

‘Learning in Lockdown’: exploring the experiences of the impact of COVID-19 on Interprofessional Education from academics’, students’ and service users’ perspectives

Alison Power, Associate Professor, Faculty of Health, Education and Society Lead for IPE, The University of Northampton (alison.power@northampton.ac.uk)

Michael Palapal Sy, Associate Professor, University of the Philippines (mpsy@up.edu.ph)

Maggie Hutchings, Associate Professor and Visiting Fellow, Faculty of Health and Social Sciences, Bournemouth University (mhutchings@bournemouth.ac.uk)

Tracy Coleman, Service User (tdcoleman62@googlemail.com)

Alla El-Awaisi, Assistant Dean for Student Affairs, College of Pharmacy, Qatar University (elawaisi@qu.edu.qa)

Gatera Fiston Kitema, PhD Candidate, University of St Andrews (gfk1@st-andrews.ac.uk)

Jean Gallagher, Service User (J.Gallagher1@bradford.ac.uk)

Chulani Herath, Senior Lecturer, Department of Psychology and Counselling, The Open University of Sri Lanka (herathchulani@yahoo.com)

Nichola McLarnon, Associate Dean, Learning Teaching and Quality, School of Health and Life Sciences, Glasgow Caledonian University (N.McLarnon@gcu.ac.uk)

Shobhana Nagraj, MRC Clinical Research Fellow, Nuffield Department of Women’s and Reproductive Health (shobhana.nagraj@wrh.ox.ac.uk)

Veronica O’Carroll, Senior Lecturer, School of Medicine, University of St Andrews (vo1@st-andrews.ac.uk)

Melissa Owens, Associate Professor, Faculty of Health Studies, University of Bradford (m.w.owens@bradford.ac.uk)

Vikki Park, Senior Lecturer, Department of Nursing, Midwifery and Health, Northumbria University (vikki2.park@northumbria.ac.uk)

Emma Pope, IPE Lead School of Healthcare Sciences, Cardiff University (popeel@cardiff.ac.uk)

Lisa-Christin Wetzlmair, PhD Candidate, University of St Andrews (lcw20@st-andrews.ac.uk)

Liz Anderson, Professor of Interprofessional Education, Department of Medical Education, The University of Leicester (esa1@le.ac.uk)

Abstract

The COVID-19 pandemic has had a significant impact on the learning experiences of students undertaking health and social care programmes across the globe. In the United Kingdom (UK) the Nursing and Midwifery Council (NMC) introduced Emergency Standards for nursing and midwifery undergraduate programmes (2020) making significant short-term changes to programme delivery. The mandate for all students to undertake Interprofessional Education (IPE), however, remained. IPE is key to preparing students on health and social care programmes as it enables students to work as effective members of multi-agency/multi-professional teams on qualification and is therefore an important element of training, having a direct impact on the quality of care and service user experience. This series of articles will explore the experiences of academics, students and service users from a global perspective in relation to the delivery of IPE during the pandemic, to identify barriers and facilitators to successful shared learning and provide suggestions for how lessons learned can be taken forward to further enhance this important element of pre-registration education.

This series of articles, written by members of the CAIPE Research Subgroup (IPE Experiences) aims to explore the experiences of 'lockdown learning' from academics', students' and service users' perspectives as the pandemic necessitated a wholesale move from face to face, blended learning and online learning to include Emergency Remote Teaching (ERT). The perceptions and attitudes of academics, students and service users on such comprehensive changes are a unique and rich data source to explore and inform future provision.

Keywords: Interprofessional Education; COVID-19; Pandemic; online learning; blended learning; Emergency Remote Teaching

Introduction

The World Health Organisation (WHO) declared COVID-19 as a global pandemic in March 2020 (WHO, 2020). In response to the highly contagious nature of the virus, the United Kingdom (UK) government put in place stringent measures to slow down its spread: including social distancing (Gov.UK, 2020). Social distancing had a significant impact on all Higher Education Institutions (HEIs) as campuses were closed and face-to-face teaching was replaced with Emergency Remote Teaching (ERT) (Power, 2020). ERT is defined as 'a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances' (Bozkurt and Sharma, 2020; Hodges *et al.*, 2020). Consequently, the implementation of Interprofessional Education (IPE) programmes globally had to move from face-to-face or blended learning to ERT. This introductory article aims to give historical context to IPE provision and provide an overview of the contextualized experiences of academics and learners on IPE development, delivery, and evaluation during the liminal period brought about by the pandemic.

