STAY+

GUIDELINES

SUPPORTING STUDENT WELLBEING IN A DIGITAL LEARNING ENVIRONMENT

EXECUTIVE SUMMARY

This report focuses on developing guidelines for creating a supportive and motivational framework for digital learning environments. It aims to define student engagement in digital learning environments, propose measures to safeguard student wellbeing, and provide recommendations for monitoring student engagement. The report identifies student engagement as a key factor in creating a supportive and motivational digital learning environment. It defines student engagement as the level of involvement, interest, and motivation that students demonstrate in their learning. The report proposes measures to safeguard student wellbeing in digital learning environments. It emphasizes the need for policies and practices that prioritize student mental health and wellbeing, such as providing access to mental health resources and promoting self-care and stress reduction. It also recommends that educators and policymakers prioritize digital literacy and digital citizenship education to ensure students can navigate digital environments safely and responsibly. The report provides recommendations for monitoring student engagement in digital learning environments. It also highlights the importance of providing feedback to students on their progress and engagement levels to encourage motivation and active participation. The present guidelines emphasizes the importance of creating a supportive and motivational framework for digital learning environments.

INDEX

1. BACKGROUND

"*The COVID-19 pandemic has affected and put unprecedented pressure on education and training systems worldwide and across the Union. It has brought major changes to how we learn, teach, communicate and collaborate within and between our education and training communities. This has had an impact on learners, their families, teachers, trainers, institution leaders, as well as on the broader society*." [1] The introduction to the Council conclusions on countering the COVID-19 crisis in education and training highlighted the need for innovative solutions that combine contemporary digital advances in learning technologies to create a supportive and responsive learning environment. However, a rudimentary transfer of traditional classroom-based resources to the home or other context was not as effective as it could have been, and VET professionals have found it challenging to engage young people aged 15-21 years old through the transition to online/distance learning. In response, the STAY+ project proposes to gamify positive behaviors of young people during the pandemic and beyond, specifically targeting the VET sector. The project seeks to promote positive behaviors that protect learner wellbeing and improve retention rates by building upon the innovative Stay mobile interactive site that piloted a rewards scheme for young people adhering to the COVID-19 UK government guidelines. The current platform allows users to earn unique digital merchandise (badges) based on their activity and utilises GPS technology to reward them for staying at home. The STAY+ project will take this innovative model further and embed rewards into VET digital learning environments. It will develop a sustainable, flexible, and long-term solution beyond the current pandemic through transnational cooperation, a range of reports, resources, and tools targeting the specific needs of VET organizations.

---

[1] [Participatory digital approaches to embedding student wellbeing in higher education](#)

By focusing on promoting positive behaviors and creating a supportive learning environment, the STAY+ project aims to tackle the challenges faced by VET professionals in engaging young people through the transition to online/distance learning. By gamifying positive behaviors and utilizing rewards, the project seeks to incentivize and motivate learners to engage with the digital learning environment actively. The project has the potential to not only improve retention rates but also contribute to the overall wellbeing and success of young people in the VET sector.

1. OVERVIEW

The sudden shift to remote and blended learning brought on by the COVID-19 pandemic has created significant challenges for both students and teachers. Studies and surveys have shown that increased stress levels are common among both groups during the initial stages of remote learning. Teachers are facing difficulties in adjusting to new methods of delivering material and decreased face-to-face time with students, making it harder to monitor progress and support student wellbeing. Similarly, students are struggling with both academic and social challenges, with many feeling disconnected from their teachers and classmates. A recent survey[2] found that 50% of students felt they couldn't communicate with their teacher enough, and 61% missed social interactions with peers, both of which can have a negative impact on overall wellbeing. While schools cannot control external factors, taking proactive steps to support student wellbeing can help maintain engagement and prevent students from falling behind. As digital learning becomes more prevalent, it is important to monitor student engagement and promote their well-being to ensure successful learning outcomes. Here are six suggested guidelines for students' engagement monitoring to consider:

A. Use Learning Management Systems (LMS) to monitor engagement
Most LMS platforms allow teachers to track student participation and engagement, such as the number of logins, time spent on tasks, and completion rates. Regularly monitoring these metrics can help teachers identify students who may be struggling and provide support when needed.

B. Encourage communication and collaboration
Digital learning can be isolating, so it's important to encourage communication and collaboration among students. Consider using discussion boards, group projects, and peer evaluations to facilitate engagement and social interaction.

