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Connection online: Best practice in synchronous online learning

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Abstract

This paper describes a research project that was conducted from 2022-4 to develop guidance for best pedagogical practice in synchronous online learning. It followed experiences during COVID-19 of barriers to relational learning online and learning cultures that fostered disconnected rather than relational learning opportunities. Action research methodology was used with a group of educators and a group of students and best practice guidance subsequently developed. Key themes are presented which were: creating an online culture, curriculum design, facilitating student engagement, and digital inequalities. Recommendations arising from these themes are discussed and what is necessary for students, educators and higher education leaders to facilitate the most relational and inclusive synchronous online education. It is concluded that digital programmes can incorporate more relational learning opportunities through synchronous online sessions if this is supported through university structures and priorities and educators are supported to design a curriculum that best facilitates these opportunities in the service of student engagement.

Keywords

online, synchronous, relational, digital, pedagogy, inclusive, higher education

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Introduction

This research investigated how we relate to each other in virtual synchronous classrooms and what barriers there are to relating and communicating in conversation; to explore how digital relating differs from face-to-face relating psychologically; and to recommend what could enhance our learning and teaching relationships in digital learning spaces. The online environment shapes our self-awareness and relating to others: our authenticity, identity, sense of connection, engagement, belonging and consequent ability to learn. This project investigated the application of these factors to teaching to support staff to develop pedagogically informed digital practices and facilitate students' learning. Through action learning methodology, groups of educators and students explored these issues and good practice guidance was devised from this.

From March 2020, along with all other educators in higher education in the UK, I moved my teaching of the MA programme in counselling and psychotherapy at a university in the North of England online overnight. I had no prior experience of teaching online and our programme was experiential, capitalising on the pedagogical opportunities of students learning from each other in group settings with facilitated exercises and discussion questions. We adopt a relational and transformative educational approach (Proctor et al 2021) which practically involves flipped learning and educators as facilitators rather than delivering/presenting content.

This was an exciting time for my counselling and psychotherapy programme team, and we learned quickly what was necessary and helpful to adapt this approach to our new online learning platform. We decided early on that a videos-on culture was necessary for experiential interaction, although of course compromises were made due to other circumstances that interrupted a learning-focused environment at the time, such as students simultaneously educating children at home and inconsistent internet access or inappropriate devices for ideal learning.

During the two lockdowns in 2020 and afterwards, I was also working closely with a colleague in Austria who was responsible for moving a counselling service involving individual therapy and groups online and we had many discussions about what facilitated this work and what we were learning, particularly about authenticity, relating and inclusion online.

My colleague identified nine paradoxes involved in relating online (Susman, 2021) and I was keen to apply these to an educational environment. These are:

- The boundary blur between public and private;
- Self-observation vs. self-obliviousness;
- Disinhibition vs. inhibition;
- Disembodiment vs. telepresence;
- The Perception-Paradox vs. the Coherence-Imperative;
- TLI (too little information) vs. TMI (too much information);
- Loss of Immediacy versus Abruptness of Transitions ;
- Safety paradox: Security of Hiding versus Threat from Invisible Others; and

- Power-Shift: Equaliser-Effect versus Power-Imbalance

Together, we (my colleague, Susman and I) offered seminars to my students, to educators and other staff across the university in autumn 2020 and at the European Scholarship of Teaching and Learning conference in 2021 and participants fed back that presenting these paradoxes were helpful to give a framework for understanding the differences that students and educators were experiencing in teaching and learning online and even for staff to understand their experiences in online meetings.

I proposed to research the application of these paradoxes to online teaching and learning and was awarded a research fellowship for 0.3 FTE over two years which began in February 2022. The proposal was to focus on *synchronous learning*, where the teacher and learner are together in the virtual room at the same time and there is the possibility for immediate verbal communication and interaction. The research investigated how we relate to each other in virtual classrooms and what barriers there are to relating and communicating in conversation; to explore how digital relating differs from face-to-face relating psychologically and to recommend what could enhance our learning and teaching relationships in digital learning spaces.

Relational pedagogical theories

The reason for this focus is that theories about how people learn mainly agree (e.g. Carless, 2016; Gravett et al., 2021) that relationships between teacher and learner and among learners are important for the process of learning. Learning is no longer understood to be a giving and receiving information process, but an experience between teachers and learners and among the learning community, that requires engagement and relating (getting to know each other). In student-centred learning (Rogers et al., 2013), students are active participants, placed at the core of the learning process. It moves away from the teacher-centred transmission model, (teacher as 'expert') and seeks to ensure students achieve a deeper level of learning. Instead, the teacher acts in the role of facilitator, encouraging learners to be self-motivated and independent.

