



# 'YOUR SHOUT'

ADVICE FROM HE TEACHERS CONCERNING  
TECHNOLOGY-MEDIATED INNOVATIVE OPEN PRACTICE

THE SECOND IN A SERIES OF THREE EBOOKS ON THE SHOUT4HE PROJECT.



# CONTENTS

---

INTRODUCTION	3
MAIN DISCUSSION	5
KEY CONSIDERATIONS	17
REFERENCES	18



# INTRODUCTION

---

In recent years there has been an interest in the use and benefits of Open Educational Resources (OERs) and Open Educational Practices (OEPs) in Higher Education (HE) (Koseoglu and Bozkurt, 2018; Tillinghast, 2020). Indeed, OEP is ‘recognized and promoted by global organizations such as UNESCO and the European Economic Community and adopted by HE institutions’ (Hockings, Brett and Terentjevs, 2012, p.238). In this context, we define OERs as ‘teaching and learning materials which are freely available and openly licensed’ (Atenas and Havemann, 2014, p. 1) and OEPs as ‘a set of activities around instructional design and implementation of events and processes intended to support learning’ (Andrade et al., 2011, p.13). Both have the potential to challenge educators in HE to create fundamental change in their practice (Kaatrakoski, Littlejohn and Hood, 2017), as well as lower costs and increase participation (Murphy, 2013). Such changes, however, require university educators to change and expand their own professional practice (Hood and Littlejohn, 2017) to keep pace with an increasingly pervasive and sophisticated digital era. In addition, engaging in open education can be complex and require complex applied knowledge, which may account for the lack of ‘significant mainstream traction’ (Stagg, 2014, p.151). Indeed, the extent of change is not obvious as there is little empirical evidence of the use of OERs in HE (Cronin, 2017).

This may, in part, be due to the lack of clarity what constitutes ‘openness’ in education (Peter and Deimann, 2013) and, in particular, its place in wider social change afforded by recent advances in digital technologies (Weller, 2011). The development of resources to exploit such changes provide the context for our project, where developing OERs led to a wider discussion about how the collaborative development process had influenced learning and teaching within HE. In this case, the OERs provided the stimulus, but not the focus, for discussion. This eBook will explore the importance of such discussion, both within your own institution and beyond (particularly transnational conversations), in developing open educational practice (OEP), which we believe is particularly crucial to enhancing university teaching.

It is important to note that these discussions take place across disciplines so that strategies employed in, or associated with, one subject can be adapted and used well in other areas, where they may be unique and offer new possibilities. Indeed, the stimulus provided by encountering novel teaching strategies can provoke new ideas for your own practice, which can help to reinvigorate teaching familiar content.

In this SHOUT4HE guide, we focus on advice from HE teachers to HE teachers regarding technology and pedagogical approaches which they have found useful in their teaching practice. We begin by considering the kind of dialogue among HE teachers which can foster change and teacher development, and then look in turn at course design; student variables such as diversity, autonomy, and engagement; and the question of institutional support. We return to the importance of open discussion among HE teachers in the last part of the guide before proposing a set of key considerations in conclusion.

# MAIN DISCUSSION

## Opening doors to discussion: teaching and learning spaces

A striking feature of OEP, particularly when classroom videos are involved, as in the present SHOUT4HE project, is that it opens the door on other classrooms. Teachers can see what others' classes look like physically, how they are organised, and what happens there.



As one member of the SHOUT4HE team said, ‘it was so interesting to see inside another teacher’s classroom to get a look at what other people are doing’. Another HE teacher commented that

‘it is very easy to get stuck doing the same thing year after year, particularly when teaching the same content. Talking to other HE teachers from different countries and different disciplines really opened my eyes to other options.’

This highlights how useful it is for teachers to talk to other teachers about teaching, regardless of the disciplines they teach or how long they have been teaching. One HE teacher stressed how such conversations

‘encouraged me to step out of the general circuits of colleagues that I see in my own department or in very closely related departments to talk to people who are in maths or who are in physics or who are in engineering and different areas.’