C. Incorporate interactive activities
Interactive activities, such as quizzes, polls, and games, can help break up the monotony of online learning and keep students engaged. They can also provide instant feedback and motivate students to stay on track.

D. Offer support and resources for mental health
The shift to online learning can be stressful for some students, and it's important to provide resources and support for mental health. This can include offering counseling services, mental health resources, and promoting healthy habits like exercise and mindfulness.

E. Monitor and address technical issues
Technical issues can be a major barrier to engagement in digital learning. Teachers should regularly monitor the platform and address technical issues quickly to minimize disruption to the learning experience.

F. Encourage student feedback

---

[2] [Participatory digital approaches to embedding student wellbeing in higher education](#)

Regularly seek feedback from students on the digital learning experience. This can provide valuable insight into what is working and what needs improvement. By following these guidelines, teachers can monitor student engagement and promote their well-being in digital learning, leading to successful learning outcomes.

2. ENGAGEMENT

2.1 Definitions

STAY+ build upon the works of the International Baccalaureate Organization Research Department[3] to propose an engagement approach structured within three pillars of the students' wellbeing in digital environments, and it is part of a larger framework that typifies the said wellbeing, as outlined in the figure 2.1 below, characterised by three key features:

a) gamification of learning;
b) digital stories
c) digital participation and resilience

Figure 2.1 – Promoting student wellbeing through effective digital learning strategies

---
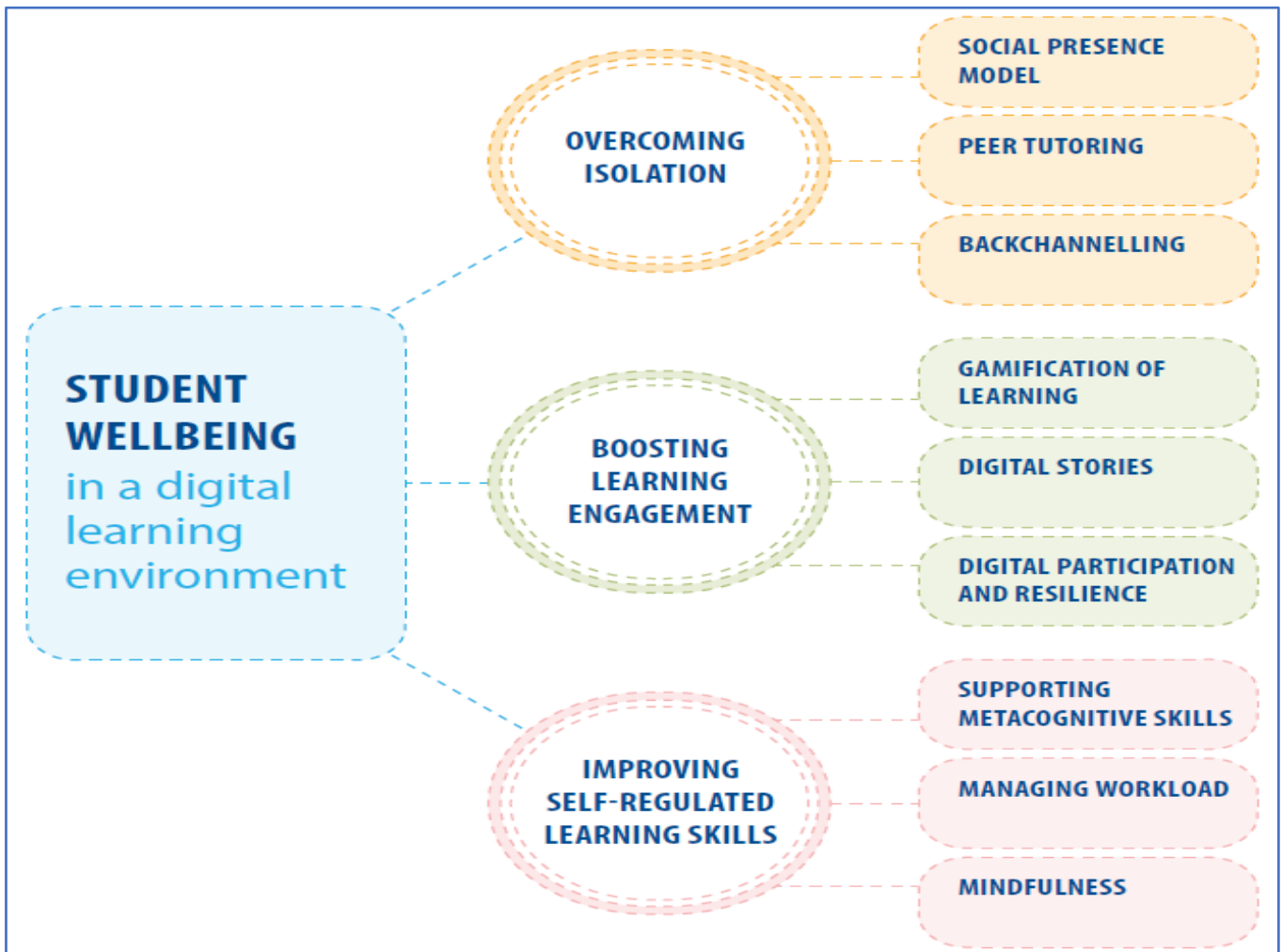
[3] Supporting student well-being in a digital learning environment, August 2022

