The Future of Education

DISCUSSION BRIEF **09**

Caloundra City Private School

Discussion Brief Number 09

Blended Learning

Blended learning models

Blended Learning (sometimes called 'hybrid' learning) refers to the combination of online or digital learning and learning face-to-face with educators in a manner that leads to better learning outcomes. The online component can be accessed on or off campus and either inside or outside scheduled lesson time, but the face-to-face interactions with educators usually occur on campus (digital interactions between people are also possible, as demonstrated during COVID 19 shutdowns, but they are not blended learning). The most common forms of Blended Learning are Station Rotation, Lab Rotation and Flipped Classrooms.

Station and Lab Rotation involve students moving between working with teachers or other students in group activities such as projects, and instruction or other activity using a digital device. Station rotation takes place within the classroom and lab rotations see students moving between classrooms and computer labs (most often in different lessons). These require a great deal of planning by the teacher and work best when the teacher has other people to assist them. The pedagogy is not new, teachers have been organising students into groups doing different activities for a long time. The main difference is the access to EdTech as opposed to textbooks or other analogue resources. These rotations allow for increased student collaboration and require more independent learning (within the scaffold established by the teacher), but they are still largely teacher-centric because the time, place, task, and mode of

presentation are most often determined by the teacher. We have seen many excellent examples of these Station Rotation activities in junior and middle schools (Lab Rotation is less common due to the increasing numbers of students with their own devices). High-quality adaptive programs, where the software constantly assesses proficiency and shapes learning around the individual student, so every student is at a different point in their learning journey, is more personalised. We have seen this in operation in station rotation mode, where the classroom teacher analyses data from the program and meets with individuals or small groups of students to address issues and/or test for understanding while other students work with the adaptive program.

Flipped Classrooms or Flipped Learning is given this name because it 'flips' the old model in which teachers deliver content in the classroom and set challenges (e.g., Maths problems) for students to complete at home, where their parents may or may not be able to help. In the flipped model students learn content at home (ideally with the assistance of high-quality EdTech) and focus on challenges (application of knowledge and skills) at school, where peers and teachers/other educators can help. Once again, this model is not new. After all, homework has been set since the dawn of schooling, but this approach is different in several ways. The first difference is that the homework is preparation for the lesson and usually involves knowledge acquisition rather than problem solving. It follows that the activity undertaken at home must

be very well designed and engaging (so dry text doesn't cut the mustard). The second difference is that the preparation work matters. If it is not done, the student will not be equipped to apply their learning in class. This obviously requires self-regulation by the student as well as clear protocols established by educators. The third difference (which seems to still astonish digital natives) is that good software EdTech monitors student progress and provides the teacher with data about time on task (which is interesting but not always conclusive for reasons covered in earlier Discussion briefs) and, assuming the course designer has embedded formative assessment tasks such as quizzes, it provides data about each student's proficiency (which should from time to time be confirmed). The old days of students claiming they did their homework when they really didn't are gone!

Someone watching a flexible form of blended learning (Flex BL) would see students working online or on a digital program in a study hub (and at home), or meeting in groups for peer-to-peer teaching, or in small tutorial groups or one-on-one with human educators. An observer would also see students entering or leaving the study hub to work on projects, attend co-curricular activities etc. EdTech performs those tasks it can do at least as well as teachers, while educators use their time to do what EdTech cannot do as well. This, more than any other BL model, reaps the benefits of the Laws of Specialisation and Comparative Advantage – deploying resources to their best uses leads to gains in efficiency. It does more than this – it leads to gains in effectiveness (better learning outcomes). The quality of Flex BL, like the quality of any learning activity, depends on excellent planning and design, valid and reliable data, each student's application to task, and engaging material.

There are other models, such as 'Emporium' (students select from a range of learning experiences) but they are not practical models for an Australian school or any school with a prescribed curriculum.

Most, if not all schools would claim they use EdTech, but it is often employed as an instrument under the control of the teacher. It is employed to help the teacher instruct (examples include PowerPoint presentations and Interactive Whiteboards). We believe the best blended learning places EdTech in the hands of the learner. While teachers and others should be available to guide and orchestrate learning activities, they do not require the learner to focus on them as they stand at the front of the room. We like the description of them as 'meddlers in the middle' who orchestrate various learning activities and intervene to assist when necessary (just-in-time).[i]

Much of what we have covered thus far was nicely summarised by Olinger (our emphasis in bold print):

Students have a greater chance of engaging with and owning their learning in meaningful ways if we as teachers have given them something to own. By **setting clear goals** and creating an **understanding of what success looks like**, students can move towards being **self-managing learners** because they are **clear about their learning and can measure their own progress**. It is essential that students be given the opportunity to grow **more comfortable with academic risk**, and to learn to **persist through ambiguity and failure**. In this environment, teachers neither occupy the "Sage on the Stage" or the "Guide on the Side" orientation. Instead, they work alongside students in constructing knowledge as a **"Meddler in the Middle"**. They create tasks that could be considered **low-threat, high challenge**. **Failure is considered an opportunity to learn as opposed to earning a poor grade.**[ii]

