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Student experiences of emergency remote teaching for interprofessional education during COVID-19

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Introduction

There is a growing interest in the use of online learning in interprofessional education (IPE) in part due to emergency remote teaching (ERT) implemented during the COVID-19 pandemic. This paper explores student experiences of online IPE considering midwifery competencies and ways to promote effective online approaches. Specifically, the paper will (1) identify intersecting competencies in midwifery and IPE, (2) describe online teaching and learning activities that target IPE competencies in midwifery education, and (3) discuss the nuanced student experiences of online IPE and ERT using case studies. The article concludes with learning pearls on ensuring the interactivity, effectiveness, and relevance of online IPE in the midst of the changing landscapes of health professions and midwifery education.

Online IPE and Emergency Remote Teaching

Recently, the impact of COVID-19 has led many educational providers to adapt to an online delivery mode. Article one in this series (Power *et al*, 2021) explores definitions of online learning and ERT, identifies the different ways that technology can enhance interprofessional learning, and discusses the impact of COVID-19 on midwifery pre-registration education including IPE. This paper extends upon this discussion by focusing on student experiences. Key terms to be discussed in this article are defined in Box 1.

Box 1: Definitions of key terms.

Online Interprofessional Education (IPE):
Two or more professions learning with, from, about each other using a virtual learning environment (VLE) as the medium for delivery. This can be synchronous (in real time) or asynchronous (flexible timing).

Emergency Remote Teaching (ERT):
An unexpected, unplanned move from face-to-face education to online provision where learning activities are devised to be delivered face-to-face are quickly adapted to be delivered in an online environment.

Online IPE And Midwifery Competencies

Despite the pandemic, the need for IPE has continued for midwifery students. Learning with, from, and about others within interprofessional teams is recognised globally as a strategy for health and social care professionals to improve health outcomes amidst the increasing complexity of the global health crisis (WHO, 2010). This is further indicated by international networks such as the Centre for the Advancement of Interprofessional Education (CAIPE), Interprofessional.Global (IP.G), Interprofessional Research.Global (IPR.G) and the International Network for Health Workforce Education (INHWE). In the United Kingdom (UK), the Nursing and Midwifery Council (NMC) stipulates the competencies and standards required for pre-registration midwifery education (NMC, 2019) and for ongoing midwifery practice (NMC, 2018). During the COVID-19 pandemic, the NMC introduced emergency standards for nursing

and midwifery education (NMC, 2020). All NMC standards include competencies to promote interprofessional collaboration (IPC), which are necessary for midwifery practice through IPE.

Box 2: Examples of Midwifery IPC Competencies

- Development and articulation of professional identity
- Effective collaboration with other professions
- Provision of safe care
- Effective communication
- Experience of providing interprofessional care

(NMC, 2019)

The NMC emphasises that midwives recognise the limits of their knowledge and practice within the boundaries of their professional role (NMC, 2018). Developing professional identity as midwives is a pivotal competence for effective IPC. Healthcare professionals are integrated into their professional fields through a process of socialisation with others (Clark, 2006; Wilhelmsson *et al*, 2012, Khalili *et al*, 2019). Through this socialisation, professionals become accustomed to the world views of their profession (Hall, 2005). Development of professional identity entails understanding the remit, jurisdiction, and boundaries of their professional roles within given situations (D'Amour and Oandasan, 2005). Gaining a strong professional identity prior to qualification as a midwife is an essential interprofessional competency. Early experience of IPE helps to prepare students for their future professional practice (van Diggele *et al*, 2020), and is one forum through which midwifery students may convey understanding of their professional identity to other healthcare professionals.

Midwives, as part of the interprofessional team, must demonstrate competence to work collaboratively and effectively with others (NMC, 2018). As fully accountable professionals, midwives are autonomous practitioners when providing midwifery-led care, and are the coordinators of care for more complex cases requiring a multi-disciplinary approach. It is vital for midwives to appropriately refer to other healthcare professionals to ensure the holistic needs of women, their babies and families are met (NMC, 2019). Through IPE, competence can be demonstrated by working with other professions to learn with, from, and about each other's roles and responsibilities. Interprofessional competencies are developed such as learning how to communicate with other health or social care professionals, assessing service users from a team-based arrangement and planning care in partnership with midwives, health professional colleagues and service users/mothers and families.

