

Fostering Interprofessional Education within Paramedic Clinical Placements

Background

Currently Paramedics only require a level 4 qualification to work as a Paramedic [18]. Research has shown that as the Paramedic Profession moves forward this level of qualification is no longer appropriate. The minimum standard will be a level 6 qualification within the next few years [1].

There is currently a shortage of Paramedics within the UK [15]. As a result the University of Wolverhampton now offer a BSc in Paramedic Science. 50% of the course is delivered through clinical placements, the majority of which are with our partner Ambulance Service. The remaining placements are with other healthcare providers.

Interprofessional Education (IPE) is an essential part of the Paramedic Curriculum [7 & 18]. The World Health Organisation (WHO) have identified that IPE is necessary to ensure collaborative practice between healthcare workers, improve patient health outcomes and mitigate the healthcare worker shortage [30].

Therefore, how do we ensure that the Interprofessional Placements our students undertake will foster this collaborative practice once they are qualified?

Methodology

I undertook a literature search utilising the CINAHL, PubMed and Medline databases. There was no literature that related specifically to Interprofessional Placement Education and the Paramedic Profession. I have reviewed the literature to see if any of the practices utilised by other Healthcare Professional students can be adapted for use by Paramedic students.

Findings

- ❖ Practice based learning enables theoretical learning to be consolidated in practice [2]
- ❖ IPE in placement is often serendipitous [6 & 24]
- ❖ Successful Practice Based Learning requires learning outcomes to be aligned to the learning activities and assessment, as well as being mapped to each of the participating students curriculums [2, 3, 5, 6, 8, 19, 27 & 28]
- ❖ The learning activities and assessment tasks need to be clear to the student and the practice placement educator/facilitator [8, 12 & 27]
- ❖ The placement provider needs to offer a supportive workplace culture with suitably trained and experienced Interprofessional Placement Facilitators who can provide appropriate feedback to the students [2, 6, 8, 16, 23, 25 & 28]
- ❖ Establishing IPE in placement can be difficult to sustain as it is often labour intensive in the development phase. It requires development in partnership with the placement providers and the establishment of an effective organisational infrastructure. It also requires evaluation for continuing effectiveness [2, 3, 6, 13 & 14]
- ❖ It can be difficult to place large cohorts of students in short term placements [2 & 28]. However, it has been shown that students prefer this method of IPE and retain the knowledge, applying it to practice, easier than simulated learning [2, 3, 4, 10, 13 & 24]
- ❖ Successful models build on early classroom based sessions with placement often featuring in the final years of study. This allows for the student to identify with their individual professions and have greater underpinning theoretical knowledge to apply in the practice setting [2, 3 & 6]
- ❖ Students should be effectively prepared to optimise their ability to learn with, from and about the other professions. This can be managed with orientation activities before the placements and classroom based sessions early in the programme of study [6, 9, 12, 27 & 28]
- ❖ To effectively evaluate the learning there needs to be time for reflection following the practical experience [2 & 22]. This can be built into the assessment in the form of a reflective portfolio [2, 3 & 10]



Discussion

A lot of the research applied to training wards and was not appropriate to Paramedic Practice [12 & 13]. IPE appears to have been successfully utilised in the practice settings for an Emergency Department [11] and community settings, specifically mental health [21] and Primary Care [4 & 20].

The Leicester Model (Fig. 1) of collaborative learning is based around Kolb's experiential cycle of learning and constructivist learning principles including reflection [4, 22 & 29]. This appears to be the model that can be adapted the easiest to the Paramedic Placements [2 & 4]. It has been used successfully in a variety of community settings. Students work alongside multi-disciplinary clinical teams assessing and assisting in the management of patients. They are tasked with assessing the suitability of care offered to patients by these teams in order to offer solutions to the management plan [4 & 21]. This would allow Paramedics to learn from, with and about Multi-disciplinary teams within the community whilst achieving the competencies required of a Paramedic whilst in placement