Meddling from the middle is a far more complex tasks than being a 'sage on the stage', which is one reason why schools need to move from classroom teacher to a team of specialist educators, as explained in the next Discussion brief.
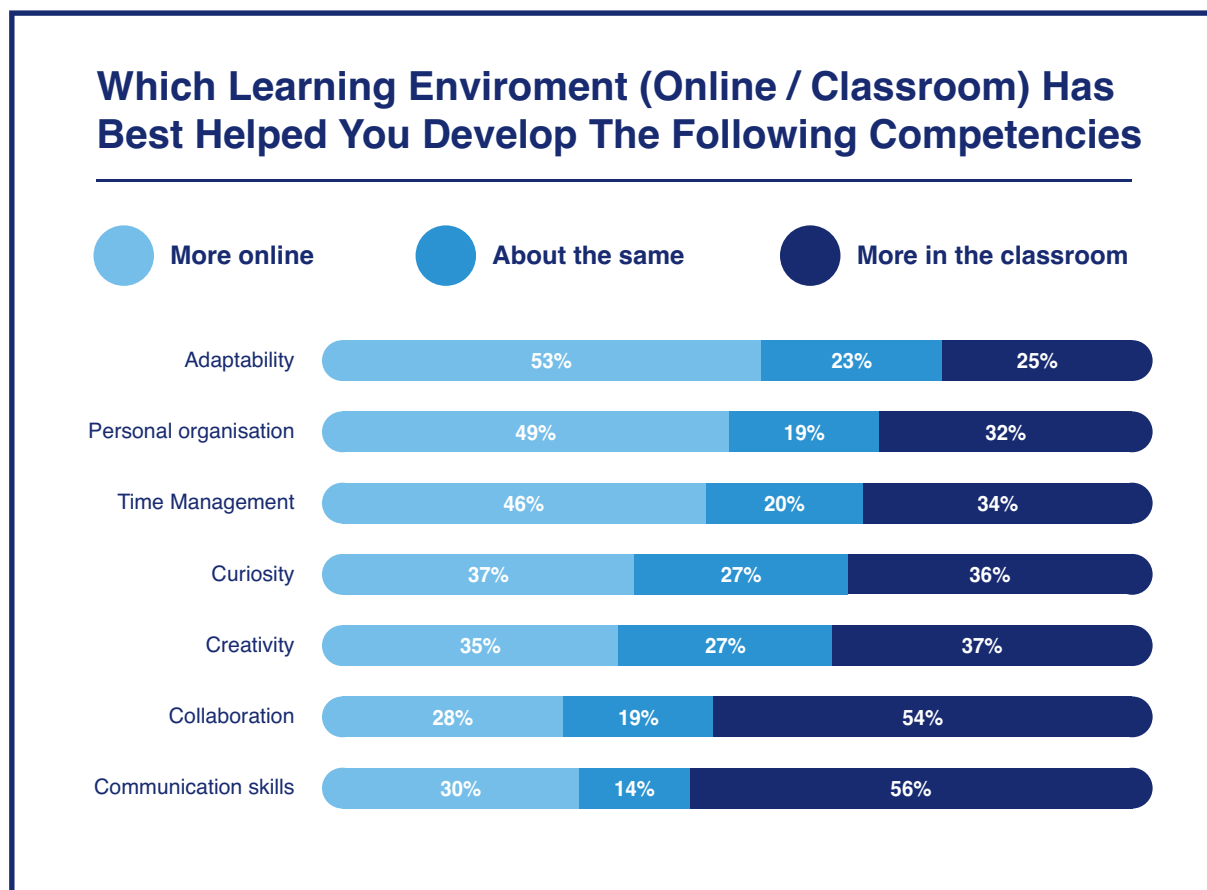
Students' attitudes to Blended (Hybrid) models of learning

Apparently, students recognise the benefits of a blended or 'hybrid' approach that combines digital and human interactions, with each suited to the development of different transferable skills. These views were acknowledged in the 2021 McCrindle Report on the Future of Education:

This study shows that different environments best develop different skills. When it comes to adaptability (53%), personal organisation (49%) and time management (46%) students are likely to say that the online learning environment has best helped them develop these competencies. Students reflect that competencies such as communication skills (56%) and collaboration (54%), however, are more likely to be best developed in the classroom. The future of learning is likely therefore a hybrid one.[iii]

Figure 1 illustrates these points:

Figure 1: Survey results from the 2021 McCridle Report on the Future of Education. [iv]