Who are we?

The Centre for the Advancement of Interprofessional Education (CAIPE) was established in 1987 and is a UK-based charity, whose main aim is to champion the importance of IPE in the provision of safe and effective health and social care. The CAIPE Experience Research Subgroup includes academics and research students from a variety of professions and countries who have collaborated to write a series of articles to share experiences of IPE during the COVID-19 pandemic from a global perspective.

Background: taking the long view

Online learning is not a new phenomenon in IPE. A wide range of UK and international developments in technology enhanced interprofessional learning, initiated during the first decade of the 21st century, were showcased in Bromage *et al.*'s (2010) treatise on interprofessional e-learning and collaborative work. These early initiatives benefited from the growing use of digital technologies in colleges and universities. Since their introduction in the 1990s, learning technology platforms, known as virtual learning environments (VLEs) or Learning Management Systems (LMSs), have been deployed by many HEIs to provide learning content repositories, communication, and administration with links to other systems including libraries, student records and timetabling (UCISA, 2019). These VLEs, together with web technologies and growing use of social networking (i.e. Facebook, Twitter, Flickr, YouTube, blogs, wikis), and social writing platforms such as Google docs and Padlet have contributed to further developments across the sector. Many HEIs embraced the advancements in technology, in order to offer new and innovative ways to deliver IPE, including the introduction of Problem Based e-Learning (PBEL) (for example: Dearnley *et al.*, 2010). Technology mediated approaches adopted in IPE have also included bespoke online learning modules, reusable learning objects, and citizen-focused virtual communities developed to provide more authentic person-centred learning experiences (Barr *et al.*, 2017).

It is into this milieu, where the pace of technological change is already rapid, that understanding and effective deployment of online technologies for learning during lockdown is so vital. While these developments have placed some HEIs in favourable positions i.e., being able to build on standard provision which may have previously offered a blend of face-to-face and online learning, the situation for IPE in lockdown is made more challenging by the necessity for developing remote emergency teaching and learning strategies, coupled with the speed with which the management of change was demanded. Moreover, it is also important to recognise the considerable burden ERT placed on HEIs from middle- and low-income countries as they tried to balance the rapid changes in classrooms, technological infrastructures, educational management, and educational priorities.

The usual rationales for change informing curriculum development and the readiness of staff and students for alternative modes of IPE delivery and facilitation has been severely compromised. The imperative to continue delivery and facilitation of IPE for students and teachers, forced to work at a distance, has usurped the slower and more considered pace of curriculum developments introducing technology mediated and blended learning strategies previously designed to address some of the educational, logistical, and organisational problems faced in IPE (Edelbring 2010). The readiness for change tends to lag behind the introduction of innovations and new ways of working (Rogers, 2003). The building of understanding and familiarisation required to embrace new learning and teaching approaches is further compromised during lockdown by the necessity of finding and rapidly implementing different ways of working.

Yet the pressures to enhance education provision in more cost-effective ways without placing the student experience at risk remain (Hutchings and Quinney 2015). Some fundamental principles identified in early developments of online learning merit consideration here. While educators and practitioners have been forced to engage with a variety of technology-mediated learning and teaching strategies as a result of lockdown, it is important to be explicit about the assumptions we hold about designs for learning. Borrowing from CAIPE's (2002) definition where IPE is defined as 'occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care', Edelbring (2010) identifies three different conceptions of learning mediated by technology for informing curriculum design, and for improving and evaluating IPE; 'learning *from* technology' where the technology can be viewed as objects or artefacts containing knowledge, 'learning *with* technology' where the technology is used for learning together with others to improve collaboration, and 'learning *about* technology' where educators, practitioners and students can gain familiarity with tools and techniques contributing to teaching and learning-

IPE's current learning context

ERT has taken over higher education in light of the changes brought about by the COVID-19 pandemic. While both learners and educators in health professions' education had no choice but to embrace teaching and learning on-line (Reich et al., 2020), there was a concern relating to the associated impact on students' opportunities for authentic communication and collaboration (Rabe et al.,

2020). Educational programmes that include practice placements, such as midwifery, are especially challenged in incorporating IPE within the emerging curricula.

