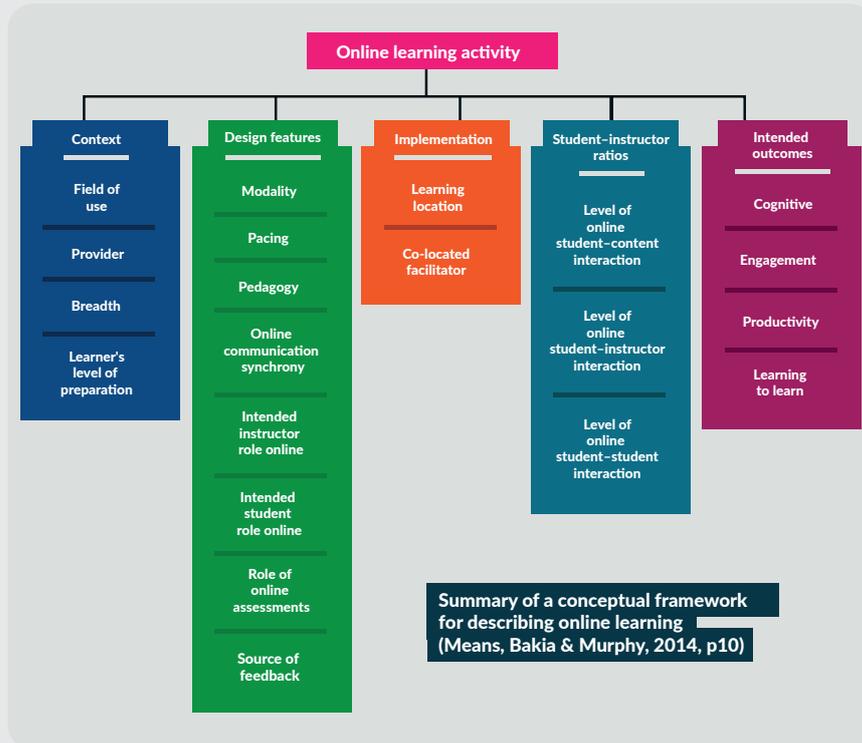




The exceptional events of 2020 have dramatically altered the way that education is delivered to students around the world. For the majority of learners in the United Kingdom, schools are not currently delivering face-to-face lessons in school buildings; instead, schools and other providers have had to adopt distance learning approaches. This first Quick Read introduces some terms, frameworks, and barriers related to distance learning, and aims to support educators as they rapidly design a remote way of working.



Terminology

Distance learning includes a range of approaches to deliver activities to learners who are not in the same space as their teacher. The terminology used to describe these approaches includes:

- Online teaching: any teaching that uses online activities
- Synchronous online teaching (SOT): online teaching where the teacher and student(s) are communicating in real time
- Asynchronous online teaching (AOT): online teaching where the teacher and student are not communicating at the same time
- Online blended teaching: a combination of synchronous and asynchronous online teaching
- E-learning: the use of electronic systems and applications within the learning process, including synchronous and asynchronous online teaching
- Virtual schools: schools which only provide asynchronous online teaching
- Remote teaching or remote learning: any teaching where the teacher and student are not in the same physical location (synchronous or asynchronous)
- Emergency remote teaching: a temporary shift to remote delivery, due to crisis circumstances¹

Despite a lack of robust evidence on the effectiveness of online teaching on school-aged pupils,^{2,3} schools are currently being required to rapidly implement distance learning approaches.

Emergency remote teaching and an online learning framework

In March 2020, a blog post by a group of US university academics coined the term 'emergency remote teaching' to describe the wholesale transfer of higher education provision across the world to online delivery.¹ In doing this, the authors remind us that this hurried transfer was not planned and therefore the full opportunities of online delivery cannot be reasonably expected. Instead, they highlighted the importance of providing learners with social support, the need for flexible and creative ways to deliver learning in a crisis, and acceptance that emergency teaching may not be as high quality as normal provision.

The authors introduce a well-regarded framework for describing online learning, which can be used in a range of educational contexts to capture many features of a learning activity.² The framework summarised above identifies five dimensions to describe an online activity and the components within each dimension. Educators can use **this template**, based on the complete framework, to describe and review their own online learning activities.