Safe practice is a shared goal for all healthcare professionals. The NMC outlines expectations for midwives to recognise signs of deterioration, to identify safeguarding issues, and to implement appropriate, safe, and timely interventions (NMC, 2018, 2019). IPE strategies such as case reviews, interprofessional team meetings, simulation-based learning, and reflective learning

provide opportunities to refine these competencies. Research has shown that health and social care professionals view their care competencies through the prism of their specific professions, which allows for the creation of different goals and competing demands when delivering care (Park, 2019). The way that different professions perceive care management priorities based on their professional worldview can become apparent during IPE sessions. By intentionally employing IPE strategies, students can have a better understanding of not only the "what" of collaboration, but more so the "why" of collaboration leading them to learn, plan, and work together with the aim of providing safe, intentional, and family-centred care.

Effective interprofessional communication with colleagues is a core competence when working within healthcare teams (van Diggele *et al*, 2020). This includes listening, making decisions in partnership with patients and families, and providing sufficient clear information to facilitate informed decision-making (NMC, 2018, 2019). During IPE, midwifery students have opportunities to hear others' experiences and perspectives, respond and communicate with their peers, and utilise enquiry-based learning towards achieving the shared goal of providing high quality care.

Online IPE is particularly challenging for students in health and social care programmes where the demonstration of clinical and interprofessional competencies with direct service user care is pivotal (Williams and Lakhani, 2010). Given that IPE must prepare students for collaborative practice in the workplace, quality care and safe practice would be difficult to achieve with a decrease in overall physical contact with service users (Rabe *et al*, 2020). This situation has occurred for many students during the pandemic as placement opportunities were affected. Although telehealth and shadowing virtual consultations have become feasible alternatives, group dynamics can still be facilitated in IPE through early planning, having contingency plans, providing advanced readings, and by balancing roles between teaching and facilitating (Rabe *et al*, 2020; Khalili, 2020). Despite the restrictions brought about by the pandemic, these interprofessional learning and working practices have continued to be actuated within online and ERT arrangements.

Student IPE Experiences of ERT

Across the world, the use of online learning has grown exponentially as a primary method of teaching and learning in higher education in response to the COVID-19 pandemic. In many health fields, educational programmes had fully moved to emergency remote teaching to accommodate the learning needs of students while staying at home. Although the challenges of adapting theoretical and clinical content to an online setup are apparent, IPE remains at the frontier of health professions' education through online IPE arrangements. Globally, students' IPE experiences have varied during the pandemic, and the following case studies provide insight into the nuances of online IPE and ERT.

Technological Considerations

Two international case studies are presented considering student's experiences of using technology during ERT (Case Study 1) and online IPE (Case Study 2). Enablers and barriers to using technology for IPE are reviewed.

Case Study 1: ERT in response to UK national lockdown during the COVID-19 pandemic

In March 2020, the UK declared the first national lockdown and when higher educational institutions closed learning was moved to online formats.

At Northumbria University in the Northeast of England, where IPE had previously adopted a blended approach using face-to-face and online activities, the university campus closure resulted in rapid conversion to ERT and a fully online asynchronous IPE programme was developed within two weeks.

Enablers:

- Students were already enrolled into the VLE (Blackboard Ultra). This aided the transition to ERT.
- Emails could be generated from the VLE providing students with information and instructions.
- Asynchronous ERT during the IPE week:
    - enabled access earlier or later in the day for those experiencing internet bandwidth constraints,
    - facilitated access during off peak times of the day for those with shortages of IT equipment at home e.g., homeschooled children competing for devices to complete online learning activities.
- Activities could be accessed by mobile phone for those without PCs, laptops, or tablets.

Barriers:

- The full functionality of Blackboard Ultra had not previously been utilised.
- Some students did not engage in the IPE activity and disconnected from the online platform.

Lessons Learned:

- It is beneficial to explore the full functionality of VLEs to ensure learning is rich and interactive.
- User guides were developed for students and IPE facilitators e.g., guides to using the discussion forums.

Case Study 2: An online IPE course for graduate students in the Philippines

In 2021, an online IPE course for graduate students in the University of the Philippines Manila (UP Manila) was piloted. These graduate students are enrolled in master's and doctorate level courses in health professions education including this IPE elective course delivered online. This graduate-level IPE course aims to develop health professions educators who are cognisant of the value of IPE and IPC within various dimensions of instruction in the context of health professions education. Through online teaching-learning activities, competencies in instructional design were honed within the context of IPE. The final course outputs were: 1) a satisfactorily designed lesson plan for pre-registration health science students in their teaching practice, and 2) participation in organising an IPE symposium.

