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Report to the Surrey Board of Education
Hybrid Learning

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December 11, 2024

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Surrey Schools – Continuous Learning 14033 92nd Avenue, Surrey, BC, V3V 0B7
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Background and Context

The Surrey School District's vision for learning, Learning by Design, is a shared commitment to prepare learners for a world in which they think creatively and critically, communicate skillfully, and demonstrate care for self and others. This vision provides learners with the skills necessary to thrive in school and beyond.

The Board of Education is seeking innovative ways to provide learning experiences that draw upon 21st-century skills. At the same time, the Surrey School District faces significant pressures related to growth and infrastructure. Hybrid learning offers a structure that provides learners with an opportunity to grow and demonstrate the skills needed to live in a rapidly changing environment, while also accommodating the district's growth and infrastructure challenges.

Hybrid learning combines -to-face instruction with synchronous and asynchronous online learning. Overall, hybrid learning aims to prepare students for the future by equipping them with the skills and experiences needed to thrive in physical and digital spaces. By leveraging technology, hybrid learning allows students to access course materials, collaborate with peers, and complete learning activities online while benefiting from face-to-face interactions with teachers and students in a classroom setting. One of the key advantages of hybrid learning is its ability to personalize learning. Students can learn at their own pace, revisit challenging concepts, and engage with interactive content that enhances their understanding.

Process for Writing the Report

The development of this report on hybrid learning was co-developed by a collaborative team of school-based leaders, district leaders, and senior administrators. The collaboration process provided participants with an opportunity to analyze academic journals, articles, and studies provided by staff in the research department. Surrey School District's research department provided the hybrid learning working group with research literature that underpins the content in this report. Utilizing provincial, national, and global research, the working group has identified benefits of hybrid learning, current and future states of hybrid learning, and the readiness of the system to implement hybrid learning strategies and structures in secondary schools. These structures and strategies are identified as crucial for the future success of hybrid learning in Surrey schools. In addition, the working group utilized lessons learned from online and hybrid structures that were implemented during the pandemic. In addition, during the pilot stage of the hybrid learning implementation, opportunities to meet with STA and CUPE representatives will occur to draw on further stakeholder input. The combination of local knowledge and broad perspectives on hybrid learning in research literature assisted in the preparation of a fulsome report on the benefits of hybrid learning in Surrey School District's secondary schools.

Benefits of Hybrid Learning

Hybrid learning in secondary schools offers a flexible and inclusive learning environment that caters to diverse student needs and preferences. It can create paths for improved academic performance, enhanced social inclusion, increased engagement and motivation. Hybrid learning can also develop essential skills, making it a valuable approach to modern education. Hybrid learning is an opportunity for the Surrey School District to be a leader in modernizing education in secondary schools. Not only does hybrid learning offer students and staff a flexible structure for learning, hybrid learning also provides students with learning opportunities that focus on the 21st century skills linked to Learning by Design. These skills

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support the successful transition from secondary school to post-secondary options including the world of work.

Hybrid learning, a blend of in-person and online education, offers numerous benefits for secondary schools. One significant advantage is the continuity of learning it provides, especially for students that benefit and or require flexible learning environments. Klunder and Admiraal (2022) discuss in their research on teacher perspectives on the implementation of blended learning, how hybrid learning enables students to participate in lessons from home, maintaining their connection with peers and teachers, which supports their social well-being and academic performance. In the Surrey School District hybrid learning can be facilitated through Microsoft Teams to allow students and teachers to connect in real time in synchronous online meetings. Teachers can provide students with small group instruction utilizing this online platform to build personal relationships with students and enhance collaboration. This model reduces feelings of isolation and facilitates learning anywhere and anytime. The opportunity to engage and motivate students in the classroom and in online environments is noted in Doering's (2006) article exploring the benefits of hybrid learning in Portuguese secondary schools. The article describes how hybrid learning allows students to explore real-world issues through authentic learning experiences within collaborative environments. Teachers in hybrid classes can support collaboration in the classroom and transfer these structures and strategies to asynchronous and synchronous learning opportunities. By structuring collaborative learning experiences, students can build key skills that will be necessary in post-secondary and the world of work. This approach transforms passive learners into reflective practitioners, making learning more flexible and interactive. Additionally, Xu and Pan (2004) underscore how hybrid learning classes can enhance deep learning for secondary students as they improve their analytical, evaluative, and creative skills. This can be achieved by extending learning outside of the classroom through the use of online forums, synchronous meetings on Teams, and co-created online documents that can be accessed anywhere and anytime. These strategies and structures can provide students and staff with flexible and collaborative learning environments in and out of the classroom.