Figure 2.1 – Translations

English	Language
Student wellbeing in a digital learning environment	
Overcoming isolation	
Social presence model	
Peer tutoring	
Backchanneling	
Boosting learning engagement	
Gamification of learning	
Digital stories	
Digital participation and resilience	
Improving self-regulated learning skills	
Supporting metacognitive skills	
Managing workload	
Mindfulness	

Gamification of learning via the STAY+ Mobile App. STAY+ gamifies and bring the evidence gathered in the situation analysis studies to life via designing, developing and delivering a mobile-interactive experience to engage, reward and retain Vocational Education and Training (VET) students in digital learning environments. The project bespoke digital platform (STAY+) is built on the brand-new innovative STAY Platform, which was designed and developed during the COVID-19 pandemic to engage, enable and encourage positive practices amongst young people. The STAY+ mobile-interactive experience allows young people to earn unique digital merchandise (badges) based on their activity and utilises live data feeds, Augmented Reality and GPS location data to reward them for positive behaviours. This in turn allows empowering them to improve their health and wellbeing, engage in in digital learning and maintain their motivation. The STAY+ Platform is developed with the overarching objective of empowering young people to become advocates of digital vocational training, via increasing their awareness of: a subject area; their own health and wellbeing, and that of their fellow learners; how to maintain their own motivation, manage their time and complete tasks; and the vocational training available in their area.

Digital stories. The project proposes a platform to allow the production of tailored digital stories, empowering individuals to creatively craft and share their narratives through a user-friendly interface.

Digital participation and resilience. The project STAY+ contributes to increasing digital participation and resilience via creating realistic motivational learning environments. STAY+ generates interactive simulations which turn learning fun and engaging. Students can explore virtual worlds, solve problems, and collaborate with their classmates in ways that felt natural and intuitive. STAY+ incorporated elements of gamification offers rewarding students for their progress and achievements. As participants further engage in using STAY+, the school began to see a dramatic shift in student attitudes and behaviors. Students who once struggled to stay focused are now eager to participate in class, and their digital skills improved dramatically. They are more confident in their abilities, more resilient in the face of challenges, and more motivated to learn. Thanks to the STAY+ platform, students at the high school have a strengthened sense of purpose and direction. They are equipped with the skills they need to succeed in a digital learning environment, and they are motivated to further explore all the possibilities that lay ahead.

2.2 National landscape

The table 2.2 (below) outlines the national landscape, connecting methodologies and key features with results, impacts and outcomes, and key recommendations.

Table 2.2 – National landscapes on students' engagement and wellbeing in the education and training sphere considering digital environments