While IPE has always been delivered in a face-to-face arrangement, the IPE course in the university had been delivered online during its pilot implementation. Although IPE, and consequently the training of IPC competencies, may have been hampered by the pandemic in terms of planning, implementation, and evaluation, the use of technology was instrumental in ensuring that IPE continues amidst the pandemic.

Enablers:

- Graduate students are working as health professionals in different fields with a certain extent of teaching experience. They must have been acquainted and trained in using educational technologies for their work
- Generally, taking IPE as an elective course implies that most of them have had experience in doing IPE and IPC and are generally highly motivated to learn
- Teaching-learning activities online included receiving feedback from local and international experts on students project proposals (IPE instructional design) using online collaborative applications, and inviting IPE experts from the United Kingdom and Australia for an IPE colloquium via Zoom.

Barriers:

- More than the issues on internet connectivity, more mature students may need to learn additional competencies such as basic digital literacies alongside IPE competencies.

Lessons Learned

- IPE, as an educational strategy, can be delivered both through face-to-face and online arrangements. This arrangement can ease the logistical, technological, and theoretical issues that are previously hindering IPE implementation in pre-pandemic times.
- For graduate students and professionals, IPE and IPC capacity building activities can be implemented fully online especially when the learning outcomes are intended to generate programs, products, processes, and publications within the context of higher and lifelong learning.

Historically, IPE delivered in an online environment has posed challenges for both facilitators and learners. Barriers include the lack of digital literacies and skills as well as the lack of technological equipment at home as illustrated in Case Study 1. Since IPE is traditionally employed through team and collaborative learning, the online arrangement reduces the "human touch" and interactivity that naturally occur in IPE (Khalili 2020). Only having an IPE experience online may deprive students and facilitators of the positive support, team learning, and dynamic interactions that naturally occur in an IPE programme as outlined in Case Study 2.

Prior to campus closure due to the pandemic, most students had already been enrolled in virtual learning environments to maximise the use of technology for learning. This enabled many students to continue their IPE courses amidst the lockdowns (Case Study 1). For some facilitators and students, attending a pilot IPE course in an online arrangement may also be advantageous through the use of collaborative applications that allow for synchronous and asynchronous group working. In Case Study 2, the use of technology also enabled harnessing global knowledge resources for consumption in the local IPE context with very minimal cost and logistical efforts.

The application of online learning to IPE is still in its infancy. Online IPE can potentially provide positive learning experiences by using innovative online strategies that promote collaboration and are supportive, flexible, and accessible for students working across all aspects of healthcare (Reeves et al. 2017). The use of technology for IPE during the Covid-19 pandemic has highlighted opportunities for interprofessional collaboration and engagement (Sharpe *et al*. 2021; Evans *et al,* 2013). However, the transition to online interprofessional learning is not without its barriers and limitations. In particular, online IPE raises concerns relating to equity and access,

particularly in low-resource settings, and areas where there may be low levels of digital literacy (Early *et al*, 2021; World Economic Forum, 2021; Nedungadi *et al*, 2018). Advancements of information and mobile technology have made it possible for online education to occur in most of the world (Khalili, 2020), however, the reality of engaging with synchronous online activities is not always feasible. The technological problems included log-on issues, being disconnected during the sessions, and malfunctioning headsets/microphones during the sessions (Evans et al. 2014). Providing opportunities for asynchronous and on-demand online IPE are potential ways of ensuring widening participation and engagement.

In addition, it is important to ensure that alongside providing such opportunities, the necessary infrastructure, equipment and skills training to undertake online IPE are provided by educational providers, employers, and the government, and that these resources reach the most marginalised, and reduce inequity related to internet connectivity and access. Case Study 1 illustrates how equity of access to technology was problematic for some students and the organisation responded by offering the opportunity to apply for funding to purchase laptops.

Theoretical Considerations

Online IPE is an emerging educational practice accelerated by ERT, and during the pandemic, students experienced asynchronous and synchronous IPE, as illustrated in Case Study 3.

