Annex A – Case Studies

NEW PLACEMENTS

CASE STUDY 1 – Bangor University: Public health scenarios with simulation suite

Targeted audience Discipline/profession	Midwifery students
University and placement partners	Bangor University
Country	Wales
The challenge	During 2020-21 a new simulation session was developed jointly with the midwifery teaching team and the University drama department. Ahead of any student involvement, the midwifery and drama lecturers met several times to discuss the possible opportunity of developing this learning experience. The drama lecturer had previous experience of being involved as an actor in student simulations.
The solution	The student midwives were provided with the backgrounds to three public health related scenarios that they could be allocated to on the day. These related to smoking cessation, safe sleeping and place of birth. An online session was provided for the students as part of their taught theory week where the module lead and students discussed the scenarios together. The students were then placed in groups and given time to discuss the approach care provision for the given scenarios. Students were informed which two of the three scenarios they would be providing care for.
	Current and previous drama students were approached by a drama lecturer to take part in this session. The scenarios were provided in advance to the drama students, and the midwifery lecturer attended an online session with them to discuss the scenarios with them. The drama students were allocated one scenario to prepare for.
	Due to restrictions accessing the campus, the session itself was held online. On the day of the session the midwifery and drama students met with the midwifery lecturer and drama lecturer. The lecturers were available during the whole session if anyone wished to contact them. The session then ran with the drama students on a MS Teams link, with the allocated midwifery students joining at an arranged time for the scenario to run. 10 minutes were provided for the scenario, with a further 5 minutes for discussion amongst the students. Once all students had completed their two scenarios, all participants re-joined the original Teams link for a debrief.
Added value and impact	Simulated placements should provide a clear match to learning outcomes with the focus being on student priorities related to clinical experience. The format should be a realistic clinical format. If full simulation weeks are to take place, then they should directly reflect clinical placements and students must wear uniform, be encouraged to take notes, breaks, and work normal hours. Preparatory guidance should be given beforehand in the form of workbooks and guidance materials. Structured debriefing and feedback should also be provided.
	The nursing team reflected that the planning and organisation of simulation is labour and planning intensive delivery which would not be sustainable for long term simulation placements. A dedicated organiser to develop the timetable and shape the week was required plus a team of staff to deliver and write the 12 simulation scenarios suitable for a mixture of disciplines around our in-point assessment on the fundamentals of care.

CASE STUDY 1 – Bangor University: Public health scenarios with simulation suite continued

Future Plans	Our simulation provision is limited by the large numbers in some of our cohorts which makes equality of inter-professional learning difficult. The simulation facilities would be enhanced by the provision of dedicated simulation staff and skills technicians to develop and implement professional specific and inter-professional simulation scenarios. For some programmes simulated provision requires stakeholder involvement for teaching and assessment, so this will require registrants and service users.
	An All-Wales approach to funding and investment linked to professional requirements would facilitate the development of our approach. It is recognised that there are multiple challenges in finding appropriate placements with suitable supervision and assessment for our students. Enhanced investment in staffing and staff training would facilitate the provision of full inter-professional simulation placements. This is an important area for future research.
	It is also suggested that a repository of simulation scenarios, covering a variety of simulations developed by HEI institutions across Wales basis would provide a "library" of simulations that can be utilised by HEI providers. This would allow institutions to react quickly to situations where simulation may be required. It will also allow for standardisation of simulation scenarios for students within Wales. This would reduce the organisational and resource development impact down and could be accessed readily by institutions.
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CASE STUDY 2 – Cardiff University: Leadership placements

Targeted audience Discipline/profession	Occupational therapy students
University and placement partners Country	Cardiff University and Health Education and Improvement Wales (HEIW) Wales
The challenge	The development of leadership skills is often considered following registration as an occupational therapist. This approach reduces the potential impact that leadership 'at all levels of practice' can have on making the most of occupational therapy practice. Despite the challenges posed by the Covid-19 pandemic on traditional practice models this did provide an opportunity to approach practice placements differently. Working virtually, seeking to harness innovation and creativity in practice, we needed new approaches to practice placements. We needed to ensure that the occupational therapy offer was the right offer (meets the populations' needs), in the right place (accessible), and at the right time (proactive, not reactive). We needed to find a way to develop leadership earlier within our professional development pathway to enable everyone to play their role in facing these challenges.
The solution	Two pre-registration occupational therapy students completed their final practice placement, using virtual working with Health Education and Improvement Wales (HEIW). They were offered the opportunity to undergo leadership and continuous improvement training alongside project-based working across the directorate responsible for the implementation of the AHP Framework and commissioning of health education in Wales. Cardiff University Occupational Therapy programme approached HEIW Head of Transformation for AHPs, who is a registered occupational therapist and had supported student placements during previous practice as an occupational therapist. This placement was enabled by several key aspects including partnership with HEIW
	to develop a virtual workspace and learning content on Gwella, joint planning for the placement, and student openness to a new practice placement model.
	One of the challenges of this model of practice placement, from an educator's perspective was the lack of opportunity for incidental observation that comes from face-to-face practice. Additional measures were put in place to facilitate conversations to support their learning / monitor progress.
Added value and impact	The model could be enhanced through offering the opportunity for HEIW and education providers to support the leadership placement in a clinical setting. This offers the chance for projects to have a direct impact on clinical practice, for the leadership learning to be shared with a wider cohort of professionals at different levels and improve the leadership confidence of supervising practice placement educators in the service while still offering access to the leadership resources within HEIW.
	This model can be replicated and adapted to suit both clinical and non-clinical settings. The starting point would be to initiate partnership between local education providers and placement setting. Working through the placement audit together enabled the conversations around how the placement could be supported to take place. The best way to implement a new model of practice placement like this is to allow the model to evolve in response to local resources, assets, needs and challenges.

CASE STUDY 2 – Cardiff University: Leadership placements continued

Future Plans	There is a perception that the named educator is the only person responsible for student learning during practice placement. This model harnessed the knowledge, skills and perspectives of a wider range of team members to provide a more rich and complete learning experience.
	We have a number of 'alternative' placements taking place including, exploring areas where there is currently no occupational therapy service, leadership and project placements across a variety of sectors including the third sector. A revised version of this model is being considered, where the service is included in the provision of practice placements for a wider range of AHPs.
	If capacity for traditional placements wasn't a concern, there might be less appetite for exploring non-traditional/new models. Therefore, the 'hindrances' may be opening opportunities that otherwise might have been harder to negotiate.
	These innovations contribute to building placement capacity but also enabling a more fully developed and prepared future workforce with experience, not just in clinical areas but areas of policy, commissioning and leadership, all skills which underpin the future of health and social care services.
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CASE STUDY 3 – Glasgow Caledonian University: Near-peer pilot project: Occupational Therapy

Targeted audience Discipline/profession	Occupational therapy students
University and placement partners Country	Glasgow Caledonian University, NHS Lanarkshire, and NHS Ayrshire and Arran Scotland
The challenge	At Glasgow Caledonian University (GCU) we wanted to increase and further develop placement capacity in occupational therapy practice education within the NHS Boards that regularly offer placements by using a particular model of peer assisted learning. Peer assisted learning has not been well taken up in NHS services historically in occupational therapy.
The solution	Participating practice educators were allocated two students. One student was in the later years of their training, and one student earlier in their training. This enabled the two students to work together, with the "senior" student acting as a peer mentor to the "junior" student, but with both able to support each other to enable a strong peer assisted learning approach. We provided pre-placement induction and training to students and educators, and weekly drop-in support sessions to educators using the model, with the ability to contact us for support at any time.
	Occupational therapy lecturers involved in practice education at GCU partnered with two NHS Boards (NHS Lanarkshire and NHS Ayrshire and Arran). Key staff in leadership positions from all organisations met to discuss the approach and identify possible practice educators who would be well placed to pilot the model.
	This intervention was enabled by a recognised need from all parties that occupational therapy placement capacity urgently needed increasing, so everyone was on board with the overall aim. It also required a willingness to try new models from our NHS partners, particularly their practice education leads, and an ability to identify suitable "champions" to pilot the model in the first instance, as well as familiarity within the university team of the model resulting from a pre-existing partnership with the University of Sydney. Thanks to Scottish Government funding, we also had a university based secondee from NHS Lanarkshire who was able to bridge the gap that sometimes exists between the academic and practice worlds.
	The main challenge was managing the natural anxiety felt by educators and students at piloting a new model which they were not familiar with. Educators were concerned about what the boundaries of their role were within the model, and senior students were concerned that they might not know enough to be able to mentor a junior student. We dealt with these concerns through preparation, support, and drop-in sessions.