It is also interesting to note that while conversations about teaching can benefit everyone involved, they are perhaps especially fruitful when each party has a specific challenge to address. As one HE teacher explained:

‘There has to be a question on both sides and I think that’s what makes it significant when everyone needs to get something out of the exchange.’

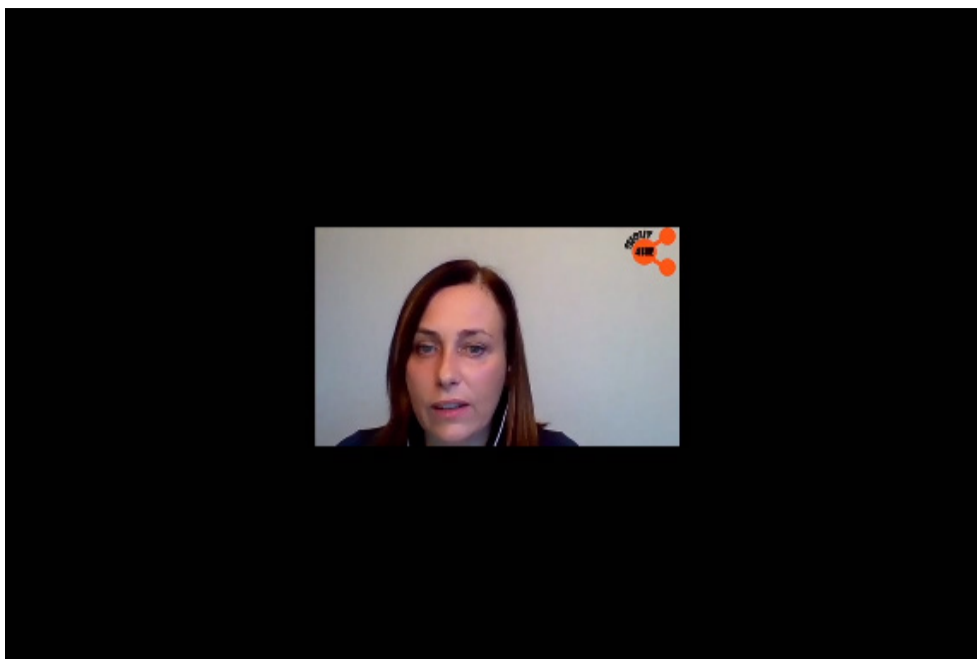
Sharing OEPs can also take place serendipitously. As one HE teacher explained important conversations can take place

‘informally when we come out of class ... I would say we come out of class and say, ‘oh how did that go?’ It’s quite often in our staff room at lunchtime or by the photocopy machine, that some informal discussions about teaching and learning go on.’

In the following sections we look at specific dimensions of HE practice and show how teacher reflection and dialogue translates into a range of technology-mediated pedagogical adaptations in the HE context.

## **Course design: blended learning approaches for specific student populations**

Using technology to increase student engagement was recommended by several HE teachers who developed blended learning courses. For example, when talking about an ESP blended learning course for 2nd and 3rd year sports sciences students, Mélanie White underlines that “The online modules encourage student engagement with resources. They also make students take on more responsibility for their learning”, while her colleague Isabelle Knight adds that “students are actually involved in the lesson” and that “students are able to share personal experience and knowledge”. The blended learning format provides a flexibility in teaching and learning that was needed for sports sciences students who are often competing athletes and therefore sometimes unable to attend weekly classes. Re-designing the course with this added flexibility and easier access to resources in mind has had an overall positive impact in student participation: “78% of students completed all activities while previously only 7% attended all lectures.”



Listen to Mélanie and Isabelle explain in more detail: 06:58-07:30 (<https://library.shout4he.eu/video/13>)

A second ESP course at Bordeaux University was designed for public health students: HE teacher Sue Becaas describes the move from a face-to-face language course for to a blended and then completely online format using a Moodle platform. Online modules consisting of receptive tasks (reading, listening, grammar and phonology) were done ahead of the face-to-face class to enable students to prepare and to engage more in classroom discussion. The teacher's role was thus that of facilitator and enabler of peer-to-peer interaction. The fact that the students worked autonomously on tasks online at their own pace enabled the teachers to manage the heterogeneous language levels. The students also felt that this flipped approach enabled them to better prepare for the class and they appreciated the fact that the face-to-face and later Zoom sessions were entirely devoted to oral interaction.

supplementary work on antibiotic resistance

- Online work, Pdf files.
- Help with tenses - n°1
- Help with tenses - n°2
- Teacher's file, Face to face class.
- Hidden from students
- Video - What is public health?