<table>
<tr><th colspan="2">Case Study 3: Comparison of asynchronous and synchronous IPE delivered through ERT</th></tr>
<tr><td colspan="2">Asynchronous learning involves activities that are designed for completion at times convenient to the learner. Whereas synchronous learning involves participating in educational activities that are delivered at a scheduled time. These online approaches present a range of enablers and barriers to interprofessional learning.</td></tr>
<tr><td>Asynchronous Example: Northumbria University
During the pandemic, asynchronous ERT for IPE was delivered online in a VLE across one week to 800 students from 9 professional fields; students participated at times convenient to them as they completed IPE tasks and participated in interprofessional debates with each other and IPE facilitators in an online discussion forum.</td><td>Synchronous Example: University of Northampton
Face-to-face IPE activity for 16 health and social care undergraduate programmes was modified to an online synchronous IPE delivery during the pandemic. The activity was scheduled and delivered live, using breakout rooms to enable smaller interprofessional group discussions.</td></tr>
<tr><td>Enablers of Asynchronous ERT during IPE:
It fits around competing demands e.g., placement attendance, part-time working, and homeschooling responsibilities for learners with children or caring responsibilities.
Students are empowered to lead their learning.
Theory can be integrated by facilitators.
Students can watch videos or read articles.
There is time for reflection across the week.
Barriers of Asynchronous ERT during IPE:</td><td>Enablers of Synchronous ERT during IPE:
Enables learners and facilitators to communicate together in real time.
The length of time for student and staff participation is clearly outlined.
Facilitators are present throughout.
Theory can be taught by facilitators.
Any questions are answered immediately.
Student learning can be ascertained.
Barriers of Synchronous ERT during IPE:</td></tr>
</table>

• Students are online at different times. • Delays can occur in online conversations. • Students may interact less. • Students have to autonomously access information online; confusion is caused when instructions aren't followed. **Lesson Learned:** • Facilitators need to be online and present at the start of the week to guide students. • Instruction guides need to be clear and accessible to guide IPE activity. • Facilitators need to encourage students to engage in online conversations.	• Fixed attendance requirements create barriers. • Attendance can be impacted by scheduled sessions due to competing demands e.g. work. • Interactions in large groups are challenging to manage. **Lesson Learned:** • There is value for students and facilitators being online in the VLE at the same time. • Smaller groups are needed to enable a facilitation and student-led approach rather than didactic teaching deliveries. • The essence of IPE needs to be maintained for students to learn, with, from, and about each other.

It is likely that future IPE programmes will retain online learning arrangements adopting a blended learning format that uses both synchronous learning that is scheduled and asynchronous learning that is undertaken independently. Synchronous education can include student reporting, breakout sessions, and use of telehealth, while asynchronous education can include listening to video recorded lectures, case-based or project-based assignments, and reflective video analysis with clear and structured guidelines (Khalili, 2020).

Case Study 3 illustrates how students were provided with asynchronous IPE activities to complete in one week during ERT. This example aligns with a scoping review by Evans *et al*. (2019) who reported that online IPE facilitation is delivered more in asynchronous arrangements where the educator provides instructional materials that students work on in their own time and at their own pace. Similarly, IPE facilitators encouraged interprofessional conversations between students about the instructional materials within an online discussion forum to embed theory and to consolidate learning. To enable interprofessional learning, Khalili (2020) considers the facilitator role a prerequisite for social and cognitive presence during online IPE to promote professional socialisation and to enable students to construct meaning from their experiences.

Asynchronous IPE enables flexibility for students to participate in activities at convenient times which can be based around placement, work, studies, or childcare. The main theoretical concerns regarding asynchronous IPE relate to the challenges of forming distinctive professional and group identities whilst working virtually, risks of experiencing isolation, and feeling excluded from or unsupported with independent learning activities when they are virtual and learner led.

Case Study 3 additionally illustrates synchronous IPE activity, where students and facilitators participated in scheduled online events. Evans *et al*. (2014) found the synchronous facilitating experience to be positive due to factors such as “perceiving the students were learning” and “the

flexibility of the role". However, there are many challenges related to synchronous facilitation, particularly managing technological challenges (Hanna *et al*. 2013; Evans *et al*, 2014).

Synchronous and asynchronous learning are underpinned by distinct educational theories. Regardless of the online arrangements employed to facilitate IPE among students, it is important to apply theoretical principles. Asynchronous approaches must be clearly explained and they embody the theory of andragogy (i.e., adult learning) where education is autonomous and learner-centred. Andragogy, with broad constructivist views, occurs when new knowledge is constructed on the foundation of existing knowledge (Mukhalalati and Taylor, 2019). Synchronous activity tends to be pedagogically directed by facilitators as learners are guided through educational activities. As health professional learners, autonomy and continual professional development are essential health professional competence stipulated by the NMC (2018, 2019). Professional autonomy and capacity for independent learning, critical thinking and reflection can be demonstrated through completion of online IPE activities.