Social constructivist pedagogical theories, which include active learning approaches and 'feedback as dialogue' approaches (Carless, 2016) advocate for the necessity of student engagement in the learning process and the importance of relationships and ongoing learning processes between educators and students. From a social constructivist perspective, the instructor approaches the classroom as a co-creator of knowledge working alongside the student rather than in front of the student.

Garrison et al. (2000) developed a constructivist approach to online learning called a community of inquiry. They describe this as "a comprehensive framework as an online learning research tool. The framework consisted of three elements—social, teaching and cognitive presence—as well as categories and indicators to define each of the presences", (Garrison, 2007, p. 61). However, their focus is on *asynchronous* online learning so the framework and resulting research has very limited applicability to *synchronous* online learning.

Inclusive learning

The approach of inclusive learning questions how power inequalities are perpetuated through educational approaches. Freire's liberationist approach (Friere, 2018, 2021) to pedagogies of social justice reminds us how education can be transformational for students, educators, and relations of power. Creating an inclusive classroom environment

involves welcoming students to the space, creating room for all their voices and cultures, and attending to their learning needs from a more holistic perspective, especially the emotional landscape of learning. This focus brings from the margins the experiences and voices of the oppressed and undergirds inclusion in the classroom. Decolonising the curriculum (see Sunnermark & Thörn, 2021) reminds us that knowledge is not undisputed but instead is information derived within systems of power that prioritise the voices and beliefs of the dominant groups and ignore and denigrate marginalised voices. Hearing more voices expands possibilities of thinking and learning for everyone.

Learning how to learn

Connectivist approaches (focusing on how technology changes learning processes) emphasise the importance of connections between people and technology and the ability to learn in the future being more important than past learning (Siemens, 2005). From this perspective, the main purpose of education is to facilitate students to learn how to learn and this process is far more important than the content of any specific curriculum. Furthermore, connectivism emphasises how learning does not take place within an individual, but we are all in interconnected webs. The more connection there is, the better the learning and knowledge. This approach provides another foundation for inclusive pedagogies as learning and knowledge are located in a diversity of perspectives.

Creating a learning community online

Digital learning has predominantly focused on the possibilities of *non-synchronous* activity, with discussions taking place over time (not at the same time) on discussion boards and often with comments posted anonymously. This provides flexibility and as such is a desirable option particularly for minoritised and international students and these possibilities are indeed invaluable to increase the accessibility of learning opportunities. Nevertheless, online learning can also support more relational ways of teaching and learning; video platforms make meeting in the virtual world possible in less anonymised and more personal and embodied ways. This research aimed to support educators and students to make the most of these relational opportunities in synchronous online learning to create online learning communities.

The online environment shapes our self-awareness and relating to others: our authenticity, identity, sense of connection, engagement, belonging and consequent ability to learn. Factors identified by Susman (2021) such as telepresence (Turkle, 2011, self-consciousness (of own image), unnatural frontality, bonding and body visibility, implications of no videos on trust and engagement, the online disinhibition effect, abrupt transitions, the blurring of public and private space and digital inequalities are crucial to navigate in ways which promote inclusion and belonging for all students and staff. This project investigated the application of these factors to teaching to support staff to develop pedagogically informed digital practices (Maguire et al., 2020) and facilitate students' learning.

One example of many is how presence (Balick, 2014) and interaction online is different from in person. For example, many staff feedback the difficulties in teaching students online who don't put videos on (Castelli & Sarvary, 2012). TEQSA (2020) found that many students said there was a lack of academic interaction and engagement. Furthermore, research shows that students who are already marginalised are likely to be further disadvantaged with online teaching (Bettinger & Loeb, 2017). Yet, student engagement cannot be measured by any crude metric such as having a camera on; diverse students

engage in diverse ways. Nevertheless, both staff and students could benefit from clearer guidance on this issue.

Research question

The research asks what are the blocks to relational learning in synchronous online education and what might best facilitate this?

Methodology

This research was given ethically approval through the AREA Committee at the University of Leeds (AREA 21 - 122).

