The most affected students can be those who had fewer opportunities for learning at home during a crisis when their families experienced economic and health issues (Dorn et al., 2020).

Many educators, parents and students have been concerned about the "lost learning" during the COVID-19 crisis. While many positive actions can be taken to address these losses, research does show that these concerns are justified. According to a working paper¹ from NWEA - a research-based, not-for-profit organization, Brown University and the University of Virginia it is estimated that following the COVID-19 school closure, "the average student could begin the next school year having lost as much as a third of the expected progress from the previous year in reading and half of the expected progress in math" (Kuhfeld et al, 2020). An analysis from consulting group McKinsey & Company has also shown that students learning loss during COVID-19 school closures varies significantly according to their access to remote learning, the quality of remote instruction, home support, and the degree of engagement (Dorn et al, 2020).

Concerns about being behind are shared by parents, teachers and students and they become worried about making up lost ground. Research has shown that a high level of anxiety can interfere with aspects of cognition that are critical for successful learning and performance (Robinson et al, 2013). We may notice that, in some cases, concerns of being behind may undermine students' ability to learn even after schools re-open, however, addressing wellbeing can be a powerful way to prevent this.

#### The opportunity

The concept of wellbeing is deeply rooted in positive psychology. Instead of focusing on what students don't know or can't do, positive psychology focuses educational approaches towards identifying and nurturing students' strengths rather than weaknesses (Seligman, 2002). Applying this outlook, the lost learning challenge may be seen also as an opportunity. Instead of asking ourselves what has been lost we can better inquire what students have been learning during the school lockdown. From a wellbeing perspective, an important message here is that maybe some learning was lost, but our children are not (Roesch, 2020).

We may also underestimate the amount of informal learning that has happened during the school lockdown and this can be celebrated and harnessed. Many education leaders are currently talking about changes in thinking and opportunities that are emerging through the COVID-19 crisis. For example, the pandemic has already raised a lot of essential questions about the role of education for an unknown and complex future, and about alternative ways to learn and to assess learning that were previously less explored. Therefore, wellbeing priorities may also play a role in shaping new policies in education after the COVID-19 crisis.

<sup>1</sup> This study covered only the US grades 3-7 cohorts and it only considered maths & reading. It was also limited to the US and considered only absenteeism and summer holiday learning loss.

#### Wellbeing suggestions

During the transition time following COVID-19, it is essential to provide opportunities not only for students but for the school community at large to ascertain varied perspectives on possible adjustments. This means to provide enough planning time to share their experiences and learning, to reflect, to value and to embed those experiences into the new learning process. Here are some suggestions to start building the confidence that the "lost learning" can be successfully recovered:

- Acknowledge that losses of learning are normal in a major event such as the Covid-19 pandemic, and that is the reality we need to start with
- Address the anxiety of being behind; engage students with expressing their feelings about learning at home and in an online environment
- Make an inventory of positive learning experiences that students encountered during the school lockdown and build the new learning experiences on those achievements.
- Emphasise that students are not responsible for any lost learning. Involve them in reflecting on varied teaching and learning practices and take their perspectives and experiences into account when planning new learning activities.
- Use strategies to support students in reflecting on their past learning, on what they have learned about how they learn during the lockdown.
- Assist students in setting new individual learning goals and encourage them to divide broader learning goals into proximal intermediate small steps necessary to complete a task. Celebrate the small progress to build their confidence and motivation.
- Provide students and parents information about the adaptations being made by the school to accommodate the new reality.

# Dealing with uncertainty

# The challenge

Perhaps among the most important experiences during the COVID-19 crisis, uncertainty was and continues to be the biggest challenge for all involved in education. It is naturally difficult for students, parents, teachers and others not knowing what is going to happen with school, final exams and life in general. At the current time, it is still unclear in many countries what school will be like in the year ahead. Research has shown that some people may have a higher tolerance for ambiguity in association with their specific personality traits: as some people have a higher level of openness to new experiences (Hodson& Sorrentino,1999). However, a continuous state of uncertainty may affect the state of wellbeing, leading to a feeling of disregard for goals that were previously meaningful, such as those relating to school. Research into social behaviour has shown that regardless of the level of tolerance, all humans have a clear tendency to reduce uncertainty and to achieve a cognitive comfort by addressing the unknown (Merrotsy, 2013).

#### The opportunity

The big lesson we all have learned during the COVID-19 crisis is that uncertainty may become the "new normal" in many aspects of our life (Chater, 2020). For education, the main opportunity here is to reconsider how our classrooms (virtual or face to face) use uncertainty as a driver for learning and innovation.