Several theoretical frameworks can underpin online IPE. Community of Inquiry (CoI) is a social constructivist framework that has three educational domains of 'social presence' to authenticate collaborative learning experiences, 'cognitive presence' to promote critical thinking, reflection and construction of meaning, and 'teaching presence' where the facilitator promotes the integration of social and cognitive aspects for learners which can guide online and blended IPE (Hayward *et al*, 2021). Gilbert and Dabbagh (2005) researched ways to structure online discussions to promote meaningful discourse (MD) between students. They defined MD as demonstration of students' critical thinking skills by linking their experience and knowledge to course content, by being able to interpret course content by analysing, synthesising and evaluating others' understanding, and thereafter, making inferences. According to Khalili (2020), the application and evaluation of the impact of MD and CoI principles in online IPE have the potential to assist facilitators and students to maintain the 'human touch', to co-construct knowledge, and to cultivate a sense of community and supportive accountability through online learning environments.

Hayward and colleagues (2021) conclude that IPE and collaborative practice offers opportunity to integrate theories and practices from specific professional fields to mutually inform and influence interprofessional teams within differing health care contexts. Online IPE therefore needs to integrate educational theories to promote interprofessional learning between students and to enhance best practice.

Logistical Considerations

Historically, IPE has been delivered in a face-to-face environment. Whilst this has provided students with a physical opportunity to learn with, from and about each other, it does have logistical challenges in relation to securing large enough teaching spaces, training faculty members in IPE, and coordinating multiple timetables. As a result of Government social

distancing measures (Gov.uk, 2020) all provision in the academic year 2020-2021 had to be moved online (Power, 2020). Case Study 5 considers the logistical issues raised by this wholescale move in mode of delivery and provides suggestions for future provision.

Case Study 4: A UK example of logistical considerations with ERT for IPE

An 'IPE collaborative curriculum' was introduced in 2019 in the Faculty of Health, Education and Society at the University of Northampton for 16 health and social care undergraduate programmes. The 'Introduction to IPE at UoN' session was facilitated face-to-face for the first cohort of students; however, the session was delivered synchronously online using a VLE for the September 2020 cohort in line with Government social distancing measures (Gov.uk, 2020).

Enablers:

- Comprehensive pre-session communication is key to give context to the content and relevance of IPE synchronous online sessions and to support students with setting up their devices for the virtual classroom
- By splitting a large group into additional rooms, the VLE's functionality is restored, allowing students to interact using functions such as chat, audio, video, screen and document sharing
- Padlets can be a valuable learning resource for large groups and a 'Truth or Myth Quiz' is a fun and engaging way to explore common misconceptions around professional roles and responsibilities

Barriers:

- The VLE Blackboard has limitations in relation to synchronous sessions for large groups with a reduction in interactivity and functionality for sessions with over 250 participants
- Unfamiliarity with the VLE can cause some students anxiety when trying to join the virtual classroom and engage with synchronous online group work
- Not all students see the relevance of IPE which negatively impacts on attitudes towards online synchronous group work

Lessons learned:

- 'Introduction to IPE' sessions should be timetabled later in the first semester to give students the time to become more digitally competent and confident with the VLE.
- To improve the student experience it is important to continue to work collaboratively with academics across the faculty to ensure IPE is seen as valuable and relevant to all programmes in the 'IPE collaborative curriculum'.

Online learning can overcome some of the logistical difficulties of IPE, such as bringing together learners from different institutions, regions, and professional programmes (Skorga, 2002; Juntunen & Heikkinen, 2004). An online format enables the creation of accessible, organised and structured learning environments that learners can access at a convenient time and location, as evidenced by Wetzlmair *et al*. (2021). Therefore, online learning has great potential to solve many logistical problems relating to implementing and delivering IPE. However, the application of online learning to IPE is still relatively new since IPE has traditionally been facilitated face-to-face. While some have found online environments easier than engaging with IPE in a face-to-face arrangement (Connor, 2003), it is important to consider that IPE is meant to prepare students for interprofessional collaboration in the real world of health and social care practices

(World Health Organization [WHO], 2010). Therefore, the effects of logistical barriers in IPE require evaluation.