What is public health?

What is public health? Video worksheet

Video worksheet correction

181.5KB Document PDF

Video transcript

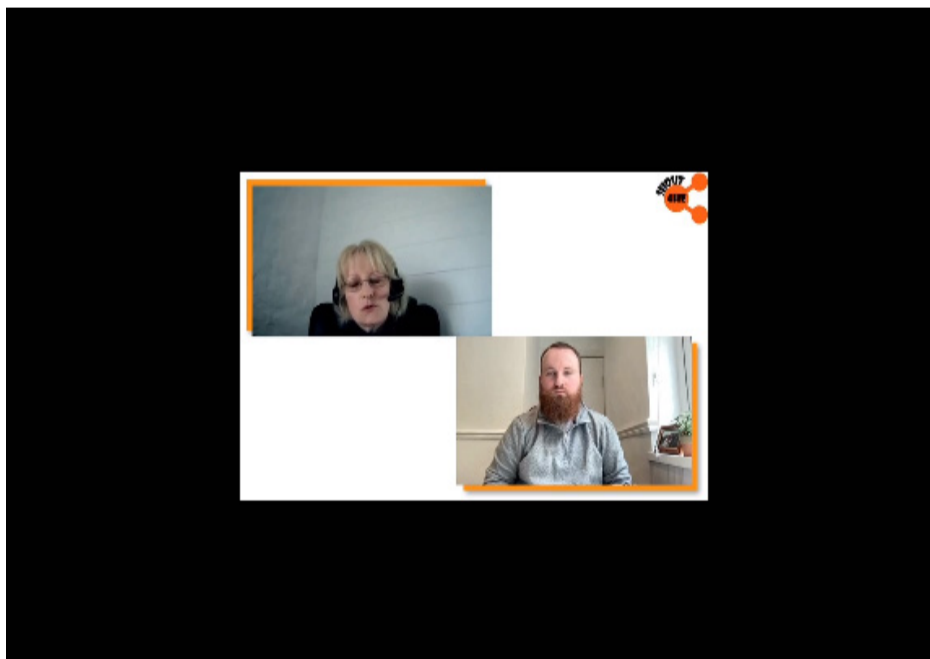
Listen to Sue explain in more detail <https://library.shout4he.eu/video/an-esp-course-for-public-health-students-making-the-move-to-blended-and-online-learning>

The focus on responding to specific student needs which is evident in both course redesign projects described here is a recurring feature in all our discussions with HE teachers in the project. The next section gives a range of examples.

## **Accommodating a diverse student population: special needs, diversity, engagement**

For Cheryl Ellis, technology has “two real roles to play.”

‘One is to assist with access to learning. So, in that respect, it might be the actual hardware or software that the student is using ... we try and remove barriers to communication for them ... So, it can help in that way, but it can also help in terms of enabling the learning process. We can also just adapt our general teaching practices to be a bit more inclusive. ... for example, if we had somebody who had a learning difficulty or a neurodevelopmental difficulty, and we want to try and make the materials as accessible as possible. So, having a multi-sensory approach to our teaching is really important’.



