



# Supporting gender equality in learning: use of a sociomaterial lens to view the learning process

Susannah Wilson, University of the Highlands and Islands (UHI Argyll)

#### **Abstract**

There is an emerging body of literature which explores the short-term impact that the COVID-19 pandemic had on education (e.g. Watermeyer, 2021). This short paper responds to the increasing body of evidence which suggests that the impact of the COVID-19 pandemic will have a disproportionate impact in the longer term, too. The focus of this paper is on the ways in which the global COVID-19 pandemic affected gender equality within education, particularly in the further education (FE) sector.

After the initial disruption to the delivery of education in March 2020, when the first COVID-19 lockdown in the UK took place, many learning institutions were able to welcome their learners back into physical buildings for the subsequent academic sessions. However other institutions, particularly those within the FE and HE sectors, knew that their doors would effectively remain closed for some time, and had to devise or adapt appropriate ways of delivering education through technological means. This paper explores the changing norms and expectations in terms of technology-enhanced learning for which the COVID-19 pandemic was a catalyst, and the impact of these on gender equality within education.

This paper explores how the use of a sociomaterial lens to view education can further our understanding of how these issues can be mitigated. Building on the available literature (e.g. Gourlay, 2021), it considers how viewing learning through a sociomaterial lens provides a framework within which mitigating strategies could be developed.

Finally, this paper considers how a sociomaterial lens may be used to support the educational community to further improve issues of gender equality. This 'On the Horizon' piece for the 'Breaking the Gender Bias' Special Issue of JPAAP is a call to action, exploring future avenues for research into improving issues of gender equality within education.

Keywords: sociomaterial, gender equality, learning, environments, COVID-19

## COVID-19 and its impact on learning

The response to the global COVID-19 pandemic proved the education sector to be "among the most robust and adaptable of all social institutions" (UNESCO, 2020, p. 13). The pandemic did not result in a "cessation of learning, teaching and assessment" (Bashir et al., 2021, p. 2), as some had feared; instead, there was a shift to emergency remote education (Bashir et al. 2021, p.2) of which teaching institutions and practitioners should be proud. Assessments were able to continue despite the cancellation of examinations; teaching took place despite the closure of the buildings. In terms of a continuation of service in what were extreme circumstances, the response to the pandemic and the transition to learning through technological means was a huge achievement, demonstrating resilience (Smyth, 2020) and innovation (Snelling, 2021) within the educational sector.

However, unlike many secondary and primary institutions, which were able to welcome learners back into their physical buildings relatively soon after each of the UK lockdowns, the doors to many further and higher education institutions were required to remain closed for some time. For example, whereas the majority of school pupils were able to return to full time school-based education after the Easter holidays of 2021 (SPICe, 2021), some further and higher education institutions did not return to prepandemic models until the beginning of academic year 2021/22. The initial disruption caused by COVID-19 was therefore prolonged for some further and higher education institutions, which resulted in continuing adaptations and the increased adoption of technological means to delivery education effectively.

Specific questions relating to equality and access in terms of these adaptations have already been considered within the literature for example, Bashir et al. (2021, p. 9) assert that "institutions should be recognising and taking the necessary steps to ensure digital equity amongst students and staff". The Scottish Government's 'Connecting Scotland' project was a response to the pandemic, aiming to provide digital devices and training to support online access (SENScot, 2022). Furthermore, many education institutions have funding and support available to support their learners to access digital devices.

However, the main aim of this short paper is to argue that questions of equality and access need to move beyond a superficial consideration of learners' access to digital devices and internet – and that we need to consider broader barriers to access and ways to mitigate them. Given that the effects of the COVID-19 pandemic can be viewed as a collection of "pre-existing societal divisions

### Supporting gender equality in learning: use of a sociomaterial lens to view the learning process

and weaknesses that have been exacerbated by the pandemic and the counter measures employed thus far" (Spours et al., 2021, p.10), this paper argues that we need to consider the wider context in which learning takes place – particularly for those who have "multiple marginalized identities" (Liu, 2021). We need to move beyond consideration of simply access to devices on which the online learning takes place, towards a broader consideration of barriers to access for those for whom the impact of COVID-19 is more complex. According to the Scottish Government (2020), "an intersectional approach is essential" (p.7), given that the effects of the COVID-19 pandemic can be seen as a "complex set of interconnected problems", which are "multi-layered" (Spours et al., 2021, p. 10).