Case Study 3 – Glasgow Caledonian University: Near-peer pilot project: Occupational Therapy continued

Added value and impact	We were able to achieve four paired placements for occupational therapy students in our pilot, which was four more placements than we would have been able to offer otherwise. It is hoped that we can scale this approach up more widely and ultimately it will result in more placements. It also had the effect of increasing confidence in newer, or more contemporary, models of practice placement.
	Early indicators are that the model assists with vital co-working and communication skills in both students, as well as reinforcing specific clinical skills, particularly for the senior student. Junior students can feel "safer", as it is easier to ask questions and check understanding and comprehension with another student than with an educator. Educators can clearly assess student team working and peer support and may feel alleviated pressure due to the ability of students to support each other.
Future Plans	One of the most significant aspects preventing further innovation in this area is culture. Within the Allied Health Professions there is a long history of "apprentice" type models of practice education, with one educator working with one student. Increases in student numbers to meet future workforce demand, decreases in practicing workforce numbers and the Covid pandemic has all meant this is an unsustainable model long term, but changes in practice are slow to materialise.
	In the future, larger pilots and roll out of this model are planned amongst a range of peer assisted learning approaches, and a range of simulation and role development approaches across the allied health professions at GCU. Without this cultural gridlock however, this would happen much more quickly and without the need for such extensive piloting. This would ensure that all allied health students gained the placement hours required to graduate and provide the future workforce Scotland and the UK needs creating a dynamic, forward thinking, innovative and creative workforce through the exposure to new ways of working.
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CASE STUDY 4 – University of Birmingham: Advancing leadership practice education experience

Targeted audience Discipline/profession	Physiotherapy students
University and placement partners Country	University of Birmingham and University Hospitals Birmingham NHS Foundation Trust England
The challenge	Effective leadership skills are essential in the provision of high-quality patient-centred care. It is therefore vital that physiotherapy students are exposed to leadership practices in their clinical experience prior to qualification in order to facilitate theory-practice integration. The acute challenges in physiotherapy practice education provision resulting from the broader impact of Covid-19, ongoing recovery plans from partners and providers, increased competition, and demand from other Higher Education Institutions (HEIs) in the region were recognised as a potential threat to the timely graduation of healthcare students. Therefore, a collaborative approach to practice education was taken between the University of Birmingham and the neighbouring University Hospitals Birmingham (UHB) NHS Foundation Trust to provide ten physiotherapy placements in an area of practice education focusing on leadership.
The solution	The placement planning was undertaken by a physiotherapist and dietician based at UHB Trust alongside a physiotherapy academic from the University following initial consultation with Kent and Medway AHP Faculty on their Leadership Placement. All stakeholders were keen to be involved in the project as it realised a significant number of additional placements in the region and provided a valuable learning experience for the student. It also allowed contribution from clinical managers to support student activity and thus demonstrated role-modelling to their team. This innovative model of Practice Education has not only enhanced existing relationships with UHB Trust but has also been disseminated and shared as best practice with neighbouring NHS Trusts.
	The most challenging aspects of the planning process were the co-ordination of Clinical Team Leads with further Covid-19 disruption, alongside managing students' expectations of a non-clinical practice education experience.
Added value and impact	Feedback from students and staff involved in the placement was extremely positive and a selection of narrative is recorded below. One of the most significant impacts of this placement was the positive effect on other Trusts to provide their own leadership placement, thus realising significant increases in numbers of physiotherapy placements in the region.
	"I have enjoyed working and delegating within a team. The focus on mental health and wellbeing was particularly good"
	"I will be more willing to engage in service improvement. As a Band 5 I will be more confident to make suggestions and help senior staff where appropriate"
	Throughout the placement a 'Safe Space' for discussion was encouraged and the team in its entirety were collaborators on the project. Regular check-ins were utilised as well as 1:1s with the student's choice of staff member to ensure mental wellbeing on a virtual placement.

CASE STUDY 4 – University of Birmingham: Advancing leadership practice education experience continued

Future Plans	Feedback from students was that they would have liked increased time in the hospital environment therefore the next leadership placement will increase the project time from one week to two. More advanced planning and further resources were also welcomed by students as well as suggestions to situate the leadership placement earlier on in the student's clinical career to be able to implement what they had learned on future placements.
	The strengthened relationship between the university and UHB Trust has yielded further improvements in practice education and encouraged further cross working with other HEIs in the Birmingham and Solihull region. With further funding to support staff to supervise students on placement this work could be expanded even further.
	It is planned that future Leadership Placements will adopt an interprofessional learning model with students from medicine, nursing, occupational therapy, dietetics and speech and language therapy collaborating with physiotherapy students and run across a variety of HEIs in the region.
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COVID RELATED PLACEMENTS

CASE STUDY 5 – Leeds Beckett University: Working together – Student SLTs running an aphasia communication group

Targeted audience Discipline/profession	Speech and Language Therapy students
University and placement partners Country	Leeds Beckett University England
The challenge	This intervention represents a new pedagogical approach to Speech and Language Therapy (SLT) placements using blended learning, a 6:1 student to educator ratio and virtual placements. A communication group was set up together with student SLTs and people with Aphasia. The aim of the project was to address individuals with aphasia who had become isolated due to Covid-19 and the significant placement shortfall that Covid-19 had created. Student objectives included developing students' understanding of aphasia and clinical skill development through simulated case studies.
The solution	An online aphasia group for 12 people with aphasia and six students was set up. The group met once a week, for six weeks, co-led by people with aphasia and the students, with one SLT acting as practice educator providing student supervision. The group took place in the morning for 1.5 hours with the afternoon spent engaging in case study simulated activities. This facilitated social communication opportunities for people with aphasia as well as facilitated learning opportunities for students through working with people with aphasia, practising supported conversation techniques and talking to the group members about living with aphasia. Case studies were designed to support students developing their knowledge and understanding of aphasia. Simulation work also supported clinical skill development such as taking case histories, planning evidence-based intervention, making care plans, and writing therapy notes and reports. Key enablers of this intervention included evidence of the benefit to people with aphasia, longstanding University history of engaging people with aphasia, HCPV flexibility, and Clinical Placement Expansion Programme funding.