At this point, it is important that we distinguish the difference between online learning and ERT. By definition, online learning or e-learning is characterized by four categories including the use of technology to deliver learning and training programmes, the delivery of programmes by electronic means, learning and interactivity are facilitated by digital tools, and information and communication technologies are used to support and improve student learning (Sangra et al., 2012). An effective online education is a result of careful instructional design and planning considering nine dimensions of design including modality, pacing, student-instructor ratio, pedagogy, instructor role online, student role online, online communication synchrony, role of online assessments, and source of feedback (Hodges et al., 2020; Branch & Dousay, 2015; Means et al., 2014).

High quality distance/online learning requires time to develop platform-appropriate resources in a careful and systematic way (Hodges *et al.*, 2020); conversely, ERT is effective in times of crisis management where all teaching, irrespective of its planned mode of delivery, is facilitated remotely at very short notice. ERT has no theoretical underpinnings; whereas distance/online learning is a distinct pedagogical concept - not just the geographical separation of learners and educators (Moore, 1973; Moore 1991). ERT entails the use of fully online teaching solutions such as video-conferencing applications and e-learning management systems for instructional delivery that would otherwise be provided in face-to-face or blended mode. ERT will usually return to previous modes of teaching once the emergency situation is over. That said, in the context of education, ERT has also fast-tracked the optimal use of online learning and opened up new opportunities and reflections towards transformative education (Ferri *et al.*, 2020). By establishing these definitions, we can look at case studies of IPE provision to differentiate ERT from distance/online learning to then evaluate how IPE has been impacted by the pandemic.

The impact of COVID-19 on Midwifery Pre-registration Education

The NMC state that they 'will only approve programmes where the learning culture is ethical, open and honest, is conducive to safe and effective learning that respects the principles of equality and diversity, and where innovation, interprofessional learning and team working are embedded' (NMC, 2019:5). The Standards of Proficiency for Midwives (NMC, 2019:4) stipulate that midwives are responsible for 'collaborating with and referring to interdisciplinary and multi-agency colleagues' as appropriate, which reinforces the importance of effective IPE at pre-registration level.

The Emergency Standards for midwifery education (NMC, 2020) were put in place in response to the COVID-19 pandemic to temporarily supersede the 2019 Standards, making significant short-term changes to programme delivery: final year students were given the option to spend the final six months of their programme in clinical practice; second year students, third and/or final year students on their first six months of study and first year postgraduate students the option to spend no more than 80% of their hours in clinical placements and 20% of their hours in theoretical learning and students in the first year of their programme would spend 100% of their programme in theory/academic learning, with

clinical placements being temporarily paused (NMC, 2020:3-8; Health Education England (HEE), 2020). In addition, social distancing measures implemented by the government, necessitated a move from 'traditional' modes of delivery e.g., face to face or blended learning (face to face and online learning) to a fully online provision for theoretical input. Indeed, IPE was not spared from the upheaval of the transition to ERT. Langlois *et al.* (2020) suggested that from a global outlook, IPE has developed in one of two ways:

1. IPE has moved to ERT resulting in the conceptualisation and implementation of new approaches to collaborative teaching and learning
2. IPE has been put aside to prioritize profession-specific learning.

The first development can be seen in institutions where IPE has been well-established and part of the curriculum; whereas the second development can be expected in institutions where IPE is still developing or where the impact of COVID-19 is severe. That said, irrespective of mode of delivery, all midwifery pre-registration providers in the UK must ensure their students 'have opportunities throughout their programme to collaborate and learn with and from other professionals' (NMC, 2018:10).