Hybrid learning can also enhance academic performance and social skills that align with Learning by Design. Barma et al. (2017) describe the opportunity that the implementation of hybrid learning to support academic achievement and social development. Utilizing effective blended learning strategies in class and online in synchronous and asynchronous activities promote student engagement, communication, and collaboration. Similarly, Benigno et al. (2022) underline the opportunity that hybrid learning has to support the social and educational inclusion of students with diverse needs and abilities by integrating distance activities with regular classroom participation, improving learning outcomes and social inclusion. Strategies and structures that allow students with diverse needs and abilities to engage online with support from teachers and support enhances inclusive learning environments

Flexibility and accessibility are additional key benefits of hybrid learning. Kaur (2021) emphasizes how hybrid learning can allow students to learn at their own pace and provide opportunities for self-regulated learning, which is particularly beneficial for those who may not thrive in traditional school environments. In their discussion of the effects of hybrid learning on writing and digital literacy, Alsowat (2022) indicates that hybrid learning can improve student essay writing and digital literacy skills. The author further posits that the combination of in class engagement paired with online learning activities can produce desirable

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results. A balance of in class and online activities allow teachers and students to participate in continuous learning that extends beyond the walls of the school.

Moreover, hybrid learning fosters collaboration and social connections. The research "long term collaboration with strong friendship ties improves performance hybrid" explores how long-term collaboration with strong friendship ties in hybrid learning environments improves academic performance by fostering trust, commitment, and effective communication.

The benefits of hybrid learning extend beyond secondary learning experiences. The development of 21st century skills promote competencies that are valued in post-secondary institutions and the world of work. Many post-secondary institutions now offer hybrid learning options to their course calendars. In an increasingly globalized environment, post-secondary programs are developing hybrid and virtual courses to provide flexible and adaptable learning opportunities for learners. In their analysis of post-pandemic hybrid learning offerings in post-secondary programs, Thahir and Baitillah (2023) discuss the skills required to thrive as a hybrid learner. The authors list critical thinking, problem solving, information literacy, technological proficiency, time management, communication skills, and adaptability as the key skills that support success in a post-secondary hybrid environment. A Harvard University report on the top skills and competencies needed for the world of work and leadership align closely with the above skills. The top ten skills include digital adaptability, empathetic communication, emotional and social intelligence, conflict management, persuasion and influence, inclusive leadership, calculated risk-taking strategic agility, engaging and inspiring leadership, and leadership without formal authority. Hybrid learning in secondary schools can provide secondary learners with an opportunity to develop crucial skills and competencies that benefit well beyond secondary school graduation. Hybrid learning's alignment with Learning by Design supports the engagement and learning of students while preparing them for a rapidly changing world that favors 21st century skills. The alignment with Learning by Design and 21st century skills supports the implementation of British Columbia's redesigned curriculum that focuses on core competency development (Ministry of Education and Child Care, 2024)

Readiness

Ensuring system readiness for implementing hybrid learning in a secondary school requires a coordinated effort among all stakeholders. Leaders play a critical role in setting a clear vision, building a shared understanding and commitment, and providing the necessary resources and guidance. Teachers and support staff are at the forefront, influencing student engagement and learning outcomes; their readiness is pivotal as they work directly with students and facilitate the hybrid learning environment. Implementing interactive online learning strategies that support diverse learners and foster a sense of belonging are essential for creating an inclusive, supportive environment that promotes academic success, while nurturing overall wellbeing and developing students' essential skills for the future.