### Considering the impact of the global pandemic on marginalised learners

It is widely believed that pre-existing societal divisions will have been "exacerbated by the pandemic and the counter measures employed thus far" (Spours et al., 2021, p. 10). Considering gender equality generally within society, for example, the Scottish Government (2020, p. 116) notes that the effects "ensuing from lockdown measures would have a disproportionate longer-term impact on women for a number of reasons", citing reasons relating to inequality in employment; caring responsibilities; economic and housing situations. Drawing on the available literature, Liu (2021) refers to the extra hours of unpaid domestic labour which were primarily taken on by women during the pandemic, which included "concurrent child and elder care responsibilities".

Furthermore, there is reason to believe that students learning in the FE sector will be particularly affected by the COVID-19 pandemic. Spours et al (2020) report a "widespread concern that the shifts to remote learning may have widened class gaps" (p.8). Gaps in learning caused by the pandemic are thought to be "about two months behind what would normally be expected" across the education sector generally, but those gaps are "much greater for disadvantaged learners" (p. 22). There is an expectation that the detrimental effects will be significant for learners within the Further Education (FE) sector, given that the sector is "more likely to cater for the more vulnerable and deprived sections of society" (p.13).

For women engaging in the FE learning context, especially those who are marginalized due to other circumstances, we therefore suggest that the impact of COVID-19 will be both significant and potentially prolonged. Liu (2021) refers to the negative impact on "women's performance capacities" due to the "multiple underlying structural inequalities" that were "exposed and exacerbated" by the pandemic. For women engaged in learning within the FE sector, the concern is that the negative impact on their 'performance capacities' will include a negative impact on their attainment within learning.

These concerns feel particularly relevant in terms of gender equality within the FE sector. The problems explored thus far – issues affecting gender equality, and issues disproportionately learners within the FE sector – are clearly each worthy of research attention. However, research which focuses on one aspect of a learner's experience, or one aspect of the context, does not provide opportunities for us to view the impact of this 'overlapping disadvantage'. This paper suggests that the combined impact of these issues poses an extra risk for women engaged in learning within the FE sector.

## Using a sociomaterial lens to support gender equality within the FE sector

The challenge, therefore, is to find a framework which can support us to interrogate the learning which occurs within the FE sector, and allows us to take the "intersectional approach" advocated by the Scottish Government (2020). A possible solution here is use of a sociomaterial lens (e.g. Gravett, 2020), which supports us to explore the "relationships between humans, things, technologies and texts" (Zukas and Malcolm, 2019, p 261).

Such a lens is already used within educational discourses, for example within Gravett and Ajjawi (2021)'s exploration of students' perceptions of belonging, Gourlay (2021)'s exploration of open and distance learning, and Gravett (2020)'s exploration of feedback literacies. Gravett (2020) focuses in particular on the "role of space" (p. 6), suggesting that these spaces "are not neutral" and "will entangle with an individual's experience". Such a suggestion has clear implications for learning which occurs outside a physical educational building. Furthermore, common to both of these papers is a criticism that educational discourses do not allow consideration of "non-human actors" (Gravett, 2020, p. 267). Gravett and Ajjawi (2021, p. 5) call on us to consider "the impact of space, place, time...[and] a wider assemblage of non-human actors upon student engagement with their studies". In employing this sociomaterial lens as a framework to consider the learning which occurs within an FE context, we will be better placed to observe the complexities of the learning experiences felt by our learners.

Consideration of non-human actors has not been omitted from all research relating to learning throughout the pandemic. Bashir et al. (2021) explored students' perceptions of their homeworking environment during the COVID-19 lockdowns. Student responses included reference to issues such as "their working environment being too noisy, too dark, poorly lit and/or subject to temperature fluctuations" (p. 5). Other student comments referred to the difficulties in completing online assessments due to not having "a comfortable desk and chair" (p. 7). From this work, Bashir et al. (2021, p.11) conclude that "pockets of students ...were more negatively affected by the move to remote online learning and teaching", but their response is to call simply for further exploration of "digital poverty".

This paper is a call to extend that exploration, to focus not just on digital poverty, but on the wider complexities and "overlapping disadvantage" (Scottish Government, 2020, p. 7) which, research suggests, may cause specific issues for gender equality in learning within an FE context. Research which uses a sociomaterial lens would allow the research community to draw together the multiple threads which impact upon gender equality in FE education. Knowing, as we do, that the COVID-19 pandemic has "exposed and

### Supporting gender equality in learning: use of a sociomaterial lens to view the learning process

exacerbated ... multiple structural inequalities" (Liu, 2021), research using a sociomaterial lens would present us with a clearer picture of the impact of these inequalities for women engaging in the FE sector. It would be a welcome addition to the literature on the impact of COVID-19 and its legacy on education, and it would support policy makers and institutions to make appropriate decisions about future delivery mechanisms used within the FE sector.