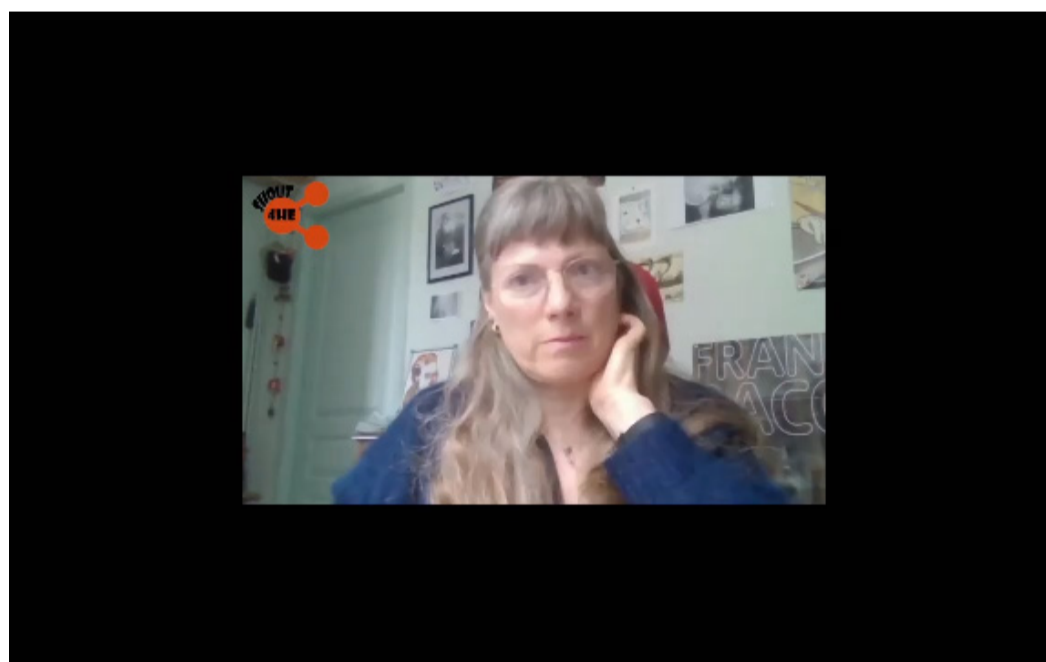
Listen to Cheryl explain in more detail: (0.35-2.25m) <https://library.shout4he.eu/video/19>



Accommodating the diversity of students' needs thanks to technology was also mentioned by Alison Bouhmid (University of Montpellier 3) when she presented her 100% online ESP course for second year human sciences students. She insists that it needs to cater for “lots and lots of different profiles, lots and lots of different experience out there, and lots of different needs” and that the course was especially designed to allow students to “to bring their own experience into the language learning context.” Students are actors in the implementation of the course as part of their role is to set up grading criteria, as she underlines: “it’s not me who sets the grading criteria. For this course, it’s the students themselves.” This element of co-management of the course, along with the setting up of a diversity of peer-to-peer interactions in which the teacher does not intervene, modifies the role of the teacher:

‘What happens is, as you’ve understood, is the teacher takes a big step back, and is really trying to encourage autonomy, and getting the students to interact between themselves, which means that there’s a whole load of interaction that goes on outside the presence of the teacher’ (08:20-08:43)

This educational practice provides a good example of how technology, particularly in the context of an online course, helps create opportunities for student interaction and learner autonomy while fully integrating students' diverse needs and profiles.



Listen to Alison explain in more detail: <https://library.shout4he.eu/video/14> (08:20-08-43)