Students must be prepared adapt to new methods and expectations. Their active participation in both online and in-person components is essential. Families play a vital role in supporting and reinforcing the transition to hybrid. By providing the emotional and logistical support students need, families help to ensure their children are prepared to fully engage and participate in hybrid learning activities.

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Successful implementation of hybrid learning increases significantly with the collective commitment of all stakeholders: leaders, teachers, support staff, students, and families. Each play a critical role in promoting an environment that supports engagement and continuous learning**.** Table 1 depicts the assessed readiness and needs of leaders, teachers, students, and families. Each participant in this change initiative must be considered for hybrid learning to be successful in secondary schools. As an example, at all levels an understanding of the future process for a pilot will need to be articulated. An articulation of the courses that will be piloted will support the needs of all participants as course planning, room allocation, and registration is completed and communicated to staff, students, and families.

Table 1: Readiness and Needs

Title	Readiness and Needs
School Leaders	School leaders have experience leading hybrid learning structures in schools through the pandemic and in additional school structures. District guidelines and parameters will be needed for school leaders to successfully lead schools through the implementation of hybrid learning. Leaders will require support to communicate the benefits of hybrid learning structures prior to and during implementation.
Teachers	Many teachers have experience facilitating hybrid or online learning during the pandemic. Teachers continue to build digital literacy skills needed to implement hybrid learning. Continued communication from district and school leaders will support teachers that implement hybrid learning in schools. Access to hardware and software that supports hybrid learning is necessary for implementation to be successful. Teachers will continue to benefit from professional learning that supports blended and hybrid learning strategies. Professional learning that includes a focus on blended learning instructional strategies and facilitating synchronous and asynchronous student collaboration is needed.
Students	Many students in grades 10, 11, and 12 are ready to engage in hybrid learning. Some students have already experienced hybrid learning with existing models. Students require access to hardware and software that supports engagement in hybrid learning. Students will need access to the internet outside of class time at school and at home. Students will also need space outside of the classroom to engage in synchronous and asynchronous learning.
Families	Families will need frequent and effective communication from schools to understand the benefits and structures associated with hybrid learning. Families will need information on how to support student learning in a hybrid environment as students will sometimes engage at home online.

Lessons Learned from Covid

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The pandemic provided the district with an opportunity to implement online and hybrid learning in all schools. Moving to virtual and hybrid learning meant that staff and students engaged with Microsoft Teams, virtual meetings, and synchronous and asynchronous work and learning. Foremost, the shift to virtual and hybrid highlighted the need for equitable access to technology and internet. As not all families have access to digital devices and internet at home, schools needed to support access to devices and internet in creative ways. This included partnerships with community partners to ensure each learner had access to pandemic learning.