I wanted to use a democratic research methodology that respected the expertise of educators and students who had all experienced online learning during COVID and where the process of research could itself be transformative, not just through the implementation of the outcomes. For this reason, I chose to use participatory action research (Reason & Bradbury, 2008). Action research is collaborative, a practice of cooperative enquiry. It opens the possibility of the process of research being transformative, not just its outcome.

Two action research groups (ARGs) were facilitated between September 2022 and March 2023; one of students and one of educators. All participants/co-researchers had experience of teaching or learning in online synchronous sessions. All participants were recruited by advertising to staff and students within across the University of Leeds and students were rewarded by vouchers for their time. Both groups covered a wide range of faculties and disciplines.

Each ARG met online on six occasions for two hours each time. Online groups were appropriate to the subject matter of online learning and potentially made attendance more accessible. There was an introductory meeting, four subsequent meetings based on four themes and a final meeting to discuss and validate the results. A student intern conducted a literature review of psychological issues in online learning and presented the paradoxes of Susman (2021) and other relevant literature under four themes which arose from immersion in the literature: contact, authenticity, connection and inclusion. At each meeting, this student intern began with engaging presentations for each group to introduce each theme. I then facilitated the discussion which was recorded.

We (the author and a research assistant) pulled out themes and possible recommendations from discussions around the themes listed above at each meeting and adapted these in response to participants' feedback on a shared online document and at the final action research group. Ongoing member checking of the reporting of the themes ensured rigour in this qualitative methodology and also promoted ownership of the research by the participants.

Procedure

Staff recruitment was easier than students. Fourteen staff volunteered to participate and an average of 11 attended each session. Student recruitment was more difficult despite the offer of vouchers to compensate for time. Nevertheless, 10 students participated, across undergraduate and postgraduate courses and across faculties including some international students. An average of six students attended each session. Data was collated as it arose by a research assistant attending each action research group, so data

analysis was not time intensive. Data was member checked by participants and agreed to represent the discussions well. Participants were asked to complete a Microsoft Form to evaluate their experience of participation at the end of the groups. Entry into a price draw for a box of chocolates on completion of the form increased completion rates.

Results

Participant experience evaluation

Six students and 10 educators completed the form to evaluate their experience of participation. Fifteen of 16 respondents had attended between four and six of the ARGs and one respondent attended only one ARG. Two of the student group and four of the educator group had experienced online learning as educators and students. Twelve of the 16 respondents said that attending the groups led to changes in their online educating or learning practices to facilitate relational connection. So, consistent with my aim, the research process itself brought about change not just the implementation of outcomes.

Co-researchers were overwhelmingly positive about their participation, reporting enjoying the groups, feeling involved in the creation of the research output and reporting that participation had changed their practice in online learning and teaching. Participants recognised that the research unveiled fresh perspectives on self-awareness of the self as educator in online settings and potentially identified optimal approaches in a synchronous online learning setting.

Themes and recommendations from action research groups data

The main themes identified from the data were: creating an online culture (with sub-themes of: minimising distractions, professional behaviour, engagement and contribution), curriculum design (sub-themes of coherent curriculum, synchronous sessions for engagement), facilitating student engagement (sub-themes of cameras on, implications of recording, transitions, supporting students with anxiety) and digital inequalities (sub-themes of device needs, digital knowledge, training, intersectionality with other societal inequalities). Each of these themes led to recommendations to maximise the relational possibilities of synchronous learning.

The biggest recommendation across groups was to set explicit expectations to create an online learning culture and how to use synchronous sessions to best promote active learning and engagement. Consequently, a student protocol for online synchronous learning was developed from the data to set out expectations and explain pitfalls. This was presented as a framework on PowerPoint for each programme to adapt to their own needs and include in programme information.

The online protocol covered the following: rationale for protocol and synchronous sessions, device requirements; expectations for learner behaviour of minimising distractions, attending from a private space with cameras on, professional behaviour (e.g. no pyjamas!), engagement and contribution. It also included tips for transitioning into online learning from other activities as natural transitioning cues such as travelling to a new location are missing. Students and educators can use the protocol for synchronous online learning to set up structures to maximise engagement and learning, such as avoiding distractions, including breaks and transition activities and thinking about camera and device set up in advance. (See: Online learning protocol template, Proctor, 2023a).

