

West Partnership

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An Introduction to Blended Learning



GLASGOW
CITY REGION
Education

1 SUMMARY

This paper is the first of a two-part series on effective blended learning. In this first paper, we provide practitioners with a definition of blended learning before taking a closer look at one model of blended learning that is likely to be used within the context of social distancing measures. The paper also offers a brief overview of where blended learning has been used up until now and offers concise definitions of key concepts surrounding the area. Throughout we provide digital hyperlinks to cited sources of information, but also present a range of resources in a reference list should you wish to extend your reading.


The second instalment in this series will consider the benefits of blended learning but will also consider the barriers and challenges that must be overcome to ensure effective blended learning is achieved. In this later paper we will review existing research that has explored good practice within blended learning. Based on such findings, we offer recommendations on what Scottish educators should be considering in offering education during these unprecedented times.

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2 WHAT IS BLENDED LEARNING?

Blended learning, as discussed in this paper, is a relatively recent innovation in education which relies heavily upon the technological advancement of the previous 30 years. As more and more of us have access to the Internet, computers, laptops and smartphones, the opportunities for blended learning have grown. Blended learning uses **virtual learning**



environments¹ to combine learning in person, as in traditional settings, and online. In their report on blended learning in primary and secondary education in the US, Staker and Horn (2012) define **blended learning** as a:

formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path and/or pace and at least in part at a supervised brick-and-mortar location away from home

The authors emphasise the unique nature of time, place, path, and pace as key elements of blended learning. They go on to describe each concept and its relationship to blended learning:

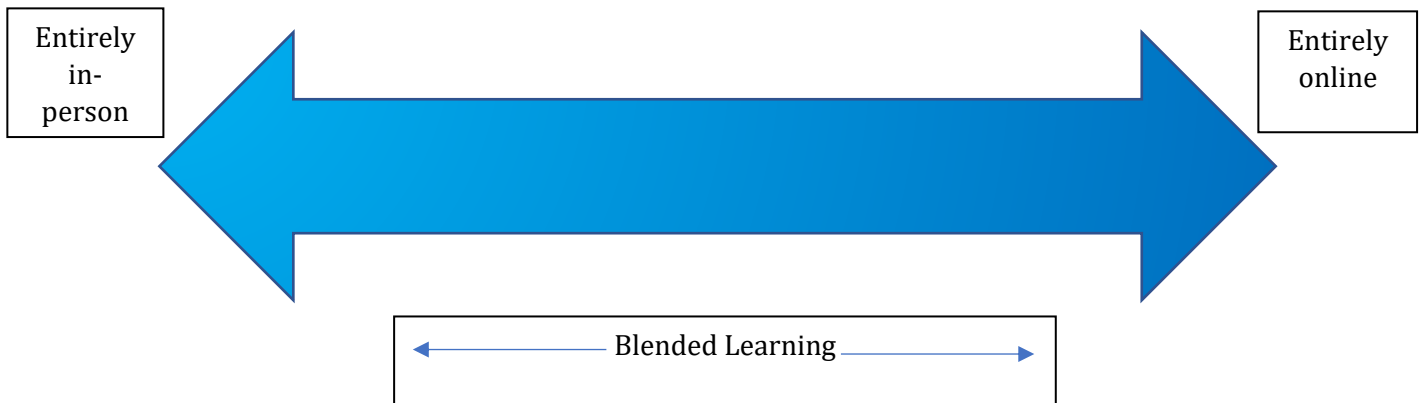
- **Time** – learning does not follow the time restraints of a standard school day. It is not necessary to follow a 9am to 3pm structure, as children and young people complete their learning at convenient times.
- **Place** – learning does not need to take place within the classroom. Classrooms may well be used, but the learner’s home may also be used for live instruction or for learning that compliments in-person tuition.
- **Path** – learning does not need to follow the direct step by step guide of a traditional lesson. Teachers may direct learners to a variety of resources, activities, or problems, with learners having some level of control over what order they engage with each resource.
- **Pace** – as in time above, learning does not have to be paced by the limitations of lesson times. Learners have more flexibility in when they complete activities or use certain resources.

This definition of blended learning presents a challenge in education systems where learners do not have equitable access to online learning environments. During the Covid-19 crisis local authorities have worked hard to support children and young people to be able to access online platforms, for example by issuing laptops and devices to families and by providing Internet access. In areas where access to online learning is not universal, the authors acknowledge that many other innovative approaches have been used to support remote learning which does not rely on information technology. When considering the discussion of blended learning which follows, readers should consider how remote learning could deliver some of the benefits of online learning, if that is more appropriate for their current context (Doucet et al, 2020).

One fundamental element of blended learning is that both in-person and online forms of learning must be present. The exact blend of these two areas of delivery is not strictly defined within blended learning. Blended learning could involve a 50:50 split of in-person and online or an 80:20 split in favour of in-person delivery. As social distancing limitations

¹ **Virtual Learning Environments (VLE)** are digital platforms that facilitate learning by providing a space to house resources, deliver content and provide instruction/feedback.