Challenges of using the online teaching experience included the inability to conduct relevant practical and hands-on sessions, also the difficulty in maintaining equal opportunities for contribution and active participation between students of different backgrounds. Similar challenges were identified by both Wang (2007) and Mishra and Bartram (2002). Conducting relevant practical sessions as well as sustainability of this IPE e-learning experience remain key challenges (Abdelaziz et al,2021).

A key consideration when ensuring digital equity involves designing online IPE activities which put the users at the heart of the process, for example, through human-centred approaches (Norman, 2019). Engaging students, and in particular, involving more marginalised or excluded groups in the design of online IPE, has the potential to improve interaction and sustainability of online IPE initiatives by meeting the needs of both learners and facilitators. Such approaches also have the potential to improve student engagement and motivation through embedding educational theory within the human-centred design and implementation phases of online IPE (Hayward *et al*, 2021). For example, constructivist approaches build upon existing knowledge of students and can be used to create opportunities for online collaboration through developing virtual interprofessional communities of practice (Johnson, 2001). As illustrated in case study 3, a practical application of this might include engagement with asynchronous interprofessional discussion boards or adopting a process of defining an IPE problem, encouraging effective online participation of all students through online facilitation which scaffolds and builds upon the existing knowledge and resources of the virtual community, encouraging collaborative online working, and negotiating next steps within the online community of practice (Johnson, 2001, Wetzlmair *et al,* 2021). Integral to achieving an effective online community of practice is creating a psychologically safe online educational environment, which recognises the importance of mutual trust, participation and continued engagement with peers (Hayward *et al,* 2021).

Logistical barriers in IPE have always been concerning for educators and curriculum designers, and this spectrum of issues has evolved especially during the pandemic. For instance, before the pandemic, IPE programmes have encountered concerns about the availability of space to facilitate sessions, student-teacher ratios, schedule conflicts, resource scarcity, and availability of faculty members who can facilitate interprofessional learning in the IPE curriculum (Breitbach *et al,* 2013). During the pandemic, organisational restrictions and limited mobility of students have moved many IPE programmes to online platforms. Although this new learning arrangement resolves the lack of classroom spaces, students have minimal to no relevant practical and hands-on experiences, this introduces difficulty in equalising students' active participation in online environments (Abdelaziz et al, 2021), therefore online IPE introduces different challenges.

Online delivery has potential to solve many of the logistical barriers associated with implementing and delivering IPE. The online format enables the creation of an accessible, organized, and structured learning environment that learners can access at a convenient time and location (Evans et al, 2013*).* As evidenced by students' perception and performance, IPE distance learning experience was perceived to be valuable (Abdelaziz et al, 2021). Online IPE could provide all students with a more equal opportunity to meaningfully contribute to the discourse. Students in online IPE could have more time to construct and edit their input before sharing it with the learning community, identify challenges, explore solutions, integrate them, and resolve issues. Due to some teachers' lack of knowledge and expertise in online education delivery along with the high level of stress among students, there are concerns that poor execution of online education delivery may cause long-term negative impacts on online education as a teaching methodology (Moor, 2020).

The flexibility provided by asynchronous and synchronous online learning, when combined with human-centred and pedagogically-embedded approaches to the design, delivery, instruction and supervision provided by digital platforms may thus, overcome some of the barriers to achieving digital equity.

CONCLUSION

For midwifery students, experiences of IPE during the pandemic have varied, yet the need to promote IPC within pre-registration education remains a constant to prepare the future health and social care workforce to effectively work and learn together to provide safe and holistic care.

The following learning pearls show how online IPE can become more interactive, effective, and relevant, especially in the midst of the changing landscapes of health professions and midwifery education.

- Engage students in the design of online IPE
- Ensure equity of access for those with limited digital literacy and availability of online access by ensuring options for asynchronous and synchronous learning.
- Provide guidance and support for students and facilitators participating in online IPE programmes
- Provide clear instructions for engagement, interaction and supervision of online IPE learning activities
- Utilise the full functionality of VLE platforms to enhance students' IPE experiences.

The potential of online IPE is yet to be fully explored and evaluated; however the pandemic offered an opportunity to embrace and employ this unexpected surge of online education to promote best practice in IPE.

Upcoming article:
Article 4 will explore the move to emergency remote teaching for interprofessional education 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 emergency remote teaching in the interprofessional education arena.

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