Conclusion

It is vitally important to the success of technology-mediated learning and teaching approaches in lockdown and beyond to appreciate the distinctions drawn by Edelbring (2010) between 'learning from technology', focused on content, and 'learning with technology' focused on collaboration. VLEs have frequently been criticised for their propensity to act as content repositories at the cost of promoting active learning and collaboration (UCISA, 2019). While the learning content provides valuable resources for promoting learning, it is the learning with technology facilitated through remote synchronous video conferencing and asynchronous communication channels using discussion boards, blogs, wikis and social networking platforms that can promote active student collaboration for IPE learning. The third concept, 'learning about technology' highlights the importance for educators and practitioners in understanding how students learn, recognising the possibilities offered and gleaning tips and techniques for making best use of the different learning and teaching strategies and technology tools available as key components within a carefully designed and planned curriculum.

Building resourcefulness and readiness for managing change in IPE provision in the future will continue. Lessons can be learnt from the benefits and challenges of learning in lockdown, drawing on past experience of technology-enhanced IPE: developments underpinned by theory and evidence-based to guide the design, delivery, and evaluation of IPE curricula (Barr et al., 2017; Hean *et al.*, 2018). This series of papers will identify where we have been able to build on current practice, what is new, and what we would wish to take forward.

Upcoming Articles:

Article 2: The impact of COVID-19 on Delivery/Process of Interprofessional Education: it's not all bad news

During the COVID-19 outbreak, most in-person teaching, and practice-based learning placements were suspended (Sani et al., 2020). Universities tried to provide ongoing health care and social work education through online remote education. Like most teaching, IPE was affected by the pandemic and the suspension of in-person teaching. The first article of this series will focus on the changes that occurred in the delivery of IPE during COVID-19. In considering the 3P (presage, process, and product) model of teaching and learning proposed by Biggs (1993) and discussed within the context of IPE by Freeth and Reeves (2004), the aim of this paper is to focus on 'process'. It will provide an international perspective through educators' case reports and will consider the key factors that enabled a rapid shift from in-person to online IPE, and the key aspects that had to change. A crisis can offer an opportunity to reflect and learn.

Article 3: Experiences of students of Interprofessional Education online/Emergency Remote Teaching in response to COVID-19: food for thought

This article aims to explore the extent of student experiences in doing online interprofessional education (IPE) at the pre-registration level. While IPE has always been facilitated both in face-to-face and online modes, the effects of the pandemic have forced educators and students to learn IPE fully online. In this article, we will describe the characteristics of online IPE, identify online teaching and learning activities that target IPE competencies in midwifery education, and discuss the nuanced experiences of students in online IPE. The article concludes with learning pearls on how to make online IPE more interactive, effective, and relevant especially in the midst of the changing landscapes of health professions and midwifery education.

Article 4: Experiences of academics of Interprofessional Education online/Emergency Remote Teaching in response to COVID-19: new tricks

Although IPE often lends itself to the use of online, virtual environments for delivery, for many programmes, the normal mode remained face-to-face until the pandemic hit and necessitated the immediate move to ERT. This article will explore the move to ERT for IPE programmes, from the perspective of Academics through the use of personal reflections. The role of reflective practice in healthcare is well documented and this article will explore the experience of learning alongside students that came as a consequence of ERT in the IPE arena.

Article 5: Practice based learning and the impacts of Covid-19: doing it for real

Practice-based learning (PBL) is an integral part of many professional programmes. PBL is usually associated with workplace learning undertaken in placements, but can also include simulations, role plays and case-based learning which may take place outside the workplace (Hutchings and Loftus 2012). PBL is contextualised and conceptualised as distinct from