In addition, educators were faced with adapting their instructional practice to align with blended learning and virtual learning strategies. Shifting practice to online required teachers and support staff to consider how to engage students in collaborative and relevant learning experiences that allowed learners to show what they know and can do using digital platforms. These strategies included synchronous online lessons, small group lessons online, and one-on-one sessions with students online. Learning through the pandemic provided all staff with an opportunity to increase their digital literacy skills relative to virtual and hybrid learning.
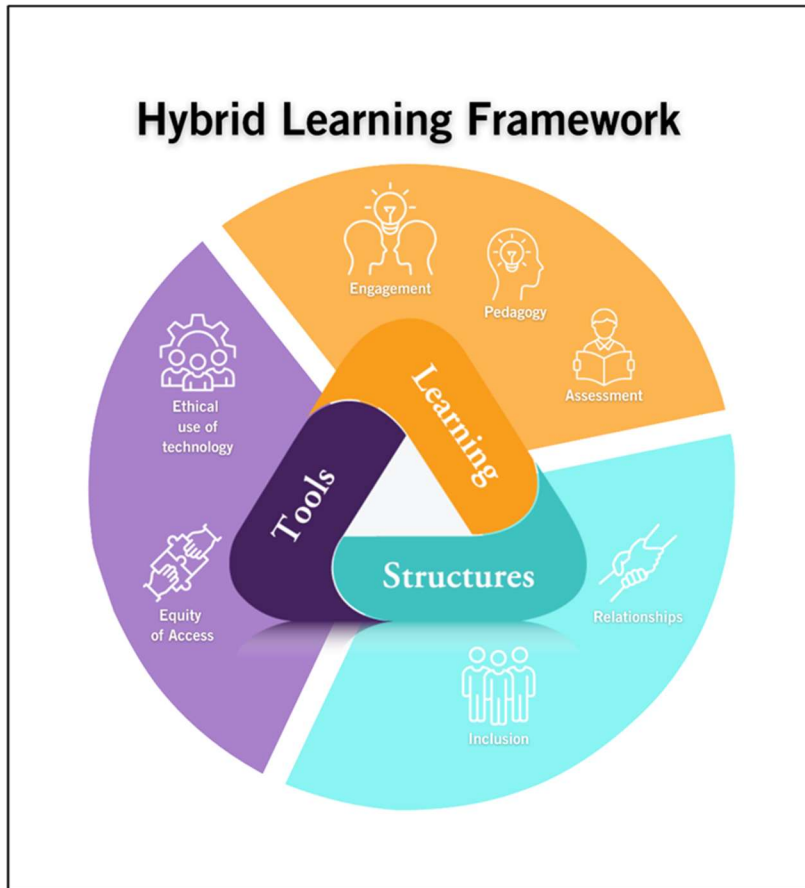
While staff adapted to instruction in an online environment, students were also asked to adapt to new structures and experiences. The pandemic provided all students with an opportunity to engage with online platforms to support learning in virtual and hybrid learning experiences. Virtual and hybrid learning during the pandemic highlighted the importance of building connection, meaningful relationships, and collaboration for students in synchronous and asynchronous experiences. Utilizing the collaborative tools in online platforms to connect students through video, shared documents, and shared workspaces supported the social and emotional needs of students while providing a rigorous academic program online and in the classroom.

Framework for Planning and Implementation

Hybrid learning in secondary schools combines face-to-face instruction with synchronous and asynchronous online learning to create a flexible and dynamic educational environment. This combination creates a conceptual framework emphasizing the integration of digital tools and resources to enhance student engagement and personalized learning experiences. By leveraging physical and virtual classrooms, hybrid learning aims to cater to diverse learning styles and needs, ultimately fostering a more inclusive and effective educational system. Figure 1 depicts a learning framework for hybrid learning in Surrey Schools. Centered on Learning by Design, the hybrid learning framework draws on the Core Competencies of our curriculum while focusing on equity and inclusion. The outer elements of the framework provide us with key aspects that support an effective hybrid learning environment. The key aspects of hybrid learning are identified in academic research and literature as elements of successful hybrid learning strategies and structures.

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Figure 1: Hybrid Learning Conceptual Framework

Note: The hybrid learning framework combines our district's vision for Learning by Design with success markers for hybrid learning in secondary schools.

Key Aspects

Each segment in Figure 1 provides aspects of hybrid learning related to Learning by Design. The blue segment (Structures) emphasizes the power of inclusion and relationships. The Surrey School District is committed to creating an inclusive learning environment for each student in our district. This commitment calls on the district to consider how students with diverse needs and abilities can access and participate in hybrid learning. The purple segment (Tools) underscores the district's commitment to providing staff and students with equitable access to technology and tools that support learning in the classroom and beyond. Finally, the orange segment (Learning), highlights the instructional elements that the Surrey School District identifies as priority practices. Instructional strategies that utilize engaging pedagogical strategies leading to assessment for, as, and of learning support the effective implementation of hybrid learning in secondary schools.