CASE STUDY 5 – Leeds Beckett University: Working together – Student SLTs running an aphasia communication group continued

Added value and impact	People with aphasia reported:
	'All that we do is to help the students, but it also is very rewarding for me as it helps me to feel needed'.
	'Being in the group motivates me to speak more, and students are learning more about aphasia'.
	The students all passed their placements with positive feedback. They reported that they learned a lot from the experience, liked the online format, and the balance of working with people with aphasia and the simulated case study. Students appreciated having more independence and autonomy; they felt trusted and increased their organisational skills and confidence.
	'It's good that we're able to practise doing telehealth and leading things online because that's the way it's going anyway so actually, it prepared us for the current workplace'.
	'I think with a standard placement you're so busy seeing clients that you sometimes don't get that time to reflectto work, like problem solve through decisions and really pick apart the clinical decision-making process'.
	The lead SLT provided positive feedback and is now running the group for a second time. The University lead reflected that this placement provided the students with excellent learning in aphasia and increased adult placements. Staff reflected that the simulated learning could be tailored to meet learning needs and enabled students to see the whole client journey, from referral to discharge, which isn't always possible in placement.
Future Plans	To make the group sustainable, it needs ongoing funding for a practice educator to supervise the students. Future projects would also need funding for set up, buy-in from local practice educators, and recruitment of participants who are willing to work with students.
	Nonetheless, further projects are planned with other groups including voice disorders, children with autism and people with Parkinson's disease however with funding for lead practice educators these groups could start right away, benefitting service users and increasing student learning.
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CASE STUDY 6 – London South Bank University: An evaluation into the effectiveness of a 5:1 physiotherapy student supervision model

Targeted audience Discipline/profession	Physiotherapy students
University and placement partners Country	London South Bank University and the Royal National Orthopaedic Hospital NHS Trust England
The challenge	During the second wave of Covid-19, the Royal National Orthopaedic Hospital NHS Trust (RNOH) required additional people to manage patients safely and effectively during this unprecedented time. The student population, especially physiotherapy students, still required practice learning opportunities to successfully graduate, therefore a multi-student peer learning placement model was discussed and agreed by the RNOH and London South Bank University (LSBU) to help re-enforce the workforce as well as providing valuable practice learning hours to students, effectively creating a 'win:win' situation for the RNOH and students.
The solution	Students, clinicians and academic staff from the RNOH and LSBU participated in the implementation and organisation of a 5:1 multi-supervision model during January and February 2021. The following model of practice learning was agreed:
	The head of therapies at the RNOH and the London AHP lead for NHS England and Improvement initially discussed how students could bridge the gap between the current workforce and patient need during the pandemic. At the time the main issue was how to manage the Covid-19 patients during the second wave of pandemic.
	Contact was then made with academics from London South Bank University who had a placement shortage for physiotherapy students at that time. An initial meeting was organised between RNOH and LSBU to discuss the logistics and a 7:1 model was initially agreed before moving to 5:1.
	The Education lead from the RNOH prepared the processes around risk assessments, training, and access to training resources while Practice Expansion Facilitator organised inductions and Covid procedures.
Added value and	Student feedback included:
impact	'It was such a confidence boosting experience when we were with each other. So that just made the whole thing 10 times better'
	'In the first [week] what we received was absolutely amazing because we felt confident going into the second week, that oh no, it wasn't as daunting as we thought it would be, we're ok, we're in good hands, we've got the support that we need on the ward, off the ward whenever we need it to be honest'.

CASE STUDY 6 – London South Bank University: An evaluation into the effectiveness of a 5:1 physiotherapy student supervision model continued

Future Plans	At the time this placement took place, Covid-19 was leading to an increasing number of admissions and staff were extremely busy, however, staff felt unsure if the 5:1 model would work on the wards outside of Covid. A similar model is utilised for the nursing staff and therefore may be a long-term option but requires further trial and assessment. However, it did encourage clinicians to consider changing their practice and taking more of a 2:1 model.
	I only take one student or have only taken one student and I think it opened my eyes to how having two could potentially work in terms of peer support, buddy support, and their support to each other.
	After analysing the results from both the staff and students focus groups, recommendations for future multi-student practice learning models have been identified. These include additional preparation time, continual communication, and further training for clinical educators.
	For students recommendations included introducing at least a 2:1 model going forward to allow for peer support, providing opportunities in other areas of physiotherapy, providing more notice to students including more details about placements, dedicated inductions.
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CASE STUDY 7 – Northumbria University: Facilitating regional SSSA prep during the pandemic

Targeted audience	Nursing Students
Discipline/profession	Nulsing Students
University and placement partners	Northumbria University
Country	England
The challenge	Planned preparation for the standards for student supervision and assessment (SSSA) training was impacted at the start of the pandemic as Practice Placement Facilitators (PPF) and educators readjusted to support front line services during these unprecedented times. The regional Higher Education Institutions (HEIs) had through a separate project commissioned and managed a practice education website hosted by Northumbria University to enable easy access to private, independent and voluntary organisation (PIVO) training. It became clear that this website could provide part of the solution to facilitate access to SSSA training and resources across the region during the pandemic.
The solution	The Regional PPFs and HEI's worked together to develop an online learning offering hosted on this website. The aim of the training was to ensure that NHS and PIVO staff under extreme pressure, who still needed to support students using Future Nurse Standards had a mechanism to deliver this. This approach would ensure ongoing training of the regional nursing workforce and take pressure off the educational teams.
Added value and impact	The training was agreed by all regional stakeholders and the website link shared across all organisations. To date over 4,500 staff from across the Northeast of England have accessed, completed, and printed out a certificate. The feedback from participants and our providers is that this is an extremely valuable approach that ensured that their staff were able to convert from mentor to Practice Assessor roles easily, prepare the next generation of Practice Supervisors and allow continued flow of applicants on to the Practice Assessor master classes. This approach has improved regional working relationships and set a minimum standard that allowed continuation of student support supervision and assessment through one of the most challenging periods. The Trusts would like this approach to continue, and we now work together to update and maintain the offering to ensure that it remains contemporary. This training and website offering is now used as a blended approach with some Trusts resuming their face-to-face training to complement the initial preparation undertaken via this approach.
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CASE STUDY 8 – University of Chester: Oversight of students undertaking practical placements where there is no suitably registered professional

Targeted audience Discipline/profession	Nursing Students
University and placement partners Country	University of Chester
	England
The challenge	The University of Chester's Faculty of Health and Social Care is continuously driving forward ideas to build capacity in Health and Social Care (H&SC) practice placements to be able to meet the demand of student places but also to give a wide and varied practice experience. We are working with NHS partners to adapt ways of working to enhance capacity, but the area of biggest growth opportunity is through our Private, Voluntary and Independent Organisations (PIVOs).
	Engaging with non-traditional placements not only helps create holistic practitioners, but it also drives forward placement capacity. It is vital that health education providers support and promote a positive balance of health and social care experiences.
	HEIs providing pre-registration nursing education have been challenged since 2018 by the implementation of the Standards for Student Supervision and Assessment (SSSA) where practice supervisors are required to be health or social care registrants. Many PIVOs do not have H&SC registrants (e.g. NMC, HCPC) to be able to independently support and assess students.
The solution	During the Covid-19 pandemic, The University of Chester introduced a long arm supervision and assessment model to provide the registrants for the practice areas. This is provided by the University using a dedicated team of visiting practice lecturers. The University currently have 11 long arm supervisors and assessors working on a flexible basis to meet the needs of the student and the practice areas. This model relies on the University to provide H&SC registrants to each of these new placements to meet the NMC regulations. Some HEIs are proposing something similar to this model but using their current academics, this more financially sustainable model allows full coverage of PIVOs without additional permanent staff.
Added value and impact	This has re-ignited the ability to work within alternative and innovative placements, that extend beyond the NHS, by providing students with placement opportunities to learn to communicate effectively with people across the lifespan including those people with learning disabilities, challenging behaviours, communication and language difficulties and clients with mental health needs, across diverse cultural and situational backgrounds. New placements that have not previously worked with HEIs before are also being supported which offer a unique experience for H&SC students.
	Students have been involved in trialling this model and the evaluations have been extremely positive allowing us to demonstrate the benefits and gain buy in from faculty and new practice partners.
	The overall impact has been that PIVO placements that has been unused since the implementation of the SSSA have been re-opened and students are gaining the expertise from these areas. The future is exciting as more of our long arm supervisors and assessors are supporting practice in our communities allowing more placement capacity.
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CASE STUDY 9 – University of Roehampton: Covid-19 vaccination centres as placements for Pre-Registration Nursing students