Country and short description of the project	Methodology key features	Results, impacts, outcomes	Key recommendations
UK. Project 'Digitise my Vocational Education and Training (DigMyVET!)' (ERASMUS+ ref. 2020-1-UK01-KA226-VET-094608, from 2021-06-01 to 2023-05-31) Supporting sustainable digital integration in vocational education and training to help staff and learners adapt to the changes in VET learning.	- Develop a set of tools to facilitate sustainable digital integration in vocational settings by providing stakeholders with a handbook on digital integration strategy best practices - Create a modular framework for a digital strategy, to be adapted and implemented based on the organisational nuances and existing digital infrastructure and appetite - Create a supportive guide for vocational learners in managing their own learning journey when transitioning from a predominantly face-to-face learning environment to a remote, digital one.	- Personal empowerment and independence - Increased quality of teaching - Creation of better-quality learning and training opportunities - Improved teacher ICT competency - Improved awareness and knowledge of the use of digital tools and ICT in vocational education and training - Improved teamwork skills - Improved understanding of learner needs - Improved knowledge about how learner needs shape their learning experience - Improved ICT skills	- Promote learning of new skills - Encourage self-study - Set long-term goals - Promote learners to understand their own role as drivers and catalysts of change - Promote empowerment and innovation - Teach team-work skills
Italy. Project: "IN.TE.M.I.S. - INnovative TEaching Method for an Inclusive School" (ERASMUS+ ref. 2016-1-IT01- KA202-005354, from 05-09-2016 to 04-09-2018). IN.TE.M.I.S. has introduced the teaching methodology of the 'Flipped Classroom', based on ICT and on an innovative and student-centred pedagogical approach, in Institutes and VET centres, in order to: increase the quality of teaching and learning, reduce the early school leaving, support the modernization of education and training systems. The project idea was born from the desire to give an answer to the challenges faced by the staff of VET schools and	Teachers and trainers of schools and VET institutions have been trained on how to integrate innovative teaching strategies and implement the Flipped Classroom learning methodology. The following activities were carried out: -n. 2 Joint Staff training Events on the topics: "Innovative teaching: pedagogical and technological aspects" and "Implementation and evaluation methods of the Flipped Classroom" - Mobility activities of Italian and Icelandic students to experiment in a practical way the implementation of the Flipped Classroom methodology for learning	-greater knowledge of the state of the art on the adoption of innovative teaching methodologies and on the Flipped Classroom method in Italy and in Europe - fruitful exchange of materials, experiences and good practices between partner organizations and participants in staff training activities -the acquisition, by the teachers, of skills related to the implementation and evaluation of mixed learning environments based on the inverted class methodology -the increase, in the students participating in the mobility, of the motivation to study thanks to the use of IT tools and participatory approaches, and of the inclusion within the training environment	- Encourage the safe use of digital tools for learning - Promote the use of ICTs-based methodologies as supporting tools in increasing inclusion - Promote the expression of different kind of intelligences - Sustain the adoption of learner-centered methodologies - Promote self-confidence and critical sense - Encourage self-motivation, goal-oriented activities - Provide feedback

Country and short description of the project	Methodology key features	Results, impacts, outcomes	Key recommendations
institutions in Italy and in other European countries: the adoption of innovative pedagogical approaches, the introduction of new information technologies in learning, the demotivation of some categories of students which - in extreme cases - has the consequence of dropping out of school. The project was carried out by seven organizations set in 5 European Countries: Italy, Iceland, Portugal, Spain and Greece over a 24 months period. https://erasmus-plus.ec.europa.eu/projects/search/details/2016-1-IT01-KA202-005354		-strengthening, in all subjects involved, linguistic skills in English, intercultural, social, IT and pedagogical skills Outputs: - Research on innovative teaching and training needs of teachers and students in Italy - Comparative research on innovative education in Europe - Guide for the implementation of blended learning environments - Repository of learning materials	
Türkiye. Project 'Creating a school environment for active participation' (ERASMUS+ ref. 2020-1-RO01-KA229-080103, from 01-09-2020 to 31-08-2023). *Development of common educational values through civic involvement and active participation at European level for 700 direct participants students and 600 indirect participants teachers, parents through cooperation between schools from 6 countries (Portugal, Poland, Italy, Greece, Turkey and Romania) over a 24 months period.* https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-RO01-KA229-080103	- Develop a digital environment joint long term strategy for increasing by 80% the number of students included socially in the period of implementation of the project, on the basis of their learning objectives and expectations on wellbeing (sense of achievement, belonging, etc.) - Enhance the platform teacher/students/parents communication, social, civic, interpersonal, intercultural competences, teamwork, for 95% the 700 of students in the period of implementation of the project	- Unity in diversity: 90% of the participants with enhance sense of belonging considering their expectations in the learning curve - learning in digital environment: 80% of the students with enhance capabilities in coping with a panoply of needs such as self-motivation, time management and stress management skills	- Foster a sense of belonging - teach stress management techniques - set realistic expectations - encourage positive self-talk - encourage social interaction - teach time management skills - provide regular feedback - promote self-care