Distance education pedagogies

Anderson and Dron recognised that distance learning pedagogies have changed over time, and identified three generations that have developed as a result.³ To be successful in providing high-quality distance learning, they concluded that all three generations of pedagogy should be used, in relation to the learning content, context, and expectations.

Distance education pedagogies (cont.)

Summary of distance education pedagogies (Anderson & Dron, 2011, p. 92)

Generation of distance education pedagogy	Technology	Learning activities	Learner granularity	Content granularity	Evaluation	Teacher role	Scalability
Cognitive-behaviourism	Mass media: print, TV, radio, one-to-one communication	Read and watch	Individual	Fine: scripted and designed from the ground up	Recall	Content creator, sage on the stage	High
Constructivism	Conferencing (audio, video, and web), many-to-many communication	Discuss, create, construct	Group	Medium: scaffolded and arranged teacher-guided	Synthesise: essays	Discussion leader guide on the side	Low
Connectivism	Web 2.0: social networks aggregation & recommender systems	Explore, connect, create, and evaluate	Network	Coarse: mainly at object and person level, self-created	Artifact creation	Critical friend, co-traveller	Medium

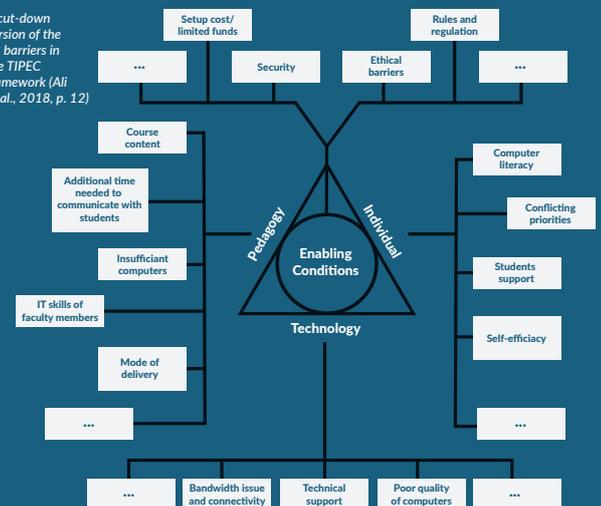
However, teachers need guidance on what each of these pedagogies might look like in practice, and the barriers that might be associated with them.

Barriers to implementing online learning

Recently, University of Reading researchers reviewed e-learning research from 1990 to 2016 to identify barriers to implementing e-learning.⁴ The authors identified 68 barriers and grouped these into a proposed **TIPEC framework** of technological, individual, pedagogical, and enabling categories.

Educators developing remote learning activities can use the TIPEC framework to help them identify barriers pertinent to their setting; they might set up training events to teach students and parents how to use new technologies, or survey families to discover their level of access to these technologies.

A cut-down version of the 68 barriers in the TIPEC framework (Ali et al., 2018, p. 12)



As educators adapt to the realities of emergency remote teaching, we encourage them to:

1

Accept that in the context of emergencies, the quality of learning is likely to be lower than 'normal'

2

Reflect upon their online learning activities and the experience they deliver for learners

3

Consider the range of barriers associated with online learning and how they can be mitigated

In our next Quick Read, we will focus on the benefits and challenges associated with emergency remote teaching, including the impact on learners and their families.

This Pedagogy Quick Read was researched and written in collaboration with **Jane Waite** who we'd like to thank for her contribution.

References

- Hodges, C., Moore, S., Lockee, B., Torrey Trust, T. & Bond, A. (2020) *The Difference Between Emergency Remote Teaching and Online Learning* Available from: <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning> [Accessed 7/4/2020]
- Means, B., Bakia, M. & Murphy, R. (2014) *Learning Online: What Research Tells Us About Whether, When and How*, New York, Routledge.
- Anderson, T. & Dron, J. (2011) Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, 12 (3), 80-97. Available from: doi.org/10.19173/irrodl.v12i3.890
- Ali, S., Uppal, M. A. & Gulliver, S. (2018) A conceptual framework highlighting elearning implementation barriers. *Information Technology & People*, 31 (1), 156-180. Available from: [doi/10.1108/ITP-10-2016-0246](https://doi.org/10.1108/ITP-10-2016-0246)

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