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Current and Future State

Current State

In the Surrey School District, face-to-face and online learning are largely different structures. Brightspace and Microsoft Teams are platforms used to facilitate learning in both environments. Noted below are two examples of hybrid learning that occur in the district. Despite these offerings, hybrid learning opportunities are not available to all learners. As not all families have access to devices and internet hybrid learning can be challenging. Equity of access must be considered for hybrid learning to succeed in secondary schools. For ELL and neurodiverse learners, accessibility can be a barrier.

To ensure success an understanding of hybrid learning structures and strategies that support blended learning is necessary. Providing teachers with professional learning support will be important moving forward, as will ensuring that devices are available to facilitate hybrid learning in secondary classes. The learning process can become transactional, with multiple platforms like Brightspace, Teams and Spaces being used, and course-based offerings often standing alone from other disciplines.

Accessibility to hybrid learning could be a challenge for students with diverse needs. The district will need to consider how hybrid learning opportunities can be accessible to students with disabilities. In addition, English language learners may experience challenges in a hybrid model. The district will need to consider how language supports will be in place to support language accessibility. Safety, cybersecurity, and the ethical use of generative AI are also critically important. Continuous cycles of learning will be required to support and implement new and emerging technologies.

Fleetwood Park Secondary Hybrid Learning Structure

Fleetwood Park Secondary has developed a hybrid learning model for Career Life Connections (CLC) courses for students in grades 11 and 12. The model includes in-person attendance on Day 1 and remote learning on Day 2, utilizing platforms like My Blueprint and Microsoft Teams. The hybrid model allows for more 1-1 contact with students and helps with post-secondary transition and time management skills.

Future State

Blending a mix of in-person and online elements, this approach enhances the learning experience through various key components.

- **Space:** Classroom spaces will be utilized for students to engage face to face learning activities, emphasizing the importance of in-class time while also providing in-person support for those who need it.

- **Strategies:** Strategies will be implemented to engage students synchronously and asynchronously online, as well as face-to-face, focusing on 21st-century learning skills and needs.

- **Devices:** Each student will have access to appropriate devices and internet connectivity, ensuring that all learning needs are met.

- **Collaborative Learning:** Interactive learning will be encouraged through small group sessions both in person and online, allowing for deep engagement with chosen topics.

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- o **Professional Development:** Teachers will be equipped with professional learning opportunities to enhance their pedagogical skills in an online environment, ensuring they are ready, willing, and able to innovate.

- o **Choice**: Where possible, students will have the flexibility to choose hybrid learning or engage face-to-face for the entire course. This approach aims to provide a comprehensive and supportive learning experience for all students.

- o **On-Site Support:** Support will be provided to students during online learning blocks at school to ensure to ensure they have the assistance they need.

- o **Artificial Intelligence (AI):** AI will be utilized to support content creation and learning, and students will be taught to use software, including AI, ethically

- o **Building Connections:** Small group online connections and collaboration opportunities are emphasized, along with decolonizing classroom structures and hierarchies. Purposeful connections with students each block ensure positive relationships, and face-to-face time is used intentionally to build connections.
- o **Assessment:** Students take ownership of their learning and see themselves in the assessment process. Informed by research and evidence, assessment is holistic in nature and is integrated throughout the hybrid learning experience.

In a hybrid learning environment, students will have the flexibility to attend both face-to-face classes and engage in online learning from home or other spaces within the school or district. A hybrid model allows students to learn anywhere, anytime, with access to support both in person and online. The online aspects of this model are structured to ensure both students and educators are clear about learning intentions, processes, and opportunities to provide evidence of learning.

Classroom spaces will be utilized for students to engage in person, emphasizing the importance of in-class time while also providing in-person support for those who need it. Strategies will be implemented to engage students synchronously and asynchronously online, as well as face-to-face, focusing on 21st-century learning skills. Each student will have access to appropriate devices and internet connectivity, ensuring that all learning needs are met.