## Encouraging student engagement from the start: from a 'strong steer' to a 'lighter touch'

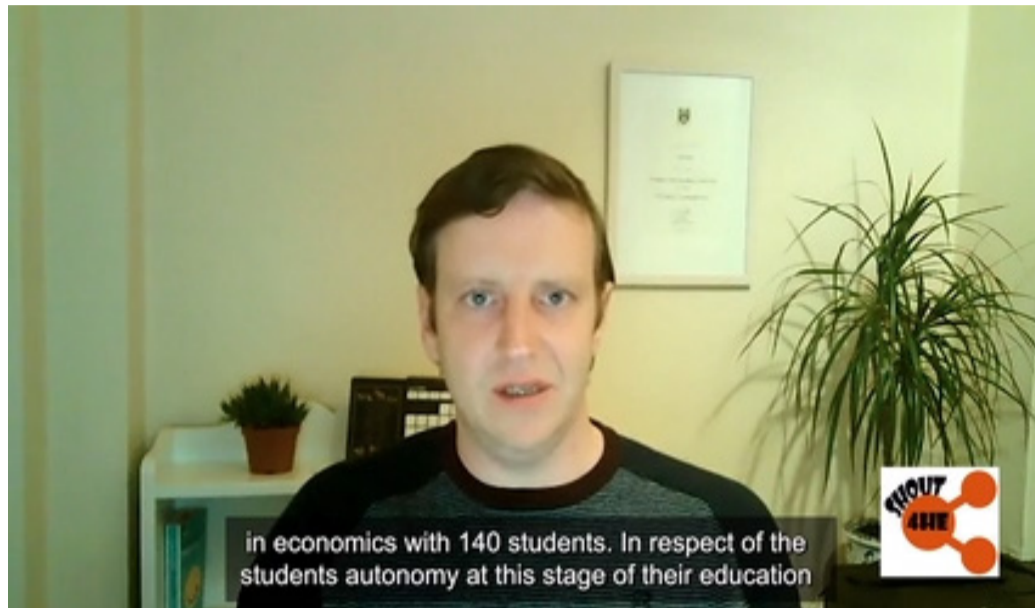
Student success is however threatened by many factors during the process of transition to university. We aim to help students to become independent learners, yet this is often challenging in large cohorts in first year. The need to increase academic performance through sustained class attendance arises when any gap in following the course material early on can lead to a compounding of problems and failure to fulfil the module outcomes. Extra effort is then required on faculty to support students later on in the term. This is also true of foundational skills in many disciplines where the first few years of the student's education form the basis for future success. This quote by Bevitt et al (2010) highlights the importance of developing a culture of high attendance in those early formative years:

'A strong steer at the start of a university career may help to counter stereotypical assumptions about attendance and help to encourage good study and attendance habits from the start. A progressively lighter touch may then be used in subsequent years of study as the students' autonomy increases.'

Niall Devitt from the University of Limerick underlines the importance of increasing student engagement during the crucial phase of transition to the university. He explains the importance of fostering a culture of engagement early during the transition to university. In many large cohorts this is challenging due to competing demands placed on students. Niall argues for making attendance compulsory in the early years of undergraduate studies, although this is very difficult to manage in practical terms. He believes educational apps can assist teachers in taking attendance and promoting engagement when used in transparent and positive ways.

The technology that Niall chose is based on an app called Acadly which uses mesh networking to locate a student's phone within the Bluetooth range of the lecturer's phone. The application is free to download on an individual lecturer basis, and also free for the student to use. From his analysis of student feedback, Niall reports a clear connection between performance and attendance.

Engagement levels were high throughout the semester and students took the opportunity to increase their final grade through increased attendance levels. An additional benefit was that interventionist policies could be implemented for those students whose engagement levels were high but that did not grade well in the module.



Listen to Niall explain in more detail: <https://library.shout4he.eu/video/23>

Interestingly, when students were polled anonymously for their feedback on the use of attendance tracking in the lecture theatre, 84% of students felt that mandatory attendance would increase their chances of passing the module and 72% agreed that it should be mandatory at the very start of the university journey.

## **Pushback and discussion: taking student views into account**

However, some technology-mediated innovation may meet with initial student resistance, and student pushback in the face of practices using technology that are new or unexpected is certainly a theme that invites critical reflection. Ulysse Delabre has been teaching modules involving student use of their smartphones to conduct scientific experiments in the physical sciences for the past six years.



For more information about this practice see <https://library.shout4he.eu/video/18> (05:48 - 06:41)

This HE teacher notes that student reactions to the use of technology are far from unanimous:

‘What was interesting to begin with is that it was very mixed, there were some who said for example that a smartphone is not made for doing science, it’s made to communicate to chat on Facebook or on Instagram etc. There were some who found it unsettling to use it as a scientific instrument. There are others who were fascinated. They said, ‘I didn’t know I had this in my pocket. It’s a real mini science lab,’ They weren’t aware of it. ‘

Another French HE teacher also highlights the importance of engaging in a discussion about teaching and learning directly with students:

‘I always try to find the problem between what I want to teach and what they don’t understand in a message that I am trying to give them. I try to find something in common with the students, a common interest and gain their trust. Then you can talk about the science again.’

Many SHOUT4HE teachers cited institutional factors as very important in implementing technology-mediated change, perhaps especially during the emergency teaching conditions created by the COVID 19 pandemic. Some examples are given in the next section.