Which Learning Enviroment (Online / Classroom) Has Best Helped You Develop The Following Competencies

- **More online**
- **About the same**
- **More in the classroom**

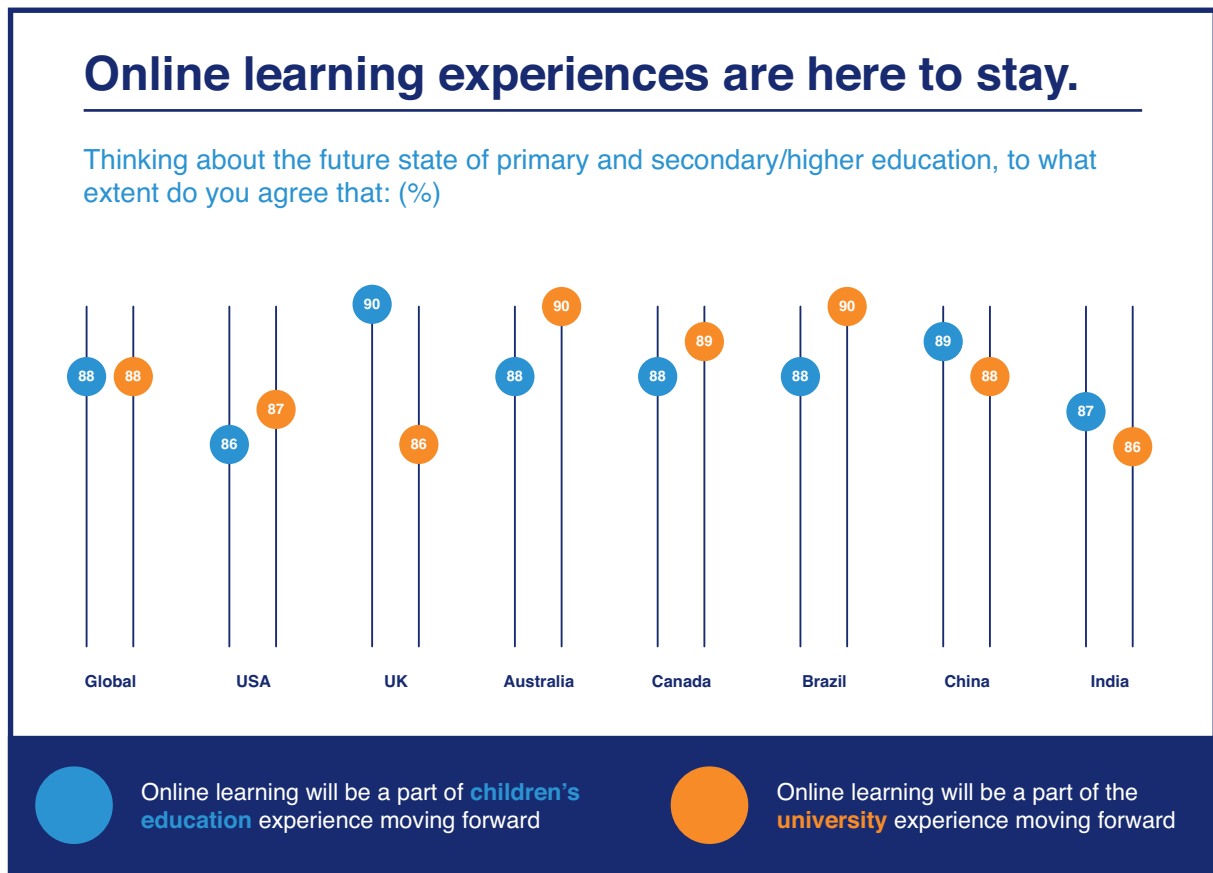| Competency	More online	About the same	More in the classroom
Adaptability	53%	23%	25%
Personal organisation	49%	19%	32%
Time Management	46%	20%	34%
Curiosity	37%	27%	36%
Creativity	35%	27%	37%
Collaboration	28%	19%	54%
Communication skills	30%	14%	56%

According to these data, students believe competencies associated with self-regulation (adaptability, personal organisation, and time management) are best developed in an online environment, while creativity, collaboration and communication skills are best developed in classroom settings. (There was no clear preference with respect to Curiosity.) The same report found that 70% of students saw their ideal learning situation as hybrid and only 29% of students saw their ideal learning situation as exclusively classroom based. Given the choice, students would not vote to return to the traditional model of schooling, although they did want to re-join their school community.

Perceived benefits of online learning: Parents perspectives

Support for hybrid (blended) learning is associated with the growing acceptance of online learning, as indicated in Pearson's 2020 Global Learning Survey, illustrated in Figure 2 below:

Figure 2: Respondents' recognition that online learning will remain part of children's education.[v]

Online learning experiences are here to stay.