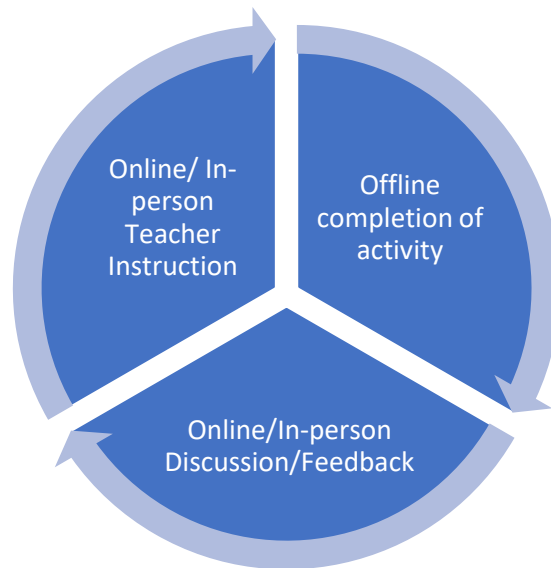
are lifted it is likely that in-person delivery will become the favoured mode of delivery. We can therefore understand blended learning as on a continuum:



3 MODELS OF BLENDED LEARNING

There are various models of blended learning. A description of each model is beyond the scope of this report, but a more detailed analysis of models applied to primary and secondary schools can be found here: [\(Staker and Horn, 2012\)](#).

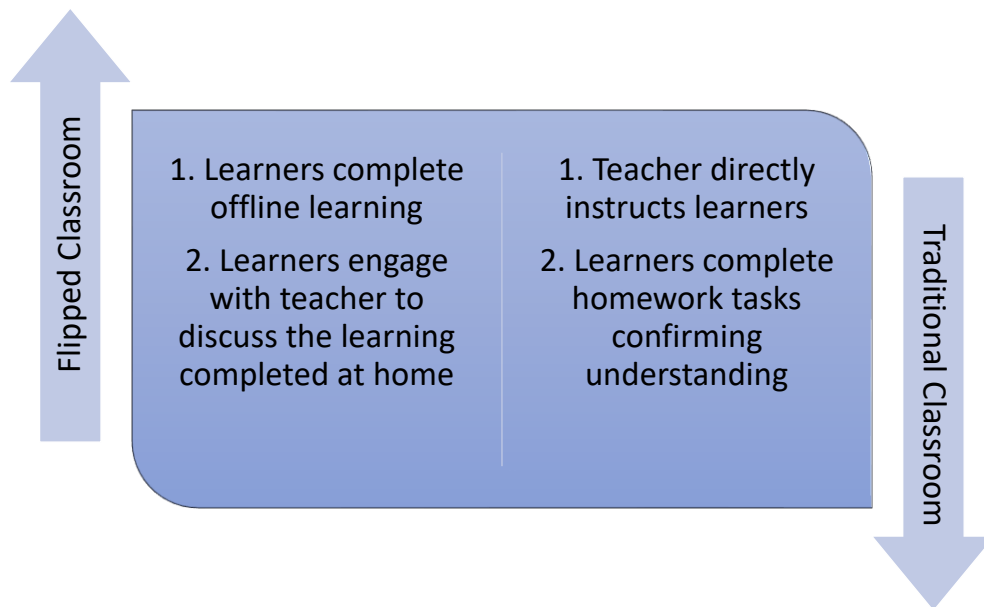
One model that we wish to examine more closely is the **rotational model** of blended learning. The rotation model has 'students rotate on a fixed schedule between learning online in a one-to-one, self-paced environment and sitting in a classroom with a traditional face-to-face teacher' ([Horn and Staker, 2011, p5](#)). Learning is structured around activities led by the teacher, either in person or online, but interspersed by offline activities that children/young people complete. We argue that this model is most appropriate given the context of social distancing and the uncertainty around when children and young people may be able to return to classrooms full-time. As social distancing restrictions are loosened, the bias towards in-person tutoring can be easily factored into a rotational model. The model is presented below:



The rotations between in-person and online stages may operate in a variety of ways. In the model above, the teacher may set learners a task to complete at home, with learners presenting their findings on an online discussion board. On the other hand, teachers may instruct children and young people online, have learners complete a task offline and have a group discussion of the task in-person. This second example is an example of a **flipped classroom** approach. Advance HE ([2020](#)) defines the flipped classroom approach as:

A pedagogical approach in which the conventional notion of classroom-based learning is inverted: students are introduced to the learning material before class with classroom time then being used to deepen understanding through discussion with peers and problem-solving activities facilitated by teachers

This approach contrasts with didactic models of teaching which have instruction followed by homework activities. Instead, homework, or offline working in our current situation, precedes more in-depth learning in the presence of the teacher. These contrasting models appear as follows:



4 WHERE HAS BLENDED LEARNING BEEN USED ALREADY?


4.1 HIGHER EDUCATION

Blended learning is commonplace within Higher Education. In the UK, most university courses are delivered using a blended learning approach. Exceptions such as the Open University use an online only delivery method. Most universities use virtual learning environments to host resources such as lecture slides, have students engage in discussion boards, and even deliver classes/lectures online. Nevertheless, university students are still required to attend in-person lectures, seminars, and tutorials.