In his influential book, Homo Deus: A Brief History of Tomorrow, Yuval Noah Harari predicts that as the pace of change increases, "most important of all will be the ability to deal with change, to learn new things and to preserve your mental balance in unfamiliar situations. To keep up with the world of 2050, you will need not merely to invent new ideas and products – you will, above all need to reinvent yourself again and again" (Harari, 2015). Current creative adaptations by students and schools can be seen then as valuable preparations for a changing world.

The influence of constant changes in the future will challenge the way new generations of learners will manage their self-knowledge and inner life balance. The IB has considered the challenge of dealing with uncertainty in the education philosophy many years ago. For example, the Learner Profile attribute *risk taker* is defined as the capacity to approach uncertainty with forethought and determination; to work independently and cooperatively to explore new ideas and innovative strategies; to become resourceful and resilient in the face of challenges and change (IBO, 2017). Some researchers are also referring to the need to deal with uncertainty as a competence to be systematically addressed in curriculum design frameworks, consisting of a specific set of "skills, strategies, knowledge, attitudes and capabilities needed to manage knowledge uncertainty" (Tauritz, 2016). The research on pedagogical aspects in this field is still developing, but we hope that the current times will stimulate more interest in finding ways to better foster competencies in managing uncertainty in the classroom.

#### Wellbeing suggestions

The first step in managing uncertainty is to note that change is an unavoidable process, as no society or individual remains static. Involving a critical perspective to change is crucial in any school community. Therefore, a shared vision for change should consider a continuous dialogue with all school community members. Here are some suggestions to ensure that everyone is involved and comfortable with the process:

- Work with the school community on strategies for framing uncertainty positively as a "new normal" while at the same time leveraging actions and areas within your control and influence.
- Focus on each individual strength in your school community and build relationships starting from the point that no one has the absolute truth.
- Empower students by giving them opportunities leadership roles and responsibilities in planning and implementing the change. Use for example, Quality Circle Time and 'think tanks' to involve students in these conversations.
- Involve students in decision making. Ensure that everyone is confident to express themselves with regards to any change in the school practices and routine. Work

- collaboratively with students in implementing those changes to ensure a higher level of commitment and motivation.
- Continue to build school routine and shared practices that foster emotional safety and trust in the changing process

# MOVING TOWARDS AN INTEGRATED WELLBEING APPROACH

Despite an overwhelming number of guidelines and advice on ensuring wellbeing, no country, school or organization has the perfect solution for navigating a crisis. The best solutions are always those that are the most appropriate to your context and make sense for your school community. The following concluding remarks are not formulas, but rather possible wellbeing strategies aimed at supporting the unique journey ahead.

#### > Learn from the crisis

Times of distress in our lives are also recognised as opportunities for significant innovation and development. Turning a time of crisis into a unique learning experience means to reflect on past actions, thinking about what works well and should be kept, thinking about what can be done differently and needs to be changed.

### Become comfortable with uncertainty

As a result of the crisis, we have become aware that uncertainty is the "new normal". The first step in overcoming uncertainty is to embrace the unknown, to value the strengths we have and to foster the creation of new routines. Learning about complexity, crisis, strategies to deal with sensitive and controversial issues may also help us all to strengthen our tolerance for ambiguity and new challenges.

# Invest time in wellbeing routines

Investing time in strengthening relationships and creating a safe and trusting learning environment has never been more worthwhile. Close monitoring of the wellbeing of members of the school community could be also addressed. Build new wellbeing routines in your school, such as times to share, opportunities to seek support and varied strategies to deal with emotional challenges for all.

### Re-design a wellbeing pedagogy

Encourage students to set individual goals and embed wellbeing practices into the day to day school experience. Embed learning activities that strengthen relationships and collaborative work, thereby fostering a sense of belonging to the school community in a time of disruptions. Mindfully plan the school activities and workload, as not only students but also teachers and other staff members may be overwhelmed by demands.

# Dare to experiment, share and innovate

Although school disruption periods may have been challenging school communities in the past, the current COVID-19 situation is unprecedented and unique in your specific context. Trust your capacity in making the best decisions for your specific context and dare to experiment, share, learn and innovate.

# **CONCLUSIONS**

Recent events have challenged educational systems all over the world to rapidly provide short term creative solutions such as quality online learning environments and resources. However, it was even more important to prioritize the wellbeing of all students facing the adversity and disruption of their normal learning and life routines. The call for wellbeing measures was to support all school community members overcoming fears and anxiety, dealing with uncertainty and missing the face to face social interactions.