'classroom' or 'theory-based' learning in that it enables students to gain real world experiences where they can apply the knowledge and skills learnt during their programmes and develop their capabilities through observation and participation in a variety of work-based settings. PBL contributes to meeting practice learning outcomes and competence for becoming safe and effective professional practitioners. The consequences of Covid-19 have impacted particularly acutely for PBL, necessitating reconfigurations in programme delivery and more flexible approaches for placements (NMC, 2021). The article will explore changes in provision and approaches to PBL and student placements, drawing on case studies and examples, to identify the challenges for incorporating interprofessional practice learning (IPPL) (Barr et al., 2017), opportunities for innovation, and guidance for future practice.-

Article 6: The impact of COVID-19 on the assessment of Interprofessional Education: overcoming barriers

Assessment is an integral component of teaching and learning with distinct purposes, to guide learning, provide accurate information for making formal decisions about progress and levels of achievement and for certification and quality assurance (Bloxham in Fry *et al*, 2015). Assessment frames learning by creating learning activities which orientate learning behaviour (Gibbs in Bryan and Clegg, 2006). Valid and reliable assessment approaches are key to ensuring demonstrable student attainment of learning outcomes. The process of designing constructively aligned assessment and obtaining reliable assessment measures through an online medium presents specific challenges, particularly in an emergency remote learning context. This paper will focus therefore on the considerations and adaptations aligned to the assessment of IPE within this context, including examples of the alternative assessment strategies employed by faculty; the modality of assessment and the tools utilised; the student and faculty experience of remote/online assessment and the challenges faced by both during the rapid pivot to remote learning and assessment.

Article 7: The impact of COVID-19 on Service Users' contribution to Interprofessional Education: 'still hearing you loud and clear'

The contribution of service users and carers to the teaching of health and social care students has long-since been recognised (Towle & Godolphin 2011). This is equally true of their contribution to interprofessional education (IPE) despite limited publication of their contribution. This paper attempts to redress this. It will discuss the theory behind service user and carer involvement in teaching and learning as well as providing real-life examples. For example, for more than five years, at the University of Leicester, carers have offered an interprofessional face-to-face workshop on aspects of the work of being a carer. This teaching stems from our long-standing involvement of patients and carers who share their stories in an interprofessional workshop called the Listening Workshop. The 'Carers Workshop' focusses on the work of unpaid, often family members, who are carers and support disabled family members or people of close personal interest. Similarly at the University of Bradford, service users and carers co-created a video depicting a pregnant woman which is discussed by students in interprofessional groups alongside lay-persons. In addition, a mother tells her story of the challenges of juggling multiple professionals whilst trying to care for her disabled child.

The move to ERT required modification of our IPE delivery to ensure service users and carers could still actively contribute. In this article we also focus on some of the lessons learned to ensure this could be successfully achieved.

Article 8: Top Tips for Emergency Remote Teaching: lessons learned and future planning

This final paper consolidates the key points from the series and considers what lessons can be learned from our experiences of ERT during the COVID-19 era. Consideration is given to the practicalities of ERT, including the preparation as well as the delivery and proposed outcome. The paper is written as a guide for others to draw on for future use.