A Microsoft Sway for educators to offer suggestions for best practice was also developed from the data (see: Sway, Proctor, 2023b) covering the areas of designing the curriculum, facilitating student engagement, and addressing inequalities online. A big issue for educators and students was how to facilitate student engagement online. Best practice covered how synchronous sessions need to fit within a coherent curriculum and how time intensive they are for educators to prepare well for. It was recommended to consider not recording synchronous sessions (to promote engagement) and instead post a summary of issues on a discussion board, but most educators decided this would not be possible due to the necessity for accessibility for online courses, which were usually marketed with a focus on flexible attendance and the possibility of accessing recordings of all material.

A further document was created to circulate to university leaders, detailing the factors needed to consider the resource implications for synchronous online learning, with respect to geographical spaces on campus, preparation time, student and educator support, and addressing digital inequalities. This included how the university can support reducing digital inequalities (with access to devices, digital literacy resources and technical support, spaces for students and staff on campus and training and support for educators).

Discussion

Students and educators in the research groups agreed about the necessity for an explicit protocol to create a culture for online learning. The default culture had become one of video cameras off in synchronous learning during COVID-19 (see Castelli & Sarvary, 2012), much to the detriment of relational learning or even basic engagement and reducing satisfaction with the learning opportunities for educators and students. Educators described talking into black holes, receiving no feedback about how their lectures were received and the same few students having occasional questions at the end. Students described the experience of putting their cameras on in a virtual room of black tiles and how then the educators who were so relieved to see another human being, focused communication on them. However, changing this was a big cultural shift that took some time and effort, explaining why and how it was important and setting expectations before programmes or modules began. Educators were concerned about students' anxieties about turning their cameras on, whereas students were more convinced that with the possibilities of blurring backgrounds to ensure private spaces were not invaded, keeping cameras off was more a matter of learned culture and laziness that kept them from having to engage but ultimately meant they missed out on relational learning opportunities.

The idea of a protocol to set cultural expectations for the online synchronous environment also led to the idea of an induction to online etiquette, with time before programme content began to consider the digital environmental implications for attention and engagement. All participants found the concept of transitions important and the idea of acknowledging the lack of transition time in the digital world helpful with tasks to assist students and educators arriving in a digital learning space before beginning with the learning content. Different people had varied preferences about how to do this, from a short meditation (body and breathing exercise) on arrival, to writing in the chat how they felt now or what they were leaving behind to be there.

Curriculum design was a particular issue for both educators and students, with a focus on the importance of using synchronous sessions for activities that involved engagement. It

was seen to be a waste of the synchronous experience to watch a didactic lecture that could simply be recorded and watched at any point, but instead students and educators valued using the synchronous space for structured discussions or experiential exercises. Opinions varied on the use of breakout rooms, with many participants describing awful experiences of non-engagement in small groups in breakout rooms, so it was unanimously agreed that breakout room activities should come with clear expectations for cameras on, engagement and structured questions or discussion points and agreeing a person to feedback to the larger group later. Small group discussions were seen as helpful for students who were reluctant to talk in a big group, to ensure more voices were heard. Using synchronous sessions to reflect on other material presented asynchronously in the curriculum was suggested as beneficial with the possibilities of follow up discussions on asynchronous discussion boards, particularly for students who were unable to attend the synchronous session.

Thinking about facilitating engagement from all students was seen as crucial, beginning with setting the expectation that all students would engage. The digital room offers the opportunity for engagement in different ways, through a chat function, through voice, through voting surveys or in small groups. Other digital advantages such as simultaneous transcripts or translations also offered increased opportunities for inclusivity.

Conclusion

From the experience of trying to put this research into practice, it became evident that different pedagogical approaches are in conflict in the digital higher education setting. Many educators involved in digital learning focused on issues of accessibility, convenience, efficiency and students choosing lone learning (choose online not synchronous) as opposed to traditional in person learning courses where relational active learning styles are more prevalent. The experience of COVID-19 gave us the opportunity to discover if these disparate aims could be combined.

Offering synchronous relational learning opportunities well is a time and resource intensive endeavour. It has implications for campus geographical spaces, technical support, training (to address digital literacy) and time for educators to create a coherent curriculum with inclusive learning experiences.

Synchronous online learning does offer the opportunity to combine both accessible digital learning with relational active learning, but since the COVID experience, there has been little incentive for programme developers or educators to prioritise relational practice in online education. Digital programmes can incorporate more relational learning opportunities through synchronous online sessions if this is supported through university structures and priorities and educators are supported to design a curriculum that best facilitates these in the service of student engagement. Without this, there could be an opportunity missed, both for the ongoing experience of students involved in digital learning and for the future when we may need to deal with enforced digital learning for all if there is another pandemic.