Whatever the future will look like, the above-mentioned suggestions are intended to support and inspire the IB Schools to continue in their commitment to wellbeing priorities as a pre-requisite for learning during the transition period and beyond. The main challenge for education in the post-pandemic transition will be to capitalise on resources and experiences acquired in this unprecedented time and to embed the wellbeing approach as a day to day practice to support a healthy and flourishing learning environment for all students.

During the pandemic, many IB schools were among the champions in providing extraordinary wellbeing support for their students and parents during the pandemic (IBO, 2020). The creativity and adaptability of IB schools has been impressive and deserves to be acknowledged and celebrated.

# References:

- Andrabi, T., Daniels, B., Das, J. 2020. Human Capital Accumulation and Disasters: Evidence from the Pakistan Earthquake of 2005. RISE Working Paper Series. 20/039. https://doi.org/10.35489/BSG-RISE-WP\_2020/039.
- 2. Atteberry, A., & McEachin, A. (2016). School's out: Summer learning loss across grade levels and school contexts in the United States today. In Alexander, K., Pitcock, S., & Boulay, M. (Eds). Summer learning and summer learning loss, pp35-54. New York: Teachers College Press.
- 3. Bavel, J.J.V., Baicker, K., Boggio, P.S. et al. Using social and behavioural science to support COVID-19 pandemic response. Nat Hum Behav 4, 460-471 (2020). https://doi.org/10.1038/s41562-020-0884-z
- 4. Chater, N. Facing up to the uncertainties of COVID-19. Nat Hum Behav 4, 439 (2020). https://doi.org/10.1038/s41562-020-0865-2
- 5. Dorn, E., Hancock,B., Sarakatsannis, J., Viruleg, E. Open interactive popup (2020, June 1). COVID-19 and student learning in the United States: The hurt could last a lifetime. McKinsey & Company. <a href="https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime">https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime</a>
- 6. Dryden-Peterson, S. (2020, April 16). Learning and Community in a Time of Crisis. Usable Knowledge, Harvard Graduate School of Education <a href="https://www.gse.harvard.edu/news/uk/20/04/learning-and-community-time-crisis">https://www.gse.harvard.edu/news/uk/20/04/learning-and-community-time-crisis</a>
- 7. FRANKLIN-WALLIS, O. (2020, May 14). This is how the school shutdown will affect children for many years. WIRED. <a href="https://www.wired.co.uk/article/coronavirus-children-schools-impact">https://www.wired.co.uk/article/coronavirus-children-schools-impact</a>
- 8. Gibbs, L., Nursey, J., Cook, J., Ireton, G., Alkemade, N., Roberts, M., Gallagher, H. C., Bryant, R., Block, K., Molyneaux, R., & Forbes, D. (2019). Delayed disaster impacts on academic performance of primary school children. Child Development, 90(4), 1402-1412. <a href="https://doi.org/10.1111/cdev.13200">https://doi.org/10.1111/cdev.13200</a>
- 9. Gouty, M. (2020, March 23), How to Overcome Fear in Times of Crisis. Literature Lust. <a href="https://medium.com/literature-lust/how-to-overcome-fear-in-times-of-crisis-58b22c9c6047">https://medium.com/literature-lust/how-to-overcome-fear-in-times-of-crisis-58b22c9c6047</a>
- 10. Harari, Y.N. (2015) Homo Deus: A Brief History of Tomorrow, Vintage Publishing, London
- 11. Hodson, G., & Sorrentino, R. M. (1999). Uncertainty orientation and the Big Five personality structure. Journal of Research in Personality, 33(2), 253-261.
- Howat, H., Curtis, N., Landry, S., Farmer, K., Kroll, T., Douglass, J. (2012) Lessons from crisis recovery in schools: how hurricanes impacted schools, families and the community. School Leadership & Management 32:5, pages 487-501. <a href="https://www.tandfonline.com/doi/abs/10.1080/13632434.2012.723613">https://www.tandfonline.com/doi/abs/10.1080/13632434.2012.723613</a>
- 13. https://srcd.onlinelibrary.wiley.com/doi/10.1111/cdev.13200
- 14. International Baccalaureate Organization (IBO) (2017) What is an IB education? <a href="https://www.ibo.org/globalassets/what-is-an-ib-education-2017-en.pdf">https://www.ibo.org/globalassets/what-is-an-ib-education-2017-en.pdf</a>