Targeted audience Discipline/profession	Nursing Students
University and placement partners Country	University of Roehampton and NHS South West London CCG England
The challenge	Throughout the pandemic there has been a documented reduction in clinical placement availability for pre-registration student nurses, resulting in providers of nurse education considering alternative approaches to traditional placements. There is minimal literature exploring the involvement of student nurses in vaccine administration, however the guidance provided in the UK allows for the option of administration of these vaccines by student nurses. Our project demonstrates how an innovative approach has addressed this gap in knowledge by allowing student nurse involvement in vaccination programmes and making recommendations that can be used to guide others in adopting similar strategies nationally and internationally.
	The focus of the innovation was to provide pre-registration student nurses with a unique opportunity to gain insight into the set up and management of a Covid-19 vaccination centre and enable them to participate in vaccine administration. Learning gained from the experiences of these student nurses was used to make recommendations on the involvement of student nurses in future vaccine administration. This work may also inspire others to consider the wider learning opportunities available for nursing and other healthcare students in vaccination centres.
The solution	A collaborative approach was adopted in the implementation of this unique opportunity. This involved the Nursing Practice Learning Team at the University of Roehampton, Sutton Training Hub and NHS South West London Clinical Commissioning Group (CCG). Placement opportunities included participating in setting up new vaccination centres, gaining experience in the management of a Covid-19 vaccination centre and vaccine administration. A Covid-19 training practicum was created involving online and face to face learning, which was then supplemented by onsite training and competency assessment. Students were supported in their placements by a Practice Supervisor and the nursing team at the University of Roehampton.
	Before their placement, students were given a survey to record their thoughts about the placement, particularly how they felt about administering vaccinations and their experiences of completing the practicum. At the end of the placement students were asked to complete an end of placement evaluation survey to gain further understanding of their experiences.

CASE STUDY 9 – University of Roehampton: Covid-19 vaccination centres as placements for Pre-Registration Nursing students *continued*

Added value and impact	Findings demonstrated that students were hesitant and nervous at the beginning of the placement period. However, after completing the placement, feedback demonstrated that students found the placements to be excellent learning environments where they developed a wide range of clinical skills and increased their understanding of communication, leadership and management. The students felt, however, that the role of a student nurse in these centres could be better defined to enable staff supporting their learning to have a greater understanding of appropriate learning opportunities.
Future Plans	The University of Roehampton is continuing to offer placements for nursing students in Covid-19 vaccination centres. In response to both student feedback and from verbal feedback received from the mass vaccination centre teams we have developed our approach to ensure further support to these clinical areas in understanding the role of the student nurse.
	There are many Covid-19 vaccination centres across the UK with the potential to provide further high-quality placements for nursing and other healthcare students. This could help increase placement capacity in areas that are experiencing a reduction in placement availability. For others to implement this innovation, we would first encourage practice learning leads to contact the relevant practice partners/mass vaccination centre coordinators and identify clinical settings appropriate for student nurse placements. Structures must then be put in place to prepare and support both students and vaccination centre clinicians.
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BLENDED LEARNING

CASE STUDY 10 – Canterbury Christ Church University: Introducing and establishing virtual practice learning

Targeted audience Discipline/profession	Nursing Students
University and placement partners Country	Canterbury Christ Church University England
The challenge	In Autumn 2020 it was identified there were pre-registration adult nursing students unable to attend placements due to either being assessed as high risk for Covid-19 or supporting shielding relatives, impacting on their progression and completion of their course. There was a concern that many students may need to interrupt their studies or withdraw completely, having a knock-on effect on the pipeline of newly qualified adult nurses entering the workforce, at a critical time for the health and social care services. Initially Virtual Practice Learning (VPL) aimed to provide for second- and third-year pre-registration adult nursing students in January 2021 however additional VPL created experiences were created for all pre-registration adult nursing students, delivering 635 hours of VPL between January and August 2021.
The solution	The first step was to research VPL across the UK and internationally, undertaking literature reviews and attending HEE webinars. The VPL experiences were developed and facilitated by an Academic in Practice, who created a template. To engage the students, the content needed to be relevant to current health and social care policies and complement the curriculum. Learning outcomes were guided by NMC Future Nurse platforms and topics were determined by the NHS Long Term Plan and recently published health reports. Content was also influenced by the RePAIR project and the university's Closing our Gap strategy aimed at reducing the attainment and attrition gap between our BAME and white students.
	A key feature would be introducing the students to practitioners and expert groups, brimming with passion, experience and up to date knowledge. This tactic paid off and live sessions were arranged with practitioners, patient groups, local services and national bodies. We highlighted the potential benefits of participation, such as increasing awareness of services, promoting multi-disciplinary working and supporting recruitment. We shared student feedback after the live sessions to be used for personal development and revalidation. It was important that all our students felt represented, so we took the time to seek out male and female practitioners of different ages and ethnicities, prioritising black nurses in specialist and leadership roles. Canterbury College Supported Learning students used the live event to meet their own 'World of Work' learning outcomes and the college subsequently awarded us the Outstanding Employer Award 2021.

CASE STUDY 10 – Canterbury Christ Church University: Introducing and establishing virtual practice learning continued

Added value and impact	The flexible nature of VPL lends itself to inclusivity, with timetables that could be adapted to individual needs. All live sessions were recorded for students to revisit. Varied resources were provided and web accessibility was checked for presentations with the opportunity to access them independently. We were aware that a programme entirely run online might cause challenges for students less confident with technology, so created pictorial guides with links to support webpages and directed students to existing university resources. We provided individual and group support sessions and encouraged the more adept students to help their peers. The introduction session was crucial to set expectations and reiterate the link to practice at a local, national and global level. Although we devised learning outcomes for each experience, students were encouraged to develop their own, facilitating independent critical thinking. The review session demonstrated the authenticity of the VPL as we shared projects, pulling out themes and linking them to their future practice. However, in a programme where autonomous learning and selfmotivation is vital, we needed to get the students on board from the start. As a new approach to practice learning, they needed reassurance it met NMC requirements and contributed to professional development. A recorded presentation introducing VPL was released prior to Q&A sessions, where students raised points we had not considered, informing further development of the plans.
Future Plans	VPL is now incorporated into our adult nursing programme, replacing aspects of simulation to promote more meaningful learning in partnership with practitioners, however, there is a maximum of 300 hours simulation per programme and therefore opportunities are restricted. Within our faculty, VPL is included in contingency planning for placement challenges. Our VPL template has been shared with placement providers creating blended practice learning, helping to expand capacity and learning opportunities. VPL could provide our students with a broader view of the health and social care landscape, greater understanding of patient journeys with potential for interprofessional education.
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CASE STUDY 11 – Cardiff Metropolitan University: Speech and language therapy telehealth placements

