

Article

Not peer-reviewed version

The Interprofessional Education Matrix: Sessions to Incorporate Higher Education Institutes within Pre- registration Nursing and Allied Health Professionals

Michaela Davies , Kate H. Knight , Catherine Chaplin , Anya Mitford Dillon , Catherine Pollitt , [Jonathan Hay](#) *

Posted Date: 23 January 2025

doi: 10.20944/preprints202501.1708.v1

Keywords: Interprofessional Education; Allied Health Professionals; Healthcare Practitioner; Healthcare education



Preprints.org is a free multidisciplinary platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This open access article is published under a Creative Commons CC BY 4.0 license, which permit the free download, distribution, and reuse, provided that the author and preprint are cited in any reuse.

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Article

The Interprofessional Education Matrix: Sessions to Incorporate Higher Education Institutes Within Pre-registration Nursing and Allied Health Professionals

Michaela Davies, Kate H. Knight, Catherine Chaplin, Anya Mitford Dillon, Catherine Pollitt and Jonathan Hay *

University of Chester

* Correspondence: j.hay@chester.ac.uk

Abstract: This short article reports on the Outreach Skills Clinic for Assessment (OSCA), a collaborative Interprofessional Education (IPE) initiative led by the University of Chester. Designed to enhance the competencies of pre-registration health and social care learners, OSCA integrates multi-disciplinary teaching across Higher Education Institutions. Data from student and practitioner feedback highlight the program's success in fostering a supportive learning environment, promoting clinical skills development, and improving peer collaboration. By collating and structuring diverse healthcare professional expertise, OSCA bridges theory and practice, equipping learners with practice skills geared towards adaptability across varied care settings. Data illustrates that this integrated approach enhances healthcare education and contributes to the delivery of safe, high-quality patient care.

Keywords: interprofessional education; allied health professionals; healthcare practitioner; healthcare education

1. Introduction

Interprofessional Education (IPE) encompasses supporting the education of students from different health professions to work together effectively, simultaneously improving patient outcomes and contributing to the quality of care [1]. Additionally, evidence suggests that significant development in core competencies occurs when in collaboration compared to those in individual field education [2]. We designed a multi-Higher Education Institution (HEI) initiative known as the Outreach Skills Clinic for Assessment (OSCA), led by the University of Chester. OSCA provides access to skills and proficiencies to aid progression and confidence—such as venepuncture and catheterisation—for pre-registration health and social care learners from across the integrated care system.

Learning together as part of a wider community of practice is not a new concept, but opportunities to do so nevertheless remain limited [3]. In contrast, the OSCA initiative has opened opportunities for enabling effective learning environments for cross-regional HEIs and in IPE. Furthermore, the OSCA team are from multi-field backgrounds—including acute adult, community, paediatric and neonatal nurses—increasing the exposure to varied education opportunities for IPE students, and assisting the development of theory and practice education experiences. This interprofessional approach to teaching provides pre-registered learners of all disciplines with a broad range of experience to draw from as they learn in OSCA sessions.

2. Materials and Methods

Anonymised feedback was gathered from students who had undertaken OSCA sessions (IPE experienced students) as well as those who had not undertaken OSCA sessions (control group). In relation to teaching pedagogy, we provided a scaffolded theory approach to multi-HEI and cross-field education during OSCA sessions, allowing for target driven outcomes but also encouraging the establishment of effective working relationships [4]. Desired clinical skills acquisition education was mapped to local and national evidence-based guidance, and then further aligned to standards of proficiency from professional bodies; the “gold standard”. We ensured that HCPs from all backgrounds and levels of practice were represented as OSCA tutors, in order to enable equivalent student insight into the reality of practice. This approach encompassed reflections on how learned skills may need to be safely adapted within different settings, such as community or urgent care, whilst acknowledging the development of a questioning culture to challenge poor practice [5,6].

The scheme’s initial learning material was designed to cover key aspects from every domain of nursing, and was underpinned by an awareness that pre-registration learners are diverse, have varying levels of clinical competency, and represent a multicultural population, this has now been expanded to meet the needs of most other health and social care pre and post registration learners. This required the provision of content adaptations and reasonable adjustments. For example, during the assessment component of teaching, rewording a question or allowing more time for a learner to answer may be appropriate, particularly since common concepts for learners of some professions may be novel to others. Providing this supportive and safe learning environment for learners helped foster their development, and promoted truthfulness and discussion around learning from errors. Pre-registrant students attending integrated sessions also had the unique opportunity to learn alongside students from neighbouring HEIs, which represented an additional variety of IPE learning.

3. Results

In the data collected to date, the opportunity for exposure to Health Care Practitioners (HCPs) from a variety of clinical backgrounds proved a prime motivation for pre-registration students attending the integrated learning sessions. Feedback indicated that the OSCA sessions had not only enabled students to complete proficiencies, set by regulatory bodies, but that they also felt better prepared for becoming registrants across a range of fields. All students were working towards the common goal of competency in healthcare provision, and whilst their clinical pathways differed, their reported learning outcomes and challenges evidenced striking similarities. These commonalities included critical reflections on the value of student practitioner peer support, gained from simply having the time to come together and share learning experiences.