It could be suggested that, having worked without access to physical buildings for several academic sessions now, blended delivery mechanisms – which refers to "a range of delivery models that use both online and in-person engagement" (Snelling, 2021) – have become the 'new normal'. Given that, even prior to the pandemic, institutions were increasingly embedding virtual components to their provision, and given assertions such as Varty (2016, p. 2, drawing on Geith and Vignare, 2008) that online learning provides "educational opportunities that are free of time and geographic constraints", we could be forgiven for accepting the continued embedding of such delivery mechanisms into the learning context. But Gourlay's (2021, p. 57) assertion that blended learning delivery mechanisms are still "grounded in material and embodied entanglements with devices and other artefacts" is an important one, suggesting that we cannot ignore the contextual realities faced by women who are learning within a blended learning context.

Within their explanation of education in a post-covid world, UNESCO (2020, p. 4) warn that "COVID-19 has the potential to radically reshape our world", and that "we must not passively sit back and observe what plays out". If it is true that "we can expect to increasingly have hybrid forms of teaching and learning...inside and outside the school, at different times...using a multiplicity of means and methods" (UNESCO, 2020, p.15) it is important too that we consider the impact of these forms on our learners. As the literature presented within this short paper suggests, one important point of consideration is the extent to which these forms of delivery impact on women engaging the FE sector. Research using a sociomaterial lens would help us to ensure that the lingering effects of the global pandemic do not, as UNESCO (2020, p.3) fear, "wipe out several decades of progress" in gender equality in education.

### Biographies

Susannah Wilson is the Learning and Teaching Enhancement lead at UHI Argyll. Her teaching responsibilities include Higher English and courses within teacher education. Susannah is currently studying towards an EdD through the Open University, focusing on professional learning, lecturer identity and assessment in the FE learning context.

#### References

Bashir, A., Bashir, S., Rana, K., Lambert, P., Vernallis, A. (2021). Post COVID-19 Adaptations; the shifts towards online learning, hybrid course delivery and the implications for biosciences courses in the Higher Education Setting. *Frontiers in Education*, 6. Gourlay, L. (2021). There is no 'virtual learning': the materiality of digital education. *Journal of New Approaches in Educational Research*, 10(1), pp. 57-66. doi:10.7821/naer.2021.1.649

Gravett, K. and Ajjawi, R. (2021). Belonging as situated practice. *Studies in Higher Education*. doi:10.1080/03075079.2021.1894118 Gravett, K. (2020). Feedback literacies as sociomaterial practice. *Critical Studies in Education*. doi:0.1080/17508487.2020.1747099.

Liu, S. (2021). How has COVID-19 impacted on gender equalities in HE? [podcast]. Episode 24 Febrary 2021. Available at: https://advancehe.podbean.com/e/how-has-COVID-19-impacted-on-gender-equality-in-he/ (Accessed 13 November 2022).

SENScot (2022). Connecting Scotland Programme. Available at: https://senscot.net/funding/connecting-scotland-programme/ (Accessed 07 Dec 2022).

Scottish Government (2020) *The impacts of COVID-19 on equality in Scotland*. Available from Coronavirus (COVID-19): impact on equality (research) - gov.scot (www.gov.scot) [08 May 2022]

Smyth, K. (2020). Reflecting on 2020 and looking to 2021: A year-end editorial from JPAAP. Available from https://3eeducation.org/2020/12/31/ (Accessed 8 December 2022).

Snelling, C. (2021). Lessons from the pandemic: making the most of technologies in teaching. Available from https://www.universitiesuk.ac.uk/what-we-do/policy-and-research/publications/lessons-pandemic-making-most (Accessed 2 November 2022).

SPICe (2022). Timeline of Coronavirus (COVID-19) in Scotland. Available from https://spice-spotlight.scot/2022/12/16/timeline-of-coronavirus-COVID-19-in-scotland/ (Accessed 13 November 2022).

Spours, K., Graigner, P., Vigurs, C., France, R. (2021). *Mitigating impacts of the COVID-19 pandemic on the further education* sector. London: UCL. Available from

https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3838#: ``:text=Suggested%20 mitigations%20 include%3A, provide%20 high%2D quality%20 apprenticeship%20 programmes.

UNESCO (2020). Education in a post-COVID world: nine ideas for public action. Paris: UNESCO. Available from https://unesdoc.unesco.org/ark:/48223/pf0000373717/PDF/373717eng.pdf.multi%20%5b14

Varty, A. (2016). Options for online undergraduate courses in biology at American colleges and universities. *Life Sciences Education*, 15, pp. 1-10.

Zukas, M. and Malcolm, J. (2019). Reassembling academic work: a sociomaterial investigation of academic learning. *Studies in Continuing Education*, 41(3), pp. 259-276. doi: 10.1080/0158037X.2018.1482861