Declarations

Competing interests: None.

Availability of data: The datasets generated and/or analysed during the current study are not publicly available due to wanting to encourage participants to speak more personally and not have their contributions to be directly available and only reported anonymously.

References

Balick, A. (2014). Technology, social media, and psychotherapy: Getting with the programme. *Contemporary Psychotherapy, 6*(2).

Bettinger, E., & Loeb, S., (2017). Promises and pitfalls of online education. *Evidence Speaks Reports, 2*(15), 1-4. https://www.brookings.edu/articles/promises-and-pitfalls-of-online-education/

Carless, D. (2016). Feedback as dialogue. In M. A. Peters (Ed.), *Encyclopedia of Educational Philosophy and Theory*. Springer Science. https://doi.org/10.1007/978-981-287-532-7_389-1

Castelli, F. R., & Sarvary, M.A. (2012), Why students do not turn on their video cameras during online classes and an equitable and inclusive plan to encourage them to do so. *Academic Practice in Ecology and Evolution,* 11(8), 3565-3576. https://doi.org/10.1002/ece3.7123

Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organisation.* Sage. https://doi.org/10.4135/9781529682861

Freire, P. (2018). *Pedagogy of the oppressed*. Bloomsbury publishing USA.

Freire, P. (2021). *Pedagogy of hope: Reliving pedagogy of the oppressed*. Bloomsbury Publishing. https://doi.org/10.5040/9781350190238

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education 2*(2–3): 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Garrison, D.R. (2007) Online community of inquiry review: Social, cognitive and teaching presence issues. *Journal of Asynchronous Learning Networks, 11*(1). https://doi.org/10.24059/olj.v11i1.1737

Gravett, K., Taylor, C. A., & Fairchild, N. (2021). Pedagogies of mattering: Re-conceptualising relational pedagogies in higher education. *Teaching in Higher Education, 29*(2), 388–403. https://doi.org/10.1080/13562517.2021.1989580

Maguire, D., Dale, L., & Pauli, M., (2020). *Learning and teaching reimagined: a new dawn for higher education*. Jisc. https://repository.jisc.ac.uk/8150/1/learning-and-teaching-reimagined-a-new-dawn-for-higher-education.pdf

Proctor, G. (2023a). *Synchronous online learning protocol for students*. https://teachingexcellence.leeds.ac.uk/wp-content/uploads/sites/89/2023/11/online-learning-protocol-template-accessible-06112323-2.pptx

Proctor, G. (2023b). *Recommendations for online synchronous learning for educators*. https://sway.cloud.microsoft/Kb4Cj8FfzwBjiosd

Proctor G., Cahill J., Gore S., Lees J., & Shloim N. (2021). A not-knowing, values-based and relational approach to counselling education. *British Journal of Guidance & Counselling*. https://doi.org/10.1080/03069885.2021.1912289

Reason, P., & Bradbury, H. (2008). *The SAGE handbook of action research: Participative inquiry and practice* (2nd ed.). SAGE. https://doi.org/10.4135/9781848607934

Rogers, C., Lyon, H., & Tausch, R., (2013). *On becoming an effective teacher: Person-centered teaching, psychology, philosophy, and dialogues with Carl R. Rogers and Harold Lyon*. Routledge. https://doi.org/10.4324/9780203725672

Siemens, G. (2005). *Connectivism: A learning theory for the digital age*. http://itdl.org/Journal/Jan_05/article01.htm

Sunnemark, L., & Thörn, H. (2021). Decolonizing higher education in a global post-colonial era: #RhodesMustFall from Cape Town to Oxford. *Review of Education, Pedagogy, and Cultural Studies, 45*(1), pp. 53–76. https://doi.org/10.1080/10714413.2021.2009749

Susman, K. (2021). Between the tiles: The psychology of the virtual room. Appropriating and subverting the digital sphere for authentic and meaningful encounter. *Person-Centered & Experiential Psychotherapies, 20*(4), 327-344. https://doi.org/10.1080/14779757.2021.1938180

TEQSA (Tertiary Education Quality and Standards Agency, Australia). (2020). *Annual report*. https://www.teqsa.gov.au/guides-resources/resources/corporate-publications/teqsa-annual-report-2020-21

Turkle, S. (2011) *Alone Together: Why we expect more from technology and less from each other*. Basic Books.