Thinking about the future state of primary and secondary/higher education, to what extent do you agree that: (%)

	Global	USA	UK	Australia	Canada	Brazil	China	India
Children's education (blue)	88	86	90	88	88	88	89	87
University (orange)	88	87	86	90	89	90	88	86

Online learning will be a part of **children's education** experience moving forward

Online learning will be a part of the **university** experience moving forward

Globally, there was an expectation that online education will be part of school children's education in the future (88% globally) and in Australia (also 88%), with a slightly higher figure (90%) with respect to university education. Survey participants acknowledged that online learning is here to stay, but educators must ensure it is used to best effect.

Investments in EdTech

Global Silicon Valley (GSV) specialises in providing venture capital for educational technology companies. They hold conferences in the USA every second year, in partnership with Arizona State University, that are attended by 5000 entrepreneurs, investors and educators. There is some serious money being invested in EdTech that has resulted in improved access to and performance of a range of technologies on the market. GSV's Michael Moe reported that the global education market is worth $7 trillion USD and the market value of digital education is forecast to grow to $1 trillion USD by 2027, almost double the forecast prior to the COVID-19 pandemic.[vi] He and his co-author noted that:

Effectively, more than 90% of total enrolled learners and educators around the world have been thrown into the deep end of the online learning pool and told to sink or swim.

Some of these new online learners will sink. Some will crawl out of the pool and never go back in. But we believe most will get the hang of it, like it, and will no longer be confined to the shore. Effectively, the genie is not going back in the bottle… digital learning has come of age. We have a B.C. (Before Coronavirus) world transitioning to A.D. (After Disease)…

What we believed to be the future has been accelerated to the present — the market that has already been growing at a healthy rate will go into overdrive. The market potential that we thought was possible in 15 years will be that size in half the time…

The Coronavirus has brought forth the Dawn of the Age of Digital Learning — a time for builders to create the platforms, tools, and technology to propel society forward.

We embrace technology in so many dimensions of our lives, but many educators have been slow to accept its application to schooling because they remain wedded to a traditional mental model, where teachers are fonts and gatekeepers of knowledge delivering pearls of wisdom to class groups. There are many reasons to keep great educators in schools (in fact we need more of them), but it makes no sense to apply them to tasks that EdTech can do better. We have referred to the Fourth Industrial Revolution as a renaissance, and we believe one of the fields of human endeavour ripe for this rebirth is education, most particularly schooling. For this to occur we must take the next step to provide every student with personalised learning, as was explained in Discussion brief 8.

We finish this chapter with words from the 2020 review into senior schooling (our emphasis in bold):

A 'one size fits all' traditional learning environment cannot bring out the best in all young people. Students who complete Year 12 and attain a Senior Secondary Certificate of Education have a stronger foundation to achieve future success in their working lives and they should be encouraged to stay the course. However, the costs to a young person of remaining in a learning environment that is unsuited to them are also apparent. **School systems should have multiple education settings and flexible learning programs so that all young people are given the opportunity to thrive.**[(vii)]

Extension Activity

Michael Horn from the Christensen Institute is recognised as a leader in BL. Here's one of his videos that explains BL:

Here is another more detailed video from Education Elements. We do not agree with the 'call centre' layout they suggest for the Flex model, and they do not explain the 'flipped' model, which one of the most common BL models. This video explains the flipped classroom model.

Reference List

(i) McWilliam, Erica L. (2009) Teaching for creativity: from sage to guide to meddler. Asia Pacific Journal of Education, 29(3). pp. 281-293.

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(iii) McCrindle Research Pty Ltd. 2021. The Future of Education: Insights into today's students and their future expectations. P. 6. McCrindle Research. Nowest. Accessed April 2022 at https://mccrindle.com.au/wp-content/uploads/reports/Education-Future-Report-2021.pdf

(iv) Ibid. P. 11.

(v) Pearson. 2020. The Global Learner Survey. P. 8. Accessed June 2022 at https://plc.pearson.com/sites/pearson-corp/files/Pearson_Global-Learners-Survey_2020_FINAL.pdf

(vi) Moe, M. and Rajendran, V. 2020. Dawn of the age of Digital Learning: An Acceleration of Trends That Have Been Building for Years. Global Silicon Valley Ventures. Accessed March 2022 at https://medium.com/gsv-ventures/dawn-of-the-age-of-digital-learning-4c4e38784226

(vii) Shergold, P. et al. 2020. Looking To The Future. Report of the review of secondary pathways into work, further education and training. Education Council. Canberra. P. 19. Accessed June 2022 at https://www.dese.gov.au/quality-schools-package/resources/looking-future-report-review-senior-secondary-pathways-work-further-education-and-training

Pelican's Nest
Early Learning Centre

City Stars
Kindergarten

Caloundra City
Private School