Interactive learning will be encouraged through small group sessions both in person and online, allowing for deep engagement with chosen topics. Teachers will have the opportunity to participate in professional learning opportunities to enhance their pedagogical skills, ensuring they are ready, willing, and able to innovate. Where possible, students will have the flexibility to choose hybrid learning or engage face-to-face for the entire course. This approach aims to provide a comprehensive and supportive learning experience for all students. Overall, core and curricular competencies are central to the learning process and the key elements identified above, as well as the concept of an educated citizen.

Considerations for Implementation

Implementing hybrid learning in secondary schools requires careful consideration of various factors to ensure its success. Hybrid learning offers flexibility and accessibility, allowing students to engage in learning from different environments. However, it also presents challenges such as ensuring equitable access to technology, maintaining student engagement, and providing adequate support and resources for

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staff. The Surrey School District must develop a strong implementation plan that utilizes the framework in Figure 1 and addresses the readiness of leaders and staff to adopt this new model. By fostering collaboration among departments and leveraging technology effectively, the district can create an engaging and inclusive hybrid learning environment that supports the development of educated citizens.

In addition to the readiness of staff, students, and families, the district will need to consider structural aspects of a hybrid learning plan. In a system that typically relies on the in-person attendance of both staff and students, the district will need to consider how to address when staff and students will be in the school. The district will need to collaborate with key stakeholders to determine common parameters for in person and remote learning. These parameters will need to consider where staff and students will engage in learning when not in the classroom. During online learning blocks, students that remain in the school will need to access space to engage in synchronous and asynchronous learning activities.

Further to the structural needs of hybrid learning, the district must consider how to ensure that students that do not have access to digital devices at home can engage in hybrid learning. A strategy to support the equitable access to technology will need to be developed to ensure all students have access to hybrid learning. Finally, the district will need to consider how hybrid learning will impact course planning and scheduling. As hybrid courses are added to timetables, secondary schools will need to analyze the impact of hybrid classes on the physical space utilized in the school. Collaboration with the district's IT department is necessary to ensure that staff and students have the devices needed to engage in hybrid learning

Summary & Key Themes

The Surrey School District is uniquely positioned to become a leader in 21st-century learning through its innovative hybrid learning initiative. This initiative aligns with the district's vision, Learning by Design, which aims to prepare students for a rapidly changing world by fostering creative and critical thinking, effective communication, and a sense of care for self and others.

Hybrid learning offers a research-based, flexible, and inclusive approach that combines face-to-face instruction with synchronous and asynchronous online learning. This model allows for personalized learning experiences, enabling students to learn at their own pace, revisit challenging concepts, and engage with interactive content. It also caters to diverse student needs and preferences, improving academic performance, social inclusion, engagement, and motivation.

The district's readiness to implement hybrid learning is evident in the preparedness of its school leaders, teachers, students, and families. School leaders have experience in leading hybrid learning structures and will require district guidelines and parameters. Teachers, many of whom have experience with hybrid or online learning, need continued communication and access to necessary hardware and software. Students need access to devices and internet connectivity outside of class time, while families need to understand the hybrid learning structure to support their children effectively.

The hybrid learning framework emphasizes the integration of digital tools and resources to enhance student engagement and personalized learning experiences. It focuses on equity and inclusion, ensuring that all students, regardless of their background or needs, can access and participate in hybrid learning.

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By embracing hybrid learning, the Surrey School District has the opportunity to be a leader in developing essential 21st-century skills and creating a flexible, inclusive, and engaging learning environment for all students.

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References

Alsowat, H. H. (2022). Hybrid learning or virtual learning? Effects on students' essay writing and digital

literacy. *Journal of Language Teaching and Research, 13*(4), 872-883.
https://doi.org/10.17507/jltr.1304.20

Barma, S., Laferrière, T., Lemieux, B., Masse-Morneau, J., & Vincent, M.-C. (2017). Early stages in

building hybrid activity between school and work: The case of PénArt. Journal of Education and
Work, 30(6), 669-687. https://doi.org/10.1080/13639080.2017.1294247

