International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

OVERCOMING ISOLATION AND LONELINESS
in a digital environment

Evidence-based opportunities for innovation in learning and teaching during school closures related to the COVID-19 pandemic and beyond
Dr Magdalena Balica

International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

OVERCOMING ISOLATION AND LONELINESS in a digital environment

- Definition: *Social isolation* is defined as the objective situation of lacking social relations and contact with others, such as we encounter during the COVID-19 pandemic.
- What do we know about the impact of isolation on learning and wellbeing?
  - connection between loneliness and overall wellbeing in children and adolescents (Loades et al. 2020)
  - sense of isolation is likely to affect teaching and learning (Berge, Collins 1995)
  - self-paced mass digital courses often report social disconnectedness (Haefner 2000; Menchaca, Bekele 2008; Reisetter, Boris 2004)
  - some students' overall wellbeing increased, and their school-related anxiety decreased (Widnall et al. 2020)
  - Not attending school may have protected some students from peer pressure, face-to-face bullying or direct interaction anxiety

OVERCOMING ISOLATION AND LONELINESS

Strategy 1: Building a social presence model

Strategy 2: Peer tutoring

Strategy 3: Backchannelling

International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

STRATEGY 1: Building a social presence model

- *What is isolation and loneliness?*

  - Originally, the term "social presence" was defined as the degree to which a person is perceived as a "real person" and connected to others in the process of communication through a medium (Mehrabian 1971). Garrison (2006a) defines social presence as "the ability to project oneself socially and affectively and getting to know each other as three-dimensional people despite not meeting face-to-face". More recent research has expanded the definition of the "social presence" concept, adding a focus on the social, cognitive and teaching dimensions of digital learning. Social presence can be created by more meaningful and significant digital learning experiences as a way to decrease the feeling of being disconnected (Garrison 2006b; Whiteside 2015).

OVERCOMING ISOLATION AND LONELINESS in a digital environment
STRATEGY 1: Building a social presence model

- *What has research shown?*

MODERATE	Students with strong perceptions of the social presence of others in the online learning space have higher levels of satisfaction with their learning. The study covered a total sample of 3,000 online students from 50 learning centres nationwide from a private university in Malaysia. The results showed a strong and positive correlation with large effect size (Nasir 2020).
MODERATE	Group discussion/small size group tasks are more effective in building a social presence feeling than large groups. The study has found that three-person groups maintained higher levels of communication quality than did six-person groups. Discussion quality was not significantly improved by simply being in a three-person group instead of a six-person group; however, other communication variables of appropriateness, openness, richness and accuracy were greater within the three-person groups than in the six-person groups (Lowry et al. 2006).
LIMITED	Course design and pedagogy have a significant impact on perceptions of social presence (Cui et al. 2013).
LIMITED	Social presence can be influenced by available technology affordance, instructors' readiness for digital teaching, and students' characteristics such as their computer and digital communication skills (Cui et al. 2013).

STRATEGY 1: Building a social presence model

Ideas for schools

- Incorporate into the digital learning space personal profiles, individual learning portfolios and photos that provide students with social cues and visual connection.
- Design opportunities for students to express their feelings, experiences and ideas, for example, through discussion forums, digital groups or case studies; real-world scenarios; or sharing experiences about assignments.
- Invest time in guiding students on their digital learning journey, for example, through summaries and timetables of overall class progress on assignments or assessments; emails to summarize a recent forum discussion or to congratulate students on their progress.
- Provide timely feedback, incorporating empathy, feelings and emotions. Video feedback may enhance the feeling of social presence in a digital learning environment more than written comments.
- Plan regular synchronous social communication within small groups. Immediacy is a critical element in social presence, and communication in real time often enhances social presence when handled well.
- Create open discussion forums, as a space where students can engage in informal discussions that are of interest to them.

International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

STRATEGY 2: Peer tutoring

What is Peer tutoring?

- Peer tutoring refers to a variety of strategies in which learners work in pairs or small groups to provide each other with explicit teaching and assessment support. There are various scenarios to organize peer tutoring:
    - same-age peer tutoring, when tutoring occurs between students of the same age or grade level
    - cross-age peer tutoring, when tutoring occurs between students of differing ages where the older student tutors the younger student.
    - reciprocal peer tutoring, when paired students alternate roles as tutor and tutee (EEF 2018).

STRATEGY 2: Peer tutoring

What has research shown?