2.3 EU landscape

The COVID-19 pandemic has dramatically changed the educational landscape in Europe, and many educational institutions have had to quickly adapt to digital learning environments to ensure the continuation of education. As a result, many students have been thrust into an online learning environment, which can be challenging for some students.[4] One of the challenges of digital learning is the lack of social interaction and connection with other students, which can lead to feelings of isolation and loneliness. Additionally, students may struggle to stay motivated and engaged in the online learning environment, as the absence of a physical classroom and face-to-face interaction can make it more difficult to stay focused.[5] To address these challenges, educational institutions have been implementing various strategies to support students' engagement and wellbeing in digital learning environments. These strategies include providing regular check-ins with students, creating virtual communities, offering mental health support, and providing opportunities for students to collaborate and engage with each other online.[6] All-in-all, while the shift to digital learning has presented some challenges, educational institutions in Europe are working to support students' engagement and wellbeing in online learning environments. The figure 2.3 (below) shows the change in study workload (% of students with a larger or significantly larger workload) and student satisfaction with the teaching staff and PR support (% of satisfied or very satisfied students) during the COVID-19 pandemic.[7]

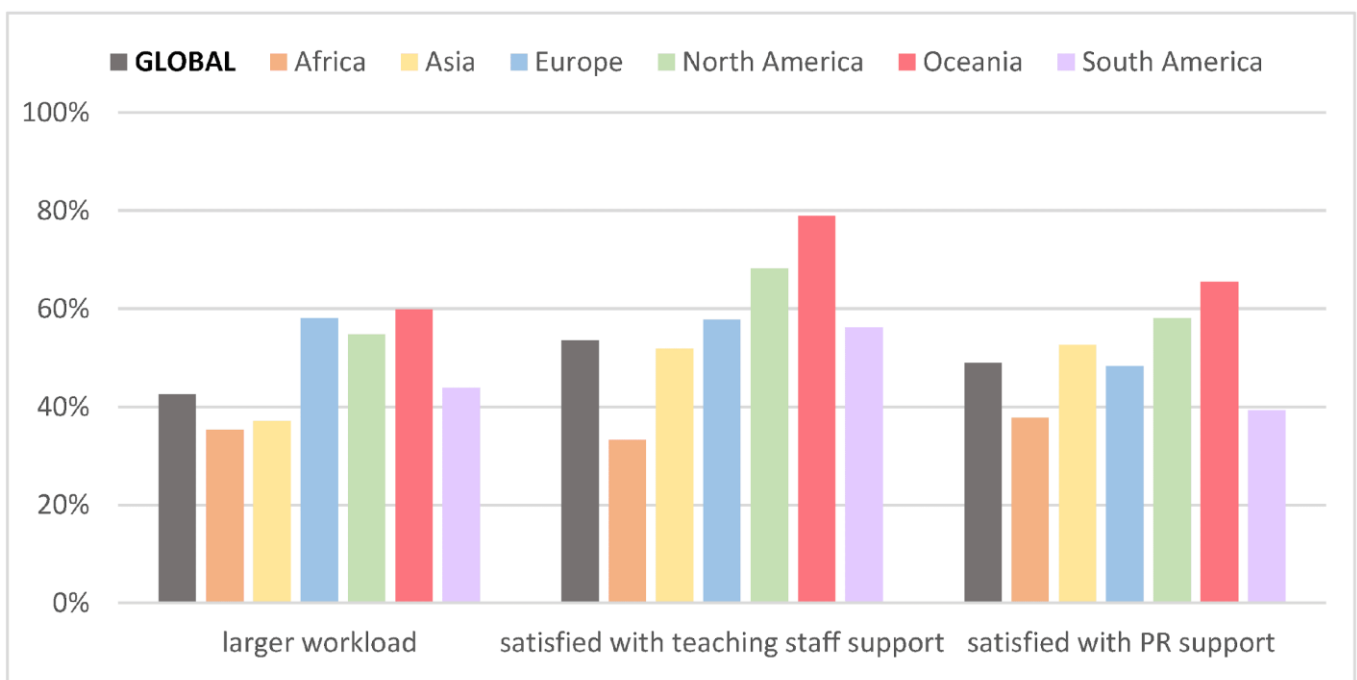*Figure 2.3 – Change in study landscape during the COVID-19 pandemic*