4.2 COMPULSORY EDUCATION IN THE US

The use of blended learning in primary and secondary education is more limited. However, blended learning is used at some institutions within the United States across the K-12² offering. Research on blended learning in schools is also dominated by accounts from the US. As in Higher Education, the use of blended learning in schools is a growing phenomenon. Horn and Staker (2011) note that in the year 2000 only 45,000 K12 students (S6 equivalent) had any of their learning delivered online, while in 2009 this figure had risen to 3 million. In 2017, [Gotovsky et al.](#) noted that worldwide, 10 million secondary school age

² K-12 refers to Kindergarten to 12th grade and is the equivalent of P2-S6 within Scottish Education. A full description of equivalents can be found here: <http://www.educationista.com/wp-content/uploads/2011/09/UK-US-Ireland-Australia-school-years-and-grades.pdf>



learners were using Google Classroom³ as part of their compulsory education. The use of online learning as complimentary to in-person delivery is a growing phenomenon across the world.

4.3 USES IN SCOTLAND

Although many practitioners outside of Higher Education may be unfamiliar with the term blended learning, there is notable evidence of its successful implementation in Scottish schools already. The use of Glow as a virtual learning environment is one example of how online delivery of learning can complement in-person delivery. Indeed, if you have used Glow to support your delivery of teaching already then you have engaged in blended learning. There is evidence of teachers in Scotland designing comprehensive learning experiences underpinned by a blended learning approach. Education Scotland ([2017](#)), for example, host a case study of one teacher's use of Glow to host online collaboration in the 2016/17 academic year.

5 GLOSSARY

Concept	Definition
Blended learning	Includes learning that happens in real time (synchronous), alongside a teacher such as online discussions and learning which happens at the learner's pace (asynchronous) such as project work.
Flipped classroom	A pedagogical approach in which the conventional notion of classroom-based learning is inverted: students are introduced to the learning material before class with classroom time then being used to deepen understanding through discussion with peers and problem-solving activities facilitated by teachers.
Remote learning	Occurs when a learner and teacher are separated by time and/ or distance and therefore cannot meet in a traditional classroom setting. Information is typically transmitted via technology such as

³ Google Classroom is an example of a Virtual Learning Environment.

	email, discussion boards, video conferencing, etc. No physical presence is required.
Rotational model	Learners rotate on a fixed schedule between learning online in a one-to-one, self-paced environment and sitting in a classroom with a traditional face-to-face teacher.
Virtual Learning Environments (VLE)	Digital platforms that facilitate learning by providing a space to house resources, deliver content and provide instruction/feedback. During social distancing, the use of VLE's such as Glow are needed to provide learners with materials and resources. Platforms such as Microsoft TEAMS or Google Classrooms may also be used as a virtual learning environment and may be handy for ensuring continued interaction between teacher and pupil.

6 REFERENCES

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Education Scotland. 2017. Blended Learning: enhancing learning through online collaboration. Access at: <https://education.gov.scot/nih/Documents/dtl9-inveralmond-yammer.pdf>

Gotovsky, K., Lee, C., Bhimani, J., Ding, K., Vahed, M., Hossain, R., Min, R., Yu, R., Javed, S. and Nguyen, T., 2017. *The future of blended learning: a report for students and policy makers*. Federation of Canadian Secondary Students Access at: <https://static1.squarespace.com/static/53c2060ae4b0db3d3fa5937f/t/591ca78f6a49632377fa8fd5/1495050128097/Future+of+Blended+Learning.pdf>

Horn, M.B. and Staker, H., 2011. The rise of K-12 blended learning. *Innosight Institute*, Access at: <https://aurora-institute.org/wp-content/uploads/The-Rise-of-K-12-Blended-Learning.pdf>



Staker, H. and Horn, M.B., 2012. Classifying K-12 blended learning. *Innosight Institute*.
Access at: <https://files.eric.ed.gov/fulltext/ED535180.pdf>

6.2 OTHER USEFUL RESOURCES

Stein, J. and Graham, C.R., 2020. *Essentials for blended learning: A standards-based guide*. Routledge. Access at:
<https://www.researchgate.net/profile/Nguyen-Trung-Hiep3/post/Can-anyone-suggest-to-me-any-good-research-papers-articles-etc-on-blended-learning/attachment/59d63e2479197b807799acf5/AS%3A422799794806785%401477814734350/download/%5BJared-Stein%2C-Charles-R.-Graham%5D-Essentials-for-Blended-Learning-Book-4-You.pdf>

West Partnership., 2020. Effective Remote and Digital Learning. Access at:
<https://blogs.glowscotland.org.uk/glowblogs/public/westpartnership/uploads/sites/7660/2020/05/26144424/WP-Effective-Remote-and-Digital-Learning.pdf>

6.3 TO REFERENCE US

This paper was written by James Bowness, Elizabeth Morrison, John Stuart and Sarah Green on behalf of the West Partnership. To reference the paper use:

Bowness, J., Morrison, E., Stuart, J. & Green, S. 2020. *An Introduction to Blended Learning*. West Partnership