STRONG	Peer tutoring can have a moderate to high positive average effect on learning outcomes (EEF 2018).
STRONG	Four- to ten-week intensive blocks of peer tutoring programmes appear to provide maximum impact for both tutors and tutees (EEF 2018).
MODERATE	Academic improvements can be found regardless of students' learning abilities, with a positive moderate size effect (Okilwa, Shelby 2010).
LIMITED	The peer tutoring experience can lead to positive social and emotional benefits on both tutors and tutees, increasing their overall wellbeing while learning (Finlay 2019).

STRATEGY 2: Peer tutoring

Ideas for schools

- Plan "get to know each other" sessions or moments for personal bonding within the peer tutoring programme.
- Provide activities that are sufficiently challenging for the tutee to benefit from the tutor's support.
- Design effective support for the tutor to ensure the quality of peer interaction and their individual wellbeing.
- Train staff and tutors and implement improvements as the programme progresses, including strategies targeted to build confidence, trust and a growth mindset.
- Use tutoring activities to review or consolidate learning, rather than to introduce new material.
- Design an appropriate structure for the tutoring programme (EEF 2018).

STRATEGY 3: Careful integration of backchannelling

What is Backchannelling?

- Backchannelling is a parallel type of digital communication that is happening concurrently with a specific face-to face or digital learning and teaching activity. It is also seen as a digital tool used for peer-to-peer interaction during a learning task (Holland 2015). Examples of backchannelling could include various social media tools: chat rooms, quiz tools, social networking tools, polls, questions and answers tools, whiteboards, pinboards, message boards, etc.

STRATEGY 3: Careful integration of backchannelling

What has research shown?

STRONG	Several experiments have revealed small negative effects of social media use on wellbeing. However, accumulating evidence indicates that social media can enhance or diminish wellbeing depending on how people use them (Kross et al. 2021).
MODERATE	Media multitasking interferes with attention and working memory, negatively affecting test performance, recall, reading comprehension, note-taking, self-regulation and efficiency. Younger students may be more exposed to distraction than older ones (May, Elder 2018).
LIMITED	The teaching and learning lesson units that used backchannelling had a higher level of engagement than the section that did not use it (Harunasari, Halim 2019).
LIMITED	Backchannelling opportunities may favour students who would otherwise avoid interacting during group discussions over students who struggle to interact during class due to disabilities or other concerns (Neustifter et al. 2016).

OVERCOMING ISOLATION AND LONELINESS in a digital environment
STRATEGY 3: Careful integration of backchannelling

Ideas for schools

- Provide opportunities for peer-to-peer backchannelling that are linked to a specific pedagogical and wellbeing purpose.
- Assess the potential risk for distraction and scaffold and monitor the peer-to-peer interaction.
- Involve students in establishing clear values and norms for constructive communication.

International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

CONCLUSIONS AND POLICY CONSIDERATIONS: Main takeaways

- **Wellbeing is a critical component of designing an effective digital learning environment.** Lacking a direct connection with their teachers and peers, many students may encounter isolation and loneliness, decrease their learning engagement or struggle with their tasks. However, other students may benefit from learning remotely if they are equipped with self-directed learning skills. Less direct social interaction may also decrease the level of negative behaviour, such as bullying or negative peer pressure. The current paper has presented a variety of strategies that may help teachers to foster the wellbeing of all students.

- **To benefit from digital learning, students need the right set of skills and support systems.** Before implementing a digital learning system, it is essential to monitor students' ability to deal with online learning. The current paper has presented a set of skills that can enhance students' wellbeing while promoting their digital participation, media literacy, metacognition, and the ability to manage various risks online, such as cyberbullying.

- **It is important that teachers design a wellbeing infrastructure in any digital learning environment to boost learning outcomes and wellbeing.** The relationship between technology, wellbeing and learning outcomes is complex. However, schools should consider the wellbeing of all students as a design principle. Without a clear rationale for the support and implementation of wellbeing measures, the use of technology is far less likely to have a positive impact on learning.

- **Teachers need appropriate training and support in monitoring and assessing student wellbeing in a digital environment.** In addition, teachers' wellbeing should be a key priority when planning for a digital learning environment.

CONCLUSIONS AND POLICY CONSIDERATIONS: Policy considerations

- **Put wellbeing and pedagogy first**. Effective use of digital learning technology should be driven by learning, teaching and wellbeing goals rather than by a specific technology.

- **Critically assess the impact of various tools and technologies on wellbeing before implementing them.** Reflect on the benefits, limitations and strategies to overcome the potential risks for various categories of students.

- **Use evidence to monitor, assess and improve students' wellbeing in digital learning environments.** Many aspects of student wellbeing in a digital learning environment are yet unknown. Therefore, there is an opportunity for schools and teachers to engage in thoughtful innovation and experimentation in this area.