Targeted audience Discipline/profession	Speech and Language Therapy students
University and placement partners Country	Cardiff Metropolitan University
	Wales
The challenge	During the Covid-19 pandemic, NHS placements were greatly reduced and Speech and Language Therapy (SLT) students, who are dependent on placements to gain essential specialist experience were potentially going to be disadvantaged. The SLT staff at Cardiff Metropolitan University therefore arranged for specialist practitioners from the NHS to provide short online virtual placement opportunities where students joined Microsoft Teams meetings for presentations and Q&A sessions. The idea was that students were given the opportunity to gain insight into specialist practice and how patient management strategies are approached.
The solution	The next step was then to organise for students to join 'virtual placements' via telehealth appointments with NHS staff. Students were able to observe virtual consultations, and by being pre-prepared for the sessions students were able to observe practitioner/patient interactions in a way that negated the need for practitioners to teach simultaneously whilst online with patients.
	This approach was a great success, 45 students initially took part in the virtual placements and reported that the sessions gave them insight into specialist practice and knowledge before they attended the virtual consultations, reduced anxiety, and increased confidence whilst giving context to the practitioner/patient intervention.
Added value and impact	The SLT team have continued to adopt this model during this academic year with another 44 students taking part. To reduce the issues with IT access from home or potential lack of equipment at home, the specialist sessions have taken part on campus in our simulation suite. The concept of pre-preparing for placement and being able to practice scenarios and ask questions reduces anxiety and helps to keep the focus on service users during consultations with practitioners, as students access the placement with prior knowledge.
Future Plans	Our ambition would be to stream short sessions with NHS specialists for all our AHP programmes, we aim to develop a debrief space on campus and equip this with screens and access to Microsoft Teams or the ability to playback videos to facilitate this. This concept would help to ease pressure on clinical educators during student placements as they could impart knowledge to large numbers of students at the same time, which would allow them to receive pre-prepared students onto placement or virtual placement.
	Technology in the format of telehealth consultations is gaining interest in terms of its application to the digital generation and the provision of healthcare delivery. Therefore, our plan is to widen student's access to technology such as online instructional sessions and online placements. This will increase the opportunity for students to develop their understanding and skills in the application of technology whilst increasing confidence and constructing new knowledge within their own professions and the wider health care team.
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CASE STUDY 12 – University of Brighton: The creation of a remote quality assurance in placement learning experience

Targeted audience Discipline/profession	Nursing students
University and placement partners Country	University of Brighton England
The challenge	In 2019, the University of Brighton implemented the NMC 2018 Professional Standards successfully into our curricula, alongside the implementation of the South Practice Assessment Document (PAD), a HEE initiative to have a common assessment document across HEIs. In response to the challenges brought by Covid-19, a new remote placement opportunity was developed enabling the team to meet the challenges and offer additional support to learners during the pandemic. The objective was to provide students with a remote placement in which they can grow, develop and have opportunity to achieve PAD requirements. This was open to all students across all
	years and fields on the BSc (Hons) Nursing Programme.
The solution	Since January 2021 the team have implemented Quality Assurance in Practice Learning (QAPL) covering a whole placement initially for a small number of shielding students. This rapidly grew to include students with additional health and social needs and when pre-planned placements closed due to Covid-19 restrictions and changes in activity. 42 students had a QAPL placement lasting between 4-22 weeks.
	Delivery of this placement was enabled by experienced Practice Learning Leads, lack of other available placements, NMC recovery standards, Microsoft Teams, and student enthusiasm for QAPL.
	QAPL is a part-time or full-time placement, where Practice Learning Leads were allocated as PAs to students who undertake a range of quality assurance activities including placement audits, creation of placement resources, undertaking quality improvement projects, and research projects.
	Students attend a weekly team meeting to review progress, facilitate the students' achievement and to set objectives for the week, this also enabled peer working and peer review.
Added value and impact	The QAPL provided students the opportunity to achieve professional values, proficiencies and practice hours when they would not have been able to do so. It facilitated completion of the programme in a timely manner and enabled students at earlier stages of their training to progress on their course and helped to reduce attrition.
	The experience gave students new insight into the quality standards which support delivery of the nursing course. As the placement integrated learning across all adult, child and mental health fields, it provided links to theoretical quality and leadership modules.
	The whole experience was very enjoyable and very interesting. It showed me the other side of nursing – the non-clinical one I have improved and developed skills of time management, patience, independent working, problem solving, communication between fellow placement attendees, practice assessors, staff of GP surgeries I was auditing.

CASE STUDY 12 – University of Brighton: The creation of a remote quality assurance in placement learning experience *continued*

Future Plans	Reducing the overall number of students at one time and having more lecturers in the PA role to support would both help. Going forward the plan is to use the Shifts function in MS Teams to accurately record student activity/hours whilst on QAPL. It would also be beneficial to have proactive recruitment to this placement.
	The implementation of QAPL is highly recommended to all HEIs. It is a valuable placement experience for learners and an excellent opportunity to update and improve placement learning resources for HEI and practice partners, however extension of the QAPL is presently limited due to resourcing limitations and sufficient numbers of lecturers with workload allowance to effectively facilitate a PA role.
	The successful implementation of QAPL has motivated the team to introduce and undertake other alternative placement options, and to offer every student to undertake a QAPL or research placement, complementary to physical placements.
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CASE STUDY 13 – University of East Anglia: Peer enhanced e-placements

Targeted audience Discipline/profession	Operating Department Practitioner students
University and placement partners Country	University of East Anglia England
The challenge	The first Peer Enhanced e-Placement (PEEP) was created as an emergency response to Covid-19 suspended placements. It was delivered entirely online by the Occupational Therapy academic team at the University of East Anglia with placement learning outcomes at the heart of its design. The PEEP is a sustainable and accessible practice placement education option assisting with ongoing placement capacity issues whilst providing quality and enhanced learning experiences. The PEEP model is underpinned by well researched online and peer group pedagogy and is delivered through simulation and technology-enhanced learning. Working live with service users who are in the practice setting is possible via higher education virtual learning environments or online platforms.
The solution	Working in partnership with online learning specialist researchers and practitioners, a model was developed based on the PEEP experience that could be understood and adopted by others. From that a PEEP acquisition experience was built. The acquisition experience is a 'flipped' learning event, based on prior work and a half day online synchronous workshop working directly with placement teams. It enables placements teams to quickly understand the benefits and to adapt the PEEP for their students. Following the acquisition experience pilot in Summer 2020 it has been rolled out across 20 health and social care professions, with 63 practice based (PB) and higher education institution (HEI) placement teams. In addition, a PEEP 'contextualisation project' engaged with the Operating Department Practitioner (ODP) profession to explore the profession's future aspirations and to implement PEEP for ODPs nationally. A change in culture was required to adopt and colleagues needed considerable shifts in their understanding, in order to see the benefits of online delivery of practice placement education.
Added value and impact	The PEEP acquisition experiences created the potential for more than 13,000 weeks of online placements. PEEPs were implemented in 2020 and 2021 across the UK in occupational therapy, diagnostic radiography, orthoptists, speech and language therapy, nursing, physiotherapy, operating department practitioners and dietetics, with consistently positive feedback from staff and students reporting learning gains, through the design and structure of the online delivery, as well as additional learning benefits. PEEPs were led by HEI, PB or combinations of HEI and PB placement teams, as online simulation and/or technology-enhanced care delivery, fulfilling professional body practice placement education requirements and assessment criteria. The flexibility of the PEEP is a key feature of its appeal. It enables specific clinical specialities, scenarios, concepts, and areas of learning for all students, including those inaccessible through usual face to face placement provision. Quality is assured due to PEEP's strong pedagogical principles and structure.