Figure 2.1 – Translations

English	Language
Global	
Africa	

[4] The impact of COVID-19 on education: a meta-narrative review, July 2022
[5] The lack of academic social interactions and students' learning difficulties during COVID-19 faculty lockdowns in Croatia, January 2022
[6] Council conclusions on supporting well-being in digital education, December 2022
[7] The lack of academic social interactions and students' learning difficulties during COVID-19 faculty lockdowns in Croatia, January 2022

English	Language
Asia	
Europe	
North America	
Oceania	
South America	
Larger workload	
Satisfied with teaching staff support	
Satisfied with PR support	

3. WELLBEING

Monitoring must be combined with supporting student wellbeing for it is essential for ensuring their academic success and overall development. Supporting student wellbeing in a digital learning environment can be challenging, but it's still essential to ensure that students feel supported and motivated. Prioritizing student wellbeing in digital learning environments involves acknowledging that students' mental and physical health are crucial factors that impact their learning outcomes. Therefore, providing access to mental health resources, such as counseling services, online therapy, or mental health hotlines, can help students manage stress, anxiety, and other mental health challenges. Encouraging physical activity is also crucial for student wellbeing, as it can help reduce stress levels and improve overall health. This can include promoting breaks from screen time to engage in physical activities like stretching or yoga, or providing access to fitness apps or online exercise classes. Promoting self-care can also help students develop healthy habits and coping mechanisms to manage stress and anxiety. This can include providing resources on stress management, time management, and sleep hygiene, or incorporating self-care activities such as mindfulness exercises or relaxation techniques into course curriculum. Here are some strategies that can help support student wellbeing:

a) *foster a sense of belonging:* encourage students to feel like they are a part of the school community by creating opportunities for them to connect with their peers and teachers;

b) *provide access to mental health resources:* make sure that students have access to mental health resources, such as counseling services or support groups.

c) *teach stress management techniques:* help students develop healthy coping mechanisms by teaching stress management techniques such as mindfulness, meditation, and exercise.

d) *encourage physical activity:* encourage students to engage in physical activity to promote a healthy lifestyle and reduce stress.

e) *set realistic expectations:* set realistic academic expectations for students and help them manage their time effectively to reduce stress and anxiety.

f) *foster a growth mindset:* encourage students to adopt a growth mindset, which involves the belief that abilities and intelligence can be developed through hard work and dedication.

g) *encourage positive self-talk:* encourage students to practice positive self-talk and to focus on their strengths rather than their weaknesses.

h) *provide opportunities for creativity and self-expression:* encourage students to engage in creative activities, such as music, art, or writing, to express themselves and reduce stress.

i) *create a safe and supportive learning environment:* foster a safe and supportive learning environment by creating a culture of respect and inclusivity.

j) *foster positive relationships:* build positive relationships with students to create a sense of trust and support, which can help them feel more comfortable seeking help when needed.

k) *encourage social interaction:* create opportunities for students to connect with each other through online discussion boards or video conferencing; encouraging students to interact and collaborate with one another can help them feel more connected and engaged in the learning process;

l) *provide virtual counseling services:* make sure that students have access to mental health resources, such as virtual counseling services or support groups;

m) *establish clear boundaries:* encourage students to establish clear boundaries between school work and personal time to reduce stress and burnout;

n) *teach time management skills:* help students develop time management skills to ensure they are able to balance their schoolwork with other responsibilities and self-care;

o) *provide regular feedback:* provide students with regular feedback on their work to help them stay motivated and engaged in the learning process;

p) *promote self-care:* encourage students to prioritize self-care by taking breaks, getting enough sleep, and engaging in activities that bring them joy outside of school; remind students that taking care of their wellbeing is just as important as academic success.