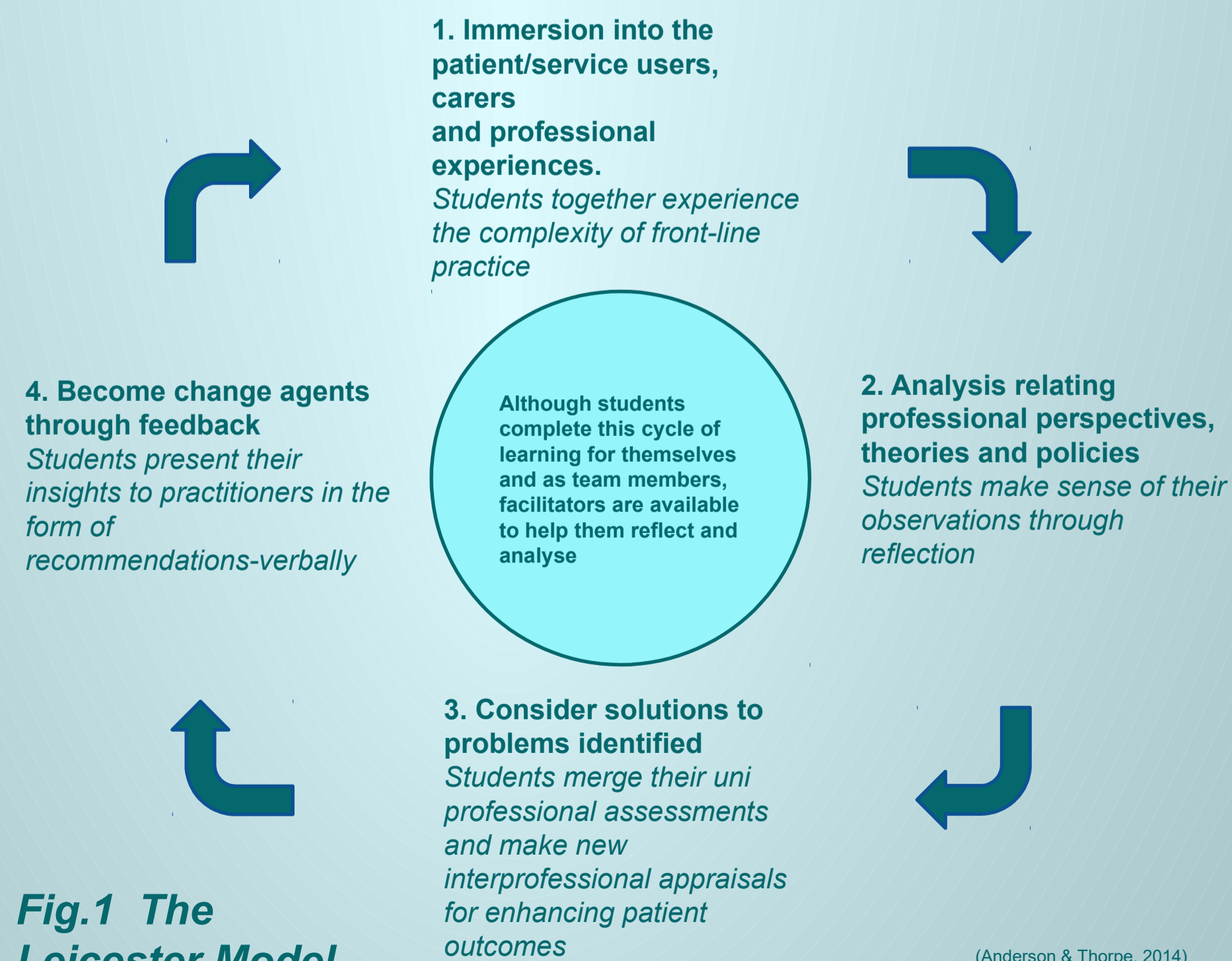


Fig.1 The Leicester Model

Strategies for Improvement

- ❖ Incorporate IPE into the communication module in the first year as an introduction for future modules
- ❖ Review Placement Documentation to ensure the learning tasks and assessments are aligned and are clear for both Students and Placement Facilitators
- ❖ Design a reflective patchwork assessment that aligns with the learning outcomes for placement and enables the students to demonstrate their Interprofessional learning whilst on placement
- ❖ Work alongside colleagues at the university to evaluate the current placement provision in line with the various health care curriculums and to identify additional opportunities for IPE both within and prior to placement
- ❖ Evaluate each of the above after the first and subsequent iterations to ensure they remain suitable for fostering IPE for Paramedic students