Benigno, V., Caruso, G. P., Dagnino, F. M., Dalla Mutta, E., & Fante, C. (2022). 2ome education

in Italian context: Teachers' perception of a hybrid inclusive classroom. *Education, 12*(8), 563.
https://doi.org/10.3390/educsci12080563

Caldana, A.C.F., Eustachio, J.H.P.P., Sampaio, B.L., Gianatto, M.L., Talarico, A.C., and dal Silvo Batalhao,

A.C. (2023). A hybrid approach to sustainable development competencies: the role of formal,
informal and nonformal learning experiences. International Journal of Sustainability in Higher
Education, 24(2). http://dx.doi.org/10.1108/IJSHE-10-2020-0420

Costa-Mendes, R., Oliveira, T., Castelli, M., Cruz-Jesus, F. (2021). A machine learning approximation of

the 2015 Portuguese high school student grades: A hybrid approach. Education and Information
Technologies, 26. 1527 – 1547. https://doi.org/10.1007/s10639-020-10316-y

Doering, A. (2006). Adventure learning: Transformative hybrid online education. *Distance Education,*

27(2), 197-215. https://doi.org/10.1080/01587910600789571

Gulosino, C. and Miron, G. (2017). Growth and performance of fully online and blended k-12 public

schools. Education and Policy Analysis Archives, 25(124). http://dx.doi.org/10.14507/epaa.25.2859

Haas, K., Carter, M., Stephenson, J., Gibbs, J. (2022). Benefits and challenges of a hybrid distance

education program for autistic school-age students: Parent, student and teacher perspectives.
Australasian Journal of Special and Inclusive Education, 46, 61 – 73.
https://doi.org/10.1017/jsi.2022.2

Hamilton, E. R., & Van Duinen, D. V. (2021). Hybrid spaces: Adolescent literacy and learning in a

museum. *Journal of Adolescent & Adult Literacy, 64*(5), 511-520. https://doi.org/10.1002/jaal.1123

Harvard School of Business. (2023). Global Leadership Development Study: Ready for Anything. Harvard

Business Publishing Corporate Learning

Kaur, A. (2021). Hybrid learning – Insights from three countries. *OEB Insights*. Retrieved from OEB

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Insights

Klunder, S., Saab, N., & Admiraal, W. (2022). A teacher perspective on using a hybrid virtual classroom for students with a chronic illness in mainstream primary and secondary schools. *Technology, Pedagogy and Education, 31*(4), 493-508. https://doi.org/10.1080/1475939x.2022.2033824

Makela, T., Fenyvesi, K., Kankaanranta, M. Pnevmaitikos, D, Christodoulou, P. (2022). Co-designing a pedagogical framework and principles for a hybrid STEM learning environment design. Education Tech Research Dev, 70 1329 – 1357. https://doi.org/10.1007/s11423-022-10114-y

Ministry of Education and Childcare. (2024). B.C.'s Curriculum. https://curriculum.gov.bc.ca/

Pulgar, J., Ramírez, D., Umanzor, A., Candia, C., & Sánchez, I. (2022). Long-term collaboration with strong friendship ties improves academic performance in remote and hybrid teaching modalities in high school physics. *Physical Review Physics Education Research, 18*(1), 010146. https://doi.org/10.1103/PhysRevPhysEducRes.18.010146

Roschelle, J., & Hodkowski, N. M. (2020). *Using research on homework to improve remote and hybrid learning* [White Paper]. Digital Promise.

Stiefel, J. (2016). A mixed methods analysis of parental support for a high school hybrid learning program. Graduate Faculty of the School of Education North Central University.

Thahir, M. and Nur Baitillah, W. (2023). The Post Pandemic Education : A Blended Learning Approach for Teaching and Learning in Higher Education in New Normal Era. International Journal of Ethno-Sciences and Education Research, 3(3) 99 – 108.

Xu, S., & Pan, C. (2024). Deep learning algorithm-oriented blended teaching in secondary school mathematics courses in ethnic areas. *Applied Mathematics and Nonlinear Sciences, 9*(1), 1-14. https://doi.org/10.2478/amns-2024-0001

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