## Institutional factors: collaboration with colleagues and support staff

The novel teaching context created by the pandemic created difficulties for student evaluation in an electromechanics course at PXL Technical University in Hasselt. When HE teacher Ilona Stouten discovered that it was not possible to visit a construction site with her students to check their knowledge and understanding, she and her colleagues decided to film a building site in 360° which student could then view through a VR headset. At first glance, this did not seem like an easy task, since Ilona is the only one of her colleagues who has experience with this. That is why she herself emphasizes the importance of open cooperation:

‘I first sat down with my colleagues and gave them a short demo of Vivista where there was definitely a focus on what is and isn’t possible. This allowed us to work together on a strategy for the VR learning module.’

It was in fact the first time they had used VR in an exam context, which she says was very exciting for them. Their collaborative approach allowed them to feel confident about pursuing this innovation, and the results were so convincing that colleagues in other disciplines at the institution are now also working with this technology themselves.



Listen to Ilona explain in more detail: <https://library.shout4he.eu/video/26>

Another HE teacher at the same institution underlines the importance of institutional support in the development of her own digital confidence when moving a module from her healthcare course online.

‘In the beginning it was a challenge for myself, I had to retrain myself. Recording videos in Moovly was very time consuming. ... We have switched to recording in a video studio at our university. The advantage is that you are accompanied by a technical person. This works much faster, because that technical person gives you a finished product.’



Adinda Toppets – Wound Care - <https://library.shout4he.eu/video/1>

A third example of institutional engagement with teaching and learning environments comes from Université Côte d’Azur where Solange Cartaut-Civaldini has installed a “Pedagolab” to match the active pedagogy she adopts in pre-service teacher education:

‘In this room - two rooms actually - these are simply arrangements that can evolve according to the learning activities and which are also characterized by verticality, i.e. equipment on the walls with Veeda whiteboards that allow groups or individuals, depending on their pace of working, to be involved in tasks like problem-solving, collective explanation, reflection or consolidation of learning, using elements that are graphic and allowing a type of expression that will be able to unfold in the space at the emotional level and at the level of the furnishings.’



She emphasises the links between the physical environment for learning and the roles of the HE teacher and students:

‘Here they are working with multiple types of learning materials but what is important is that I always give in this type of activity several type of resources which might be audiovisual and which require an internet connection on their laptop like a video or an audio recording, photocopies so as to allow a way into the material which is optional based on fairly simple principles and which really allow us to adopt a role which is that of facilitator or guide, not that of trainer, the person who will transmit a practice in a top-down manner, or a type of knowledge, but to allow the students to co-construct the knowledge and to mobilize their whole body.’

## **Open discussion of open practice: the added value of an HE pedagogical project**

Engaging conversations about teaching and learning can represent a valuable opportunity for teachers to increase their awareness about the quality of their teaching, discover good practices and adapt their pedagogical approaches to institutional and external processes and challenges. Michel Syska describes this in the following way:

‘One of the most important things in teaching is to be open-minded. Some of my colleagues, in my opinion, they just believe that they have to teach what they have been taught. I think the most important thing is to believe that you can also make your own decisions on what is important in your field in your discipline. You don’t have to reject everything that was done in the past, but you also have to innovate and to change mentalities, and even to open your field to what is new.’

Michel is behind the creation of a national all-night coding competition for information technology students. Hear more here: <https://library.shout4he.eu/video/coding-night-for-computer-science-students-of-ba-and-ma-programs>

This HE teacher added a comment about the value of pedagogical projects such as SHOUT4HE:

‘I was interested in meeting you and answering the interview because any-time people ask me questions about what I’m doing in my teaching it helps me to improve what I am doing and to have some kind of new look on my practices.’