CASE STUDY 13 - University of East Anglia: Peer enhanced e-placements continued

Future Plans PEEP has proven sustainability and scalability beyond the first 'original emergency' response. The PEEP acquisition experience is now well rehearsed and highly acceptable to staff involved in placements across the sector. Digital healthcare service provision is continuing apace making online modes of practice placement education and learning for healthcare students even more important. Emergent additional learning benefits, large numbers of students completing the PEEP simultaneously, the ability to design a PEEP once and deliver multiple times, the widescale adaption and adoption of PEEP across health professions, the feedback received, and additional research undertaken, together demonstrate that PEEP offers a desirable legitimate and sustainable practice placement education model. Ongoing PEEP research continues to provide additional evidence on the student experience and the impact of wider innovation, to further underpin the PEEP and develop the model. Current funding limitations restrict delivery of PEEP acquisition experiences to maximise the adoption and potential benefits. Funding needs to be assured for the longer term to support teams implementing the PEEP. Central repositories of PEEP core content accessible for placement teams across professions would assist with efficiencies, when organising PEEPs at a local level. The ideal impact would be for every health course in the UK to include one online PEEP as part of placement provision, adding reported PEEP learning gains to the student practice placement education experience, providing bespoke practice education preparing students for a digital future in healthcare. Professor Lisa Taylor (Lisa.Taylor@uea.ac.uk) Contact

CASE STUDY 14 – University of the West of England Bristol: Virtual mental health placements

Targeted audience Discipline/profession	Adult Nursing students
University and placement partners	University of the West of England Bristol
Country	England
The challenge	The University of the West of England (UWE) Future Nurse curriculum has built in a 2-week experiential placement designed to enable students to experience cross field activities in their second year. Planning for this took place before the change of provision of many community mental health services due to pandemic related social distancing restrictions on visiting clients in their homes. In addition, many of the Private, Voluntary and Independent Sector providers had closed to students due to Covid-19 visiting restrictions. As a result Over 50 adult nurses could not be placed in mental health services. As is the case during the pandemic, small elements of teaching and learning packages that already existed were revised and adapted for online and blended delivery. In this situation, a case study designed for Mental Health nursing students to span a week was expanded and extended to be delivered virtually in care groups.
The solution	Students had a mixture of information introducing them to Sam and his family via webinars and reading material. We also used Open University materials to support the delivery of the Mental Capacity Act. The concept for these 2 weeks was the unfolding care of Sam as events change and the students are alerted to new episodes in Sam's health. They work together in groups to keep care planning, share learning and resources and add new information, for example physical health care issues and medicines management. Groups presented their care plans and overall work and learning in the final sessions.
Added value and impact	Evaluation of the 2 weeks was positive and showed that adult students, many of whom had cared for clients with mental health needs in adult settings, had not appreciated the background care and the rationales for this. In addition, giving in depth reading of medicines management and issues associated with long term physical health needs was beneficial for their future care management and referral skills.
	The main challenge of this model of delivery had been anticipated as ensuring full participation outside the taught and delivered session. However, this did not manifest as students readily engaged and were guided by tutorial support. The "story board" was developed for a different purpose and scale and the team were able to flex content as students responded.
Future Plans	This exercise is now being adapted for other student professional groups so that there is more feature on that profession. For example, paramedic science will use this to replace a series of Crisis Team placements that are not available in large numbers.
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SIMULATION AND TECHNOLOGY ENABLED PLACEMENTS

CASE STUDY 15 – Anglia Ruskin University: HoloLens: Hilda's home

Targeted audience Discipline/profession	Nursing students
University and placement partners Country	Anglia Ruskin University England
The challenge	The Faculty of Health, Social Care and Education at Anglia Ruskin University (ARU) is increasing placement capacity and skills teaching using HoloLens¹ mixed reality technology transporting students directly into a service user's home. ARU has significantly increased the recruitment of health care students, almost doubling the student nurse intake in 2020 and 2021 compared with 2019. Finding sufficient placements for these students however is a challenge. We had already developed a successful virtual simulated placement (VSP) for 22 nursing students. The challenge was how do we make it even better for a second cohort of 23 students and keep them engaged when learning from home. The aim of using HoloLens was to create an authentic placement experience that could accommodate potentially hundreds of students while being engaging and high quality.
The solution	We used HoloLens and dynamics 365 remote assist and teams to send a secure live feed from Hilda's Home, an 85-year-old disabled service user, to 23 students learning from a distance. Setting up the technology and learning how to manipulate objects smoothly in the mixed reality environment were the most challenging aspects. The Director of Learning, Teaching and Assessment (DLTA), worked with ARU IT to procure and set up the HoloLens and link it to the University office 365 environment.
	The DLTA visited Hilda in her bungalow and wore the HoloLens. The students were able to view everything that she did. In addition, the DLTA could engage with both the students in a holographic projection of a Microsoft team's meeting and Hilda. Before the visit, the students had spent two weeks learning about Hilda in the virtual simulated placement via Canvas Learning Management System. The HoloLens visit enabled a large group of students to 'meet' Hilda in a meta-evolved learning experience reducing the risk of Covid-19 transmission to both the students and service user. Prior to the visit, the students had prepared questions for Hilda. The students could engage with the service user via the HoloLens wearer, who asked Hilda the questions. Following the discussion, the students were able to explore Hilda's home directly through the eyes of the HoloLens wearer, identifying potential hazards within the home and observing how Hilda lived within her environment. The students could view and read documents e.g., prescription charts and medication packaging.
	It is also possible to increase interactivity by inserting holographic projections around the environment of any media stored in OneDrive, including interactive documents, quizzes, videos, or diagrams. The projections can be viewed by both the holographic wearer and the students. In addition, students can engage directly in the holographic environment via extended functionality on their team's dashboard, which enables them to draw/write holographically in the real-world environment and also use a holographic pointer to highlight objects. Within the team's environment, the students were supported by two practice supervisors.

CASE STUDY 15 – Anglia Ruskin University: HoloLens: Hilda's home *continued*

Added value and impact	For the students, the visit felt authentic, and they were immersed in the environment. The experience also changed the students' perception of elderly service users in a way that will positively transform them as future nurses. "The experience with Hilda felt so real, like we were there with her in her sitting room asking all these questions about her life and actively listening."
	"The opportunity I had in meeting Hilda has now made me understand that people are different; some people, no matter their age or medical condition they still want to be independent, want their voice to be heard."
Future Plans	We want to expand the use of HoloLens. Funding for user licenses and devices and training for academics is needed to develop this new pedagogy. We plan to use the HoloLens within the skills labs to increase capacity for engagement in deteriorating patient high fidelity simulation scenarios with students wearing HoloLens on campus in the skills labs team working with students at home. With funding, there would be an opportunity to employ graduates or health professionals to be trained to be specialist 'HoloLens' coaches; for example, within an ambulance as an expert observer connecting with a group of paramedic students working on ARU Campus. The use of HoloLens enables us to increase the number of students that can be placed within an environment and will enable placements to expand into previously unused areas – for example, prisons for Mental Health Students.
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CASE STUDY 16 – Cardiff University: "Get There Together" a virtual occupational therapy placement