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References

- Barr, H., Ford, J., Gray, R., Helme, M., Hutchings, M., Low, H., Machin, A. and Reeves, S. (2017) *Interprofessional Education Guidelines 2017*. CAIPE. <https://www.caipe.org/resources/caipe-publications>
- Biggs, J. (1993). From theory to practice: a cognitive systems approach. *Higher Education Research and Development*, 12, 73–85
- Bloxham S (2015) Assessing assessment: new developments in assessment design, feedback practices and marking in higher education. In Fry, H., Ketteridge, S., & Marshall, S. A *Handbook for Learning and Teaching in Higher Education: Enhancing Academic Practice*, (4th ed.). London: Routledge. pp.107-122.
- Bromage A, Clouder L, Thistlethwaite J, Gordon F (2010) *Interprofessional e-learning and collaborative work: Practices and technologies*. Hershey PA: Information Science Reference.
- CAIPE (2002). Interprofessional education – a definition. www.caipe.org
- Commission on Higher Education Philippines. (2021). Joint Memorandum Circular No. 2021-001: Guidelines on the gradual reopening of campuses of higher education institutions for limited face-to-face classes during the Covid-19 pandemic. <https://ched.gov.ph/wp-content/uploads/CHED-DOH-Joint-Memorandum-Circular-No.-2021-001-Guidelines-on-the-Gradual-Reopening-of-Campuses-of-Higher-Education-Institutions-for-Limited-Face-to-Face-Classes-during-the-COVID-19-Pandemic.pdf>
- Dearnley ,C, Owens M, Greasley P, Plew C (2010) Mixing Students Mixing Methods. In: Bromage A, Clouder L, Thistlethwaite J, Gordon F (Editors) *Interprofessional E-Learning and Collaborative Work. Practices and Technologies*. Hershey, Information Science
- Edelbring S (2010) A threefold framework for relating to innovations and technology in education: learning from, with and about technology. In: Bromage A, Clouder L, Thistlethwaite J, Gordon F (eds.) *Interprofessional e-learning and collaborative work: Practices and technologies*. Hershey PA: Information Science Reference, 23-33.
- Freeth, D., & Reeves, S. (2004, Feb). Learning to work together: using the presage, process, product (3P) model to highlight decisions and possibilities. *J Interprof Care*, 18(1), 43-56. <https://doi.org/10.1080/13561820310001608221>
- Gibbs G (2006) How Assessment Frames Student Learning. In Bryan, C. and Clegg, K. *Innovative Assessment in Higher Education*, London, Routledge. pp 23-36.
- Hean S, Green C, Anderson E, Morri, D, John C, Pitt R, O’Halloran C (2018). The contribution of theory to the design, delivery, and evaluation of interprofessional curricula: BEME Guide No. 49. *Medical Teacher*, 40 (6) 542-558.
- Hodges C, Moor S, Locke B, 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 29.06.21]
- Hutchings, M., Loftus, S. (2012) Practice based education outside the workplace: simulations, role plays and problem-based learning. In Higgs, J., Barnett, R, Billett, S, Hutchings, M, Trede, F. (eds). *Practice-Based Education: Perspectives and Strategies*. Netherlands, Sense Publishers
- Hutchings M, Quinney A (2015) The flipped classroom, disruptive pedagogies, enabling technologies and wicked problems: responding to ‘the bomb in the basement’. *Electronic Journal of e-Learning* 13 (2) 105-118. Available online at www.ejel.org

Langlois S, Xyrichis A, Daulton B, Gilbert J, Lackie K, Lising D, MacMillan K, Najjar G, Pfeifle A, Khalili H (2020) The COVID-19 crisis silver lining interprofessional education to guide future innovation. *Journal of Interprofessional Care* **34** (5) 587-592

Nursing and Midwifery Council (NMC) (2021) *Current emergency and recovery programme standards*. London: NMC.

Nursing and Midwifery Council (NMC) (2020) *Emergency standards for nursing and midwifery education*. London: NMC

Nursing and Midwifery Council (NMC) (2019) *Standards of proficiency for midwives*. London: NMC

Nursing and Midwifery Council (NMC) (2018) *Realising professionalism: Standards for education and training. Part 1: Standards framework for nursing and midwifery education*. London: NMC

Nursing and Midwifery Council (NMC) (2009) *Standards for pre-registration midwifery education*. London: NMC

Power A (2020) The start of an academic year like no other (Editorial). *British Journal of Midwifery* **28** (10) 357

Rogers E (2003) *Diffusion of Innovations* (5th edn) Simon and Schuster

Sani, I., Hamza, Y., Chedid, Y., Amalendran, J., & Hamza, N. (2020, Oct). Understanding the consequence of COVID-19 on undergraduate medical education: Medical students' perspective. *Ann Med Surg (Lond)*, 58, 117-119. <https://doi.org/10.1016/j.amsu.2020.08.045>

Towle, A and Godolphin, W (2011) A meeting of experts: the emerging roles of non-professionals in the education of health professionals *Teaching in Higher Education* **16**, (15) P: 495-504

UCISA (2019). *The VLE landscape*. Available from: <https://vle.ucisa.ac.uk/The-VLE-landscape.html> [Accessed 18.08.21]