Feedback from registered HCPs has also been highly positive on aggregate. Data evidenced an appreciation of professional networking opportunities across a wide geography, and the offer of high quality integrated clinical skills training was readily accepted by many organisations. Registered HCPs reported that this integrated learning model had given them insight into the current pre-registration education programme, and that they had subsequently developed a greater awareness of the pre-registrant scope of practice. These insights were stated to have informed HCPs in better supporting new registrants in practice, enabling a more tailored preceptorship period to meet additional learning needs more equitably. The same benefits were not found amongst the control group.

4. Discussion

The teaching and assessment of pre-registration learners requires an integrated, collaborative approach across a region. The overarching goal of medical education programmes across each geographically diverse Integrated Care System (ICS) is continual improvement in practice and systems of care. In bringing together multi-disciplinary health care professionals from across the scope of practice and collaboratively working with surrounding educational partners to build strong

working relationships, OSCA exceeds this expectation. Data suggests that IPE-experienced students experienced a positive, supportive, safe and effective learning environment, generating a range of learning opportunities and facilitating expertise, alongside developing the ability to relate to different learning styles in knowledge and skills acquisition.

The integrated approach of teaching and demonstrating skills within an interdisciplinary team enabled IPE-experienced students to learn theory and practice in an open, inclusive environment, where they felt safe to ask questions, make mistakes, and learn best practice. Quality assurance underpins the everyday practice of HCPs, therefore, by using an integrated care system approach to training and education, we can support the delivery of safe practice to those in our care. By bringing together HCPs from a diverse range of clinical backgrounds, integrated learning fosters rich conversations around the sharing of best practice and innovative approaches to care.

5. Practice Points

1. Interprofessional approaches proved conducive to student learning.
2. Regional collaboration led to benefits for students.
3. HCPs utilised the integrated learning model to improve practice supervision.

Author Contributions: **Michaela Davies:** Conceptualization, Methodology, Investigation. **Kate H. Knight:** Conceptualization, Methodology, Investigation. **Catherine Chaplin:** Conceptualization, Methodology, Investigation. **Anya Mitford Dillon:** Conceptualization, Methodology, Investigation. **Catherine Pollitt:** Conceptualization, Methodology, Investigation. **Jonathan Hay:** Writing- Original draft preparation, Writing-Reviewing and Editing.

Funding: This research received no external funding.

Institutional Review Board Statement: This study did not require ethical approval. All ethical considerations were encompassed by the regular ethical standards and procedures for Faculty of Health, Medicine and Society at University of Chester.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data from this study can be provided at request.

Conflicts of Interest: The authors declare no conflicts of interest.

Public Involvement Statement: No public involvement in any aspect of this research.

Use of Artificial Intelligence: AI or AI-assisted tools were not used in drafting any aspect of this manuscript.

Abbreviations

The following abbreviations are used in this manuscript:

IPE	Interprofessional Education
OSCA	Outreach Skills Clinic for Assessment
HEI	Higher Education Institute
HCP	Healthcare Practitioner

References

1. World Health Organisation (2010). Framework for Action on Interprofessional Education and Collaborative Practice, *World Health Organization*. <http://apps.who.int/iris/handle/10665/70185>. Accessed 13 August 2024.
2. Karlsson, M., Hillström, L., Johnsson, A., & Pennbrant, S. (2022). Experiences of Work-integrated Learning in Nursing Education, *Journal of Further and Higher Education* 46(10), 1377–1390. <https://doi.org/10.1080/0309877X.2022.2079971>

3. Teheux, L., Coolen, E. H., Draaisma, J. M., de Visser, M., Scherpbier-de Haan, N. D., Kuijer-Siebelink, W., & van der Velden, J. A. (2021). Intraprofessional workplace learning in postgraduate medical education: a scoping review. *BMC Medical Education*, 21, 1-15. <https://doi.org/10.1186/s12909-021-02910-6>
4. Coffman, S., Iommi, M., Morrow, K., (2023) Scaffolding as Active Learning in Nursing Education, *Teaching and Learning in Nursing* 18(1). <https://doi.org/10.1016/j.teln.2022.09.012>
5. Diggele, C., Roberts, C., Burgess, A., Mellis, C., (2020) Interprofessional Education: Tips for Design and Implementation, *BMC Medical Education* 455(20). <https://doi.org/10.1186/s12909-020-02286-z>
6. Roberts, C., Morrell-Scott, N., and Wilkinson, A., (2022) Learning Beyond a Single Field of Nursing through a Virtual Case-based Approach to Pre-Registered Nurse Education. *British Journal of Nursing*, 31(18). <https://doi.org/10.12968/bjon.2022.31.18.948>

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.