As noted at the beginning of this guide, change often begins at home and in discussion with colleagues and students. For the majority of HE teachers in the project, technology-mediated change was driven by a desire to improve learning outcomes by engaging students more actively in their own learning. Such change involves using technology to change the environment in which learning takes place, but also requires discussion among colleagues to allow the modification of teaching approaches to fit these new contexts. Pedagogical and technological innovation go hand in hand, and this HE teacher explains:

‘When we talk about active pedagogy, the conditions must be created for this active pedagogy to be effective. The learning environment must be in line with the pedagogy that takes place there and the activities that are designed. So this reflection on the right kind of change, on the configuration of spaces for the learning experience to occur, was a real necessity for me and for my colleagues and the form, the pedagogical method is closely matched by the space that accommodates it.’

We end with a set of conclusions and recommendations for your on-going professional development as HE teachers



# KEY CONSIDERATIONS

---

- Be open to discussion about your teaching wherever and whenever the opportunity may arise, in formal and informal settings and with colleagues in your discipline and in other areas; try to be honest about failures as well as successes.
- Take advantage of the flexibility offered by blending technology-mediated approaches combining face-to-face and online teaching and learning; consider a flipped classroom model which places learning resource online for self-access by students and frees up class time for interaction in the form of group work or question-and-answer sessions.
- Consider diverse student needs in all their complexity, taking into account particular difficulties faced by certain sectors of the student population but also the expertise and experience students may bring to their HE programmes.
- Aim to foster student autonomy where possible, but without excluding more directive approaches, particularly in the first years of HE programmes of study. Consider progress at a scale beyond that of one semester or one year, so that the 'strong steer' which students often appreciate in first year can give way to a lighter approach with more advanced cohorts.
- Listen to student feedback from post-course evaluations and more in formal discussions, and be ready to engage with doubts and negative pushback; students may initially feel uncomfortable with new practices which they later come to appreciate.
- Be ready to harness institutional support at whatever level it may be forthcoming, from collaborating with colleagues in your own department and beyond, to drawing on available technical and pedagogical support, and considering physical learning spaces as well as online tools.
- Remember that pedagogical development is an ongoing process: make sure you play the long game by looking for incremental rather than instant change, working with others, and taking time to not only to reflect on difficulties but also to celebrate successes.

# REFERENCES

---

Andrade, A., Ehlers, U. D., Caine, A., Carneiro, R., Conole, G., Kairamo, A. K., ... & Holmberg, C. (2011). Beyond OER—shifting focus to open educational practices: OPAL report 2011.

Atenas, J., & Havemann, L. (2014). Questions of quality in repositories of open educational resources: a literature review. *Research in Learning Technology*, 22, 20889.

Bevitt, D., Baldwin, C., & Calvert, J. (2010). Intervening early: Attendance and performance monitoring as a trigger for first year support in the biosciences. *Bioscience Education*, 15(1), 1-14.

Cronin, C. (2017). Openness and praxis: Exploring the use of open educational practices in higher education. *International Review of Research in Open and Distributed Learning: IRRODL*, 18(5), 15-34.

Hockings, C., Brett, P., & Terentjevs, M. (2012). Making a difference—inclusive learning and teaching in higher education through open educational resources. *Distance Education*, 33(2), 237-252.

Kaatrakoski, H., Littlejohn, A., & Hood, N. (2017). Learning challenges in higher education: an analysis of contradictions within Open Educational Practice. *Higher Education*, 74(4), 599-615.

Koseoglu, S., & Bozkurt, A. (2018). An exploratory literature review on open educational practices. *Distance Education*, 39(4), 441-461.

Hood, N., & Littlejohn, A. (2017). Knowledge typologies for professional learning: educators'(re) generation of knowledge when learning open educational practice. *Educational Technology Research and Development*, 65(6), 1583-1604.

Murphy, A. (2013). Open educational practices in higher education: Institutional adoption and challenges. *Distance Education*, 34(2), 201-217.

Peter, S., & Deimann, M. (2013). On the role of openness in education: A historical reconstruction. *Open Praxis*, 5(1), 7-14.

Stagg, A. (2014). OER adoption: a continuum for practice. *International Journal of Educational Technology in Higher Education*, 11(3), 151-165.

Tillinghast, B. (2020). Developing an Open Educational Resource and Exploring OER-Enabled Pedagogy in Higher Education. *IAFOR Journal of Education*, 8(2), 159-174.

Weller, M. (2011). *The digital scholar: How technology is transforming academic practice*. A&C Black.