Targeted audience Discipline/profession	Occupational therapy students
University and placement partners Country	Cardiff University and Aneurin Bevan University Health Board Wales
The challenge	Clinical placement delivery was difficult during the pandemic due to social distancing measures. Continuous cancellations of placements due to changes in Government Covid-19 rules and guidance led to a clinical placement backlog.
	People living with dementia and their carers reported increased feelings of loneliness and isolation due to the pandemic. Those affected by dementia experienced anxiety when accessing their local area due to their difficulty in understanding the changing government rules. Lack of confidence impacted on engagement in self-care and leisure occupations, such as attending hair salons, doctor surgeries, pharmacies, cafes, and local shops.
The solution	The innovative clinical placement sought to provide a simple way of showing people affected by dementia what to expect when visiting local places during the pandemic, thus helping them to rebuild their confidence in accessing the local community.
	The clinical placement team created a digital video clip library and leaflet resource for individuals living with dementia, explaining what to expect when visiting their local area. This opportunity also aimed to support the delivery of practice placement learning outcomes for occupational therapy students during the coronavirus pandemic.
	The students worked closely with service users known to the Memory Services in Gwent to identify places that they wished to visit but did not have the confidence to go to. They approached local businesses to gain consent and subsequently created accessible digital recordings and leaflets explaining what to expect in the venues identified. The stories were shared with individuals and more widely online as part of the National Get There Together Project. Digital recordings included using local transport, visiting cafés, supermarkets, parks, and recreational areas.
	As this practice placement was predominantly facilitated using remote models of supervision, a weekly peer support group was established, initially facilitated by Cardiff University and Aneurin Bevan UHB Occupational Therapists, but later facilitated by the students themselves. The weekly peer support sessions provided an opportunity for sharing progress, group reflection and problem-solving. They helped the students develop their leadership and facilitation of learning skills, aligning with the Royal College of Occupational Therapists Career Development Framework ² .

CASE STUDY 16 – Cardiff University: "Get There Together" a virtual occupational therapy placement continued

Added value and impact	This innovative placement project enhanced relationships between the university and its practice placement providers, while it promoted inclusivity and offered additional support to students, patients and carers during a challenging time. From a university perspective this placement provided an opportunity to explore and evaluate how to deliver an alternative, virtual model of clinical practice placement offering leadership opportunities to the students.
	This innovative approach to practice education allowed students to be directly involved in service development. This included creating a library of resources for people living with dementia as well as raising the profile of occupational therapy across health, social care and the third sector. The placement benefitted the students, the service, people living with dementia and the wider community.
	The university, students and practice partners have worked collaboratively to promote the benefits of this innovative model of practice education and the project was presented at The Wales International Dementia Conference. The project participants also wrote a paper ³ , which has been published in the World Federation of Occupational Therapy Bulletin to share the findings with a global community of occupational therapists.
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CASE STUDY 17 – Edinburgh Napier University: From crisis management to creative solutions: Transforming healthcare education in the Covid era

Targeted audience Discipline/profession	Nursing and Allied Health students
University and placement partners Country	Edinburgh Napier University, University of the West of Scotland and NES Scotland
The challenge	A team at Edinburgh Napier University collaborated with NHS Education for Scotland (NES) and University of the West of Scotland computing department and applied game theory to create a national digital simulation resource ⁴ for early recognition and treatment of a person acutely unwell with suspected Covid-19. Similar to simulation, serious digital games can promote learning ⁵ in a safe learning environment and allow the player to develop knowledge skills and confidence through trial and error.
The solution	Using an 'agile' project management approach the interactive online simulation and accompanying workbook was developed and launched in 15 days on an open access platform accessible to qualified and student health professionals. This approach to simulation has not been used in healthcare education previously.
	During the four phases of the online simulation players are tested on decision making relating to assessment, immediate management, initial investigations and ongoing treatment. Immediate feedback is built into the game and improves the precise understanding of the subject area and is viewed as a valuable educational approach. To date the game has been accessed by over 500 medical, nursing and allied health students. Feedback suggests it is a valuable resource, testing skills and knowledge in real time. Feedback from the commissioner (NHS Education for Scotland) praised the team for its responsiveness and innovative, solution focussed approaches.
Added value and impact	The initiative has transformed the approach to simulation in healthcare education. This project led to NES commissioning six additional scenarios which Edinburgh Napier University and University of the West of Scotland won a grant to complete. The project is nearing completion and will be hosted on a nationally accessible online platform for all health professionals in Scotland. Not only will it provide a flexible and interactive approach to online learning it allows those who are living in remote and rural areas to access emergency care education at a time, place and pace suitable for them. Students can access the resource an unlimited amount of time thereby refreshing skills prior to placement.
	The group is currently undertaking research investigating the effect of simulation online compared to face-to-face simulation on knowledge acquisition, confidence and anxiety. This valuable research will build on previous work ⁶ and inform the direction of future digital simulation.

CASE STUDY 17 – Edinburgh Napier University: From crisis management to creative solutions: Transforming healthcare education in the Covid era *continued*

Future Plans	Planning is underway to obtain funding to translate the simulation into Portuguese and Spanish. This will further widening global access and offering a consistent approach to care of the severely ill person with Covid-19. Low- and middle-income countries may also benefit from access to the resource but adaptation and accessibility on online platforms would require further investment and testing. We believe that this innovation better prepares students for placement, giving participants confidence to care effectively for the clinically deteriorating patient. At Edinburgh Napier students are provided with placement hours for completing the simulation, acknowledging its synergy with clinical simulation. The team are keen to widely disseminate the simulation, secure funding for a large multicentre trial to assess the effect of digital simulation on learning and development of practical skills, thus providing an evidence-based approach to future digital learning.
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CASE STUDY 18 – University of Salford: Digital skills passport

Targeted audience Discipline/profession	Nursing students
University and placement partners Country	University of Salford England
The challenge	The Topol review revealed that the majority of NHS jobs will necessitate a digital skill and that universities have to incorporate training within their curricula. The vision of the University of Salford Digital Skills Passport (DiSk Pass) is to equip all our preregistration nursing students with digital capabilities to thrive in today's digital world. DiSk Pass in nursing focuses on integrating DiSk Pass within the University of Salford Pre-Registration Future Nurse Curriculum to respond to the challenges highlighted above and meet the NMC standards for nursing education.
The solution	Pre-registration nursing students undertake digital activities throughout their three-year (BSc) or two-year (MA) nursing programme. DiSk Pass has been designed taking account of HEE's Digital Capability Framework ⁷ .
	As part of their degree, nursing students access approximately 3 weeks of learning (BSc) or 2 weeks (MA) alongside other activities mapped against the Digital Capabilities Framework. Students' progress through four different levels of digital capability (level 1-aware, level 2-able, level 3-capable, level 4-expert); we aim to equip all our nursing students with skills for level 2.
	DiSK Pass follows the principles of learning as recognised in the heutagogic environment ⁸ , a form of self-determined learning, which equips learners with critical skills to gain digital confidence and competence for a better transition to workforce. The environment encourages a de-linear approach, in which the learner is fully engaged with their learning, questioning their behaviours and taking the responsibility for action to further develop themselves.
	Students engage with micro-learning activities for example they, review their digital profiles, review practice, propose digital solutions for identified challenges, case studies, guidance and curation of resources, and activities on LinkedIn Learning. Students contribute to creating micro-learning content, published digitally in a chosen format (e.g., padlet, mentimeter). The learning experience retains the heutagogic principles, introducing learners to the significance of effective professional use of the digital.
	A dedicated week is created on the University of Salford's Virtual Learning Environment (VLE) for all pre-registration nursing programme intakes, which links to other platforms to maximise student exposure to different systems. Each week consists of live sessions (guest speakers, introductions, facilitated Q&A sessions, panels) and independent activities. The week ends with a celebration event in which awards are provided to the best students work. The innovative and creative work done by the students is disseminated via social media. Since 2019, the team has facilitated over 8 weeks of DiSk Pass training engaging over 2200 pre-registration student nurses.