- 15. International Baccalaureate Organization (IBO) (2020) COVID-19: resources for a new landscape in education <a href="https://www.ibo.org/covid-19-support/">https://www.ibo.org/covid-19-support/</a>
- 16. Kuhfeld, Megan, James Soland, Beth Tarasawa, Angela Johnson, Erik Ruzek, and Jing Liu. (2020). Projecting the potential impacts of COVID-19 school closures on academic achievement. (EdWorkingPaper: 20-226). Retrieved from Annenberg Institute at Brown University: <a href="https://doi.org/10.26300/cdrv-yw05">https://doi.org/10.26300/cdrv-yw05</a>
- 17. Tauritz, R. L. (2016). A pedagogy for uncertain times. Trends in ESD research and innovation, 90-105. https://rltauritz.files.wordpress.com/2019/02/tauritz-2016-a-pedagogy-for-uncertain-times.pdf
- 18. Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war and terrorism: Pathways of risk and resilience. Annual Review of Psychology, 63, 227-257.
- 19. Merrotsy, P. (2013) Tolerance of Ambiguity: A Trait of the Creative Personality?, Creativity Research Journal, 25:2, 232-237, DOI: 10.1080/10400419.2013.783762
- 20. Peek, L., & Richardson, K. (2010). In Their Own Words: Displaced Children's Educational Recovery Needs After Hurricane Katrina. Disaster Medicine and Public Health Preparedness, 4(S1), S63-S70. doi:10.1001/dmp.2010.10060910
- 21. Pelissolo, A., Cautrès, B; Ward, J.K., Bibard, L. Zylberman, P. (2020, May 26). Pourquoi a-t-on peur face à l'épidémie? <a href="https://theconversation.com/pourquoi-a-t-on-peur-face-a-lepidemie-133727">https://theconversation.com/pourquoi-a-t-on-peur-face-a-lepidemie-133727</a>
- 22. Robinson, O. J., Vytal, K., Cornwell, B. R., & Grillon, C. (2013). The impact of anxiety upon cognition: perspectives from human threat of shock studies. Frontiers in human neuroscience, 7, 203. https://doi.org/10.3389/fnhum.2013.00203
- 23. Roesch, J. (2020, June 10). The rush to reopen schools is a mistake. Lost learning time is not the crisis. Age of awareness. <a href="https://medium.com/age-of-awareness/lost-learning-time-is-not-the-crisis-15c3a909a04a">https://medium.com/age-of-awareness/lost-learning-time-is-not-the-crisis-15c3a909a04a</a>
- 24. Seligman, M. E. P. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. New York: Free Press.
- 25. Struyf, D., Zaman, J., Hermans, D. Vervliet, B. (2017). Gradients of fear: How perception influences fear generalization, Behaviour Research and Therapy, Volume 93, June 2017, Pages 116-122 <a href="https://www.sciencedirect.com/science/article/pii/S0005796717300694#">https://www.sciencedirect.com/science/article/pii/S0005796717300694#</a>
- 26. Taguma, M., Senior Analyst, M., FERON, E., & Meow Hwee, L. I. M. (2018). Future of Education and Skills 2030: Conceptual Learning Framework. <a href="https://www.oecd.org/education/2030/Education-and-Al-preparing-for-the-future-Al-Attitudes-and-Values.pdf">https://www.oecd.org/education/2030/Education-and-Al-preparing-for-the-future-Al-Attitudes-and-Values.pdf</a>
- 27. The Mental Health Foundation, UK (2020, June 10). Returning to school after the coronavirus lockdown. <a href="https://www.mentalhealth.org.uk/coronavirus/returning-school-after-lockdown">https://www.mentalhealth.org.uk/coronavirus/returning-school-after-lockdown</a>
- 28. Tyng, C. M., Amin, H. U., Saad, M., & Malik, A. S. (2017). The Influences of Emotion on Learning and Memory. Frontiers in psychology, 8, 1454. https://doi.org/10.3389/fpsyg.2017.01454
- 29. UNESCO, (2020) Education: From disruption to recovery <a href="https://en.unesco.org/covid19/educationresponse">https://en.unesco.org/covid19/educationresponse</a>

- 30. University of Oxford. (2020, May 29). New study reveals long-term impact of disaster-related school closures. Phys.org. <a href="https://phys.org/news/2020-05-reveals-long-term-impact-disaster-related-school.html">https://phys.org/news/2020-05-reveals-long-term-impact-disaster-related-school.html</a>
- 31. Yu, L., Shek, D., & Zhu, X. (2018). The Influence of Personal Well-Being on Learning Achievement in University Students Over Time: Mediating or Moderating Effects of Internal and External University Engagement. Frontiers in psychology, 8, 2287. <a href="https://doi.org/10.3389/fpsyg.2017.02287">https://doi.org/10.3389/fpsyg.2017.02287</a>