4. MONITORING

4.1 Remote monitoring

STAY+ proposes a panoply of measures to facilitate the monitoring of students' engagement in digital learning environments and their wellbeing, spanning from tracking metrics to peer-to-peer settings, and in particular: Learning Management Systems (LMS) to monitor engagement. Most LMS platforms allow teachers to track student participation and engagement, such as the number of logins, time spent on tasks, and completion rates. Regularly monitoring these metrics can help teachers identify students who may be struggling and provide support when needed. Use technology to co-create and sustain the monitoring framework e.g., use technology tools to support learning, such as educational apps, video tutorials, and online simulations. Remote monitoring of a digital learning environment involves the use of technology to monitor the activities and progress of learners in an online learning environment. This type of monitoring is particularly important for remote or distance learning, where instructors may not have physical access to their students. Some common ways that remote monitoring of a digital learning environment can be carried out are outlined next. Learning Management Systems (LMS): LMS is a software application that allows instructors to create, manage, and deliver online courses. LMS often have built-in tools for monitoring student progress, such as tracking course completion, monitoring assignment submissions, and providing real-time feedback to students. Video conferencing: tools like Zoom, Google Meet, and Skype can be used to conduct live virtual classes, allowing instructors to monitor student engagement, participation, and understanding in real-time. Learning analytics: involves using data and analytics tools to track student progress and identify areas where additional support may be needed. For example, an LMS may collect data on how long a student spends on a particular activity or module, which can help instructors identify which topics students are struggling with. Student feedback: educators can also monitor their students by collecting feedback through surveys, quizzes, and other assessment tools. This can help instructors understand how well their students are engaging with the course material and identify areas where improvements can be made. All-in-all, remote monitoring of a digital learning environment can provide instructors with valuable insights into how their students are progressing and help them make data-driven decisions to improve their teaching and support their students' learning.

4.2 Technical issues

Technical issues can be a major barrier to engagement in digital learning. Teachers should regularly monitor the platform and address technical issues quickly to minimize disruption to the learning experience. Monitoring and addressing technical issues in a digital learning environment is crucial to ensure that students have a seamless and effective learning experience. Here are some steps that can be taken to monitor and address technical issues:

a) monitor the learning environment e.g., regularly check the digital learning environment for any technical issues that may arise, such as broken links, slow loading times, or malfunctioning tools. this can be done manually or through the use of monitoring tools that automatically detect issues.

b) establish a support system e.g., provide students with a support system that they can contact when they encounter technical issues. this can be in the form of a help desk, a support forum, or a dedicated email address.

c) create a knowledge base e.g., create a repository of frequently asked questions and troubleshooting guides that students can use to solve common technical issues on their own.

d) provide technical training e.g., offer technical training to students to ensure they have the skills needed to use the learning environment effectively. this can include training on how to use tools and applications, troubleshooting common issues, and navigating the learning environment.

e) monitor feedback e.g., encourage students to provide feedback on any technical issues they encounter, and use this feedback to identify recurring issues and areas for improvement.

f) regularly update and maintain the learning environment e.g., ensure that the digital learning environment is regularly updated and maintained to avoid technical issues. this can include updating software, fixing broken links, and ensuring that the system is compatible with different devices and browsers.

By taking these steps, educators can effectively monitor and address technical issues in a digital learning environment, ensuring that students have a seamless and effective learning experience.

4.3 Personal interactions

STAY+ proposes that personal interactions facilitate wellbeing of students in digital learning environments, thus highlights the importance of fostering the said interactions. In the following paragraphs, we will explore the series of measures proposed by STAY+ to implement this approach. One of the key measures proposed is to encourage communication and collaboration among students. As digital learning can be isolating, it is essential to create opportunities for students to connect and collaborate with each other. This can be achieved through the use of discussion boards, group projects, and peer evaluations, which can facilitate engagement and social interaction. These activities can also help students develop important skills such as communication, teamwork, and problem-solving. Incorporating interactive activities is another measure that can help to break up the monotony of online learning and keep students engaged. Interactive activities, such as quizzes, polls, and games, can provide instant feedback and motivate students to stay on track. These activities can also help students develop critical thinking and decision-making skills while promoting engagement and collaboration. Offering support and resources for mental health is also crucial for promoting student wellbeing in digital learning environments. The shift to online learning can be stressful for some students, and it's important to provide resources and support for mental health. This can include offering counseling services, mental health resources, and promoting healthy habits like exercise and mindfulness. By providing students with access to mental health resources and support, educators can help them manage stress and anxiety and promote overall wellbeing. Finally, encouraging student feedback is an

essential measure to improve the digital learning experience continually. Regularly seeking feedback from students on their experiences can provide valuable insights into what is working well and what needs improvement. It can help educators and policymakers identify areas for improvement, develop targeted interventions, and ensure that students' needs are being met. In conclusion, personal interactions are essential for promoting student wellbeing in digital learning environments. Encouraging communication and collaboration, incorporating interactive activities, offering support and resources for mental health, and encouraging student feedback are measures that can help implement this approach. By adopting these measures, educators and policymakers can create a supportive and motivating digital learning environment that prioritizes student wellbeing.