CASE STUDY 18 – University of Salford: Digital skills passport *continued*

Added value and impact	The initial development of resources was time consuming and reviewing student's outputs remains a challenge. Academic staff were already stretched due to the challenges of the pandemic and the DiSk Pass team opted for minimal personal tutor involvement, which influences the level of feedback students receive. The app aims to address some the challenges in that most of the process are automated and trigger the final certificate, with the ability to track each student progress. However, this will only be possible with a full-fledged app. DiSk Pass activities required integration within a module and working closely with programme and module leaders across the 2 or 3 years of study.
Future Plans	Additional funding is required to develop a fully working app with extended functionality. The app can facilitate continuing professional development training for the NHS workforce. Additional resources can facilitate testing the other fields of practice and accreditation.
	A portfolio of projects is planning including XR (cross reality) solutions to facilitate clinical skills training and develop DiSk Pass resources for the NHS workforce, collaboration with Sage to produce a book in Digital Skills in Nursing Education and Practice, and integration of DiSk Pass across the school
	DiSk Pass team's impact vision is to increase student digital capability and development of self-determined lifelong learners, who can thrive in future practice. We envisage a shift in awareness or knowledge of digital health, digital capability and motivation to embrace technology and ensure information governance and security.
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CASE STUDY 19 – University of West London: Using virtual reality to assess annexe B proficiencies

Targeted audience Discipline/profession	Nursing students
University and placement partners Country	University of West London England
The challenge	In recognition of the challenges of Covid-19 the NMC recovery standards offer an additional 300 hours of simulated learning within the 2,300 validated practical learning hours. The additional simulation hours are considered an effective alternative way of learning, enabling flexibility in practical learning, and supporting student progress. Simulated practice is an opportunity for experiential and immersive learning and a technique to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully safe, instructive, and interactive fashion.
The solution	At the University of West London (UWL), we recognised many 3rd year mental health and learning disability nursing students were unable to be assessed in practice for some annexe B proficiencies. In addition, some trust policies precluded students carrying out some skills for assessment. UWL purchased five virtual reality scenarios for 500 students to assess 3rd year nursing students specifically in relation to Annex B proficiencies.
	Our students were invited to the simulation centres at UWL across the Berkshire and London sites for proficiency assessment using virtual reality. Virtual reality simulations model real-world clinical settings and what problems and risks they may encounter there, helping students to develop skills, build confidence, and demonstrate procedures. Students were issued individual licences to practice the scenarios at home or at one of the UWL campus computers 2 weeks in advance.
	'I really liked the opportunity to practice this at home. It gave me confidence for my assessment, and I would have been worried using the new technology'
	In addition, pre-recorded demonstrations of skills, clinical skills procedure documents and best practice guidelines were provided for students as part of their pre-work investigate activity.
	The practice assessors assessed students in nursing procedures including undertake a whole-body systems assessment, identify signs of deterioration and sepsis, manage the administration of oxygen, set up and manage routine electrocardiogram (ECG) investigations and interpret traces, and manage and monitor blood component and transfusions
	The virtual reality scenarios presented were an older male with an upper GI bleed and a younger male with sepsis. The scenarios allowed the students to investigate the presenting complaint, patient history, SBAR components, completing a National Early Warning Score (NEWS) chart, ability to escalate, access results and do a full comprehensive A-E assessment comprising of all medical assessments parallel with using their communication skills.

CASE STUDY 19 – University of West London: Using virtual reality to assess annexe B proficiencies continued

Added value and impact	In the evaluation, students have made positive comments on this experience including that using virtual reality simulation aids understanding of complex concepts. Students have noted that this way of learning and assessment, accompanied by practice assessors, is particularly valuable to visual learners and those with specific processing and learning difficulties. They particularly enjoyed the gamification aspect of the software. It gave you a better opportunity to practise and build your skills I thought it was incredibly informative! Really enjoyed this session and pleased that the university have invested in this software. Feedback from our practice assessors was extremely positive with most commenting about the realism of the clinical setting and the ability for the students to fully immerse themselves in the environment.
Future Plans	Some students had difficulty accessing the software at home despite the support of our digital simulation technician. This was overcome by allowing students time to practise when they arrived at the university before starting their assessment. Some students struggled more with getting to grips with the software and would have liked longer to prepare for this. We have addressed this for future groups by including a virtual reality induction at the start of the academic year.
	Moving forward, nurse training using virtual reality will require significant investment, particularly in areas such as Learning Disabilities and Mental Health, where it is known there are notable workforce shortages. A virtual simulation physical health placement for learning disabilities and mental health students would be of great benefit in addressing parity of esteem and support the achievement of physical health proficiencies and skills.
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CASE STUDY 20 – Wrexham Glyndŵr University: Pillow talk simulation

Targeted audience Discipline/profession	Nursing students
University and placement partners Country	Wrexham Glyndŵr University Wales
The challenge	At Wrexham Glyndŵr University (WGU) numerous examples of good practice and innovation emerged throughout the Covid-19 pandemic and lockdowns, when students were not always able to access the normal simulation rooms and equipment. One such innovation led by WGU was <i>Pillow Talk</i> .
The solution	Pillow Talk is a creative low-tech way to allow advanced practice students to run through not only their clinical examination skills but to also recap on anatomy and physiology knowledge.
	Clinical examination simulation can be reimagined by students drawing systems such as respiratory, cardiac and abdominal, onto a pillow covered in a disposable pillowcase, provided by the university.
	It allowed the student to identify anatomical landmarks in a safe and enjoyable manner (key elements of being active in learning). Students utilised this simulation technique alongside live face to face taught sessions via Microsoft Teams sessions with lecturers using more formal simulation equipment (such as mannequins) at home. Asynchronous learning involved students reading theoretical materials on the Moodle course pages. Synchronous teaching involved students sharing their pillows and practicing palpation and rehearsing anatomy and physiology knowledge with peers while overseen by a lecturer.
Added value and impact	Simulation delivered to enhance inter-professional education develops the vital understanding of the perspective of other professions, communication, and compassionate leadership principles so that students are well prepared for multidisciplinary team working on graduation. It reduces risk by providing engaging active learning opportunities so that students have appropriately challenging and supported learning so that they develop competence and resilience as well as recognising and reflecting on areas for development. All of these are crucial to students and practitioners of the future for sustaining wellbeing in complex and pressured working environments.

CASE STUDY 20 - Wrexham Glyndŵr University: Pillow talk simulation continued

Future Plans	It is challenging to succession plan and continually refresh our simulation equipment and teaching and learning environments without a formalised simulation funding stream. We therefore seek as many external funding opportunities as we can and allocate budget from commissioned and non-commissioned student fees to procuring equipment. Without a ring-fenced budget, simulation has to compete for priority with all other requirements. This necessarily limits procurement to the immediate necessities and prevents more targeted strategic long-term procurement planning to support the vision of a centre of excellence for simulation and centre for applied and immersive technology teaching and research. Following the successful bids to HEIW following the strategic review of non-medical healthcare education, WGU has plans for a new Innovation Quarter which will house the centre for applied and immersive technology, which includes specialised teaching areas for inter-professional and profession specific simulation.
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