References

1. Allied Health Solutions (2013) Paramedic Evidence Based Education Project (PEEP) End of Study Report. [Online] [Accessed: 21 June 2017] Available at: <https://www.collegeofparamedics.co.uk/downloads/PEEP-Report.pdf>
2. Anderson, E.S., Ford, J. & Kinnair, D.J. (2016) Interprofessional Education and Practice guide No.6: Developing Practice-Based Interprofessional Learning Using a Short Placement Model. *Journal of Interprofessional Care*. 30 (4) pp. 433-440
3. Anderson, E., Smith, R. & Hammick, M. (2016) Evaluating an Interprofessional Curriculum: A Theory-Informed Approach. *Medical Teacher*. 38 (4) pp. 385-394
4. Anderson, E.S. & Thorpe, L.N. (2014) Students Improve Patient Care and Prepare for Professional Practice: An Interprofessional Community-Based Study. *Medical Teacher*. 36 (6) pp. 495-504
5. Biggs, J. & Tang, C. (2011) *Teaching for Quality Learning at University*. 4th Edition. Maidenhead: Open University Press
6. Brewer, M.L. & Barr, H. (2016) Interprofessional Education and Practice Guide No.8: Team-Based Interprofessional Practice Placements. *Journal of Interprofessional Care*. 30 (6) pp. 747-753
7. College of Paramedics (2015) Paramedic Curriculum Guidance. 3rd Edition- Revised [Online] [Accessed: 14 June 2017] Available at: <https://www.collegeofparamedics.co.uk/downloads/Paramedic_Curriculum_Guidance_2015.pdf>
8. Copley, J.A., Allison, H.D., Hill, A.E., Moran, M.C., Tait, J.A. & Day, T. (2007) Making Interprofessional Education Real: A University Clinic Model. *Australian Health Review*. 31 (3) pp. 351-357
9. Dean, H.J., MacDonald, L., Alessi-Severini, S., Halipchuk, J.A.C., Sellers, E.A.C. & Grymonpre, R.E. (2014) Elements and Enablers for Interprofessional Education Clinical Placements in Diabetes Teams. *Canadian Journal of Diabetes*. 38 (4) pp. 273-278
10. Domac, S., Anderson, L., O'Reilly, M. & Smith, R. (2015) Assessing Interprofessional Competence Using A Prospective Reflective Portfolio. *Journal of Interprofessional Care*. 29 (3) pp. 179-187
11. Ericson, A., Masiello, I. & Bolinder, G. (2012) Interprofessional Clinical Training for Undergraduate Students in an Emergency Department Setting. *Journal of Interprofessional Care*. 26 (4) pp. 476-481
12. Falk, A.L., Hult, H., Hammar, M., Hopwood, N. & Dahlgren, M.A. (2013) One Site Fits All? A Student Ward as a Learning Practice for Interprofessional Development. *Journal of Interprofessional Care*. 27 (6) pp. 476-481
13. Frisby, J., Mehdi, Z. & Birns, J. (2015) Interprofessional Learning on a Stroke Unit. *The Clinical Teacher*. 12 (5) pp. 315-319
14. Furness, P.J., Armitage, H. & Pitt, R. (2012) Establishing and Facilitating Practice-Based Interprofessional Learning: Experiences from the TULIP Project. *Nursing Reports*. 2 (1) pp. 25-30
15. Gov.uk (2015) *Tier 2 Shortage Occupation List Government-approved version valid from 19 November 2015* [Online] [Accessed: 21 June 2017] Available at: <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486107/Shortage_Occupation_List_-_November_2015.pdf>
16. Hall, L.W., & Zierler, B.K. (2015) Interprofessional Education and Practice Guide No.1: Developing Faculty to Effectively Facilitate Interprofessional Education. *Journal of Interprofessional Care*. 29 (1) pp. 3-7
17. Havyer, R.D., Nelson, D.R., Wingo, M.T., Comfere, N.J., Halvorsen, A.J., McDonald, F.S. & Reed, D.A. (2016) Addressing the Interprofessional Collaboration Competencies of the Association of American Medical Colleges: A Systematic Review of Assessment Instruments in Undergraduate Medical Education. *Academic Medicine*. 91 (6) pp. 865-888
18. Health and Care Professions Council (HCPC) (2014) *Standards of Education and Training*. 20120801POLSETS. London: HCPC
19. Jacob, E., Barnett, T., Missen, K., Cross, M. & Walker, L. (2012) Australian Clinician's Views on Interprofessional Education for Students in the Rural Clinical Setting. *Journal of Research in Interprofessional Practice and Education*. [Online] 2 (2) [Accessed: 15th June 2017] Available at: <http://www.jripe.org/index.php/journal/article/view/68>
20. Kent, F. & Keating, J.L. (2015) Interprofessional Education in Primary Health Care for Entry Level Students – A Systematic Literature Review. *Nurse Education Today*. 35 (12) pp. 1221-1231
21. Kinnair, D.J., Anderson, E.S. & Thorpe, L.N. (2012) Development of Interprofessional Education in Mental Health Practice: Adapting the Leicester Model. *Journal of Interprofessional Care*. 26 (3) pp. 189-197
22. Kolb, D.A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*. London: Prentice Hall
23. Martin, P., Kumar, S. & Abernathy, L. (2017) Bridging the Training-Practice Gap in Interprofessional Student Supervision. *Perspectives on Medical Education*. 6 (2) pp. 133-137
24. O'Carroll, V., Braid, M., Ker, J. & Jackson, C. (2012) How Can Student Experience Enhance the Development of a Model of Interprofessional Clinical Skills Education in the Practice Placement Setting? *Journal of Interprofessional Care*. 26 (6) pp. 508-510
25. Paré, L., Mazade, J., Pelletier, F., Houle, N. & Iloko-Fundi, M. (2012) Training in Interprofessional Collaboration. Pedagogic Innovation in Family Medicine Units. *Canadian Family Physician*. [Online] 58 (4) [Accessed: 12th June 2017] Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3325472/>
26. Reeves, S., Boet, S., Zierler, B. & Kitto, S. (2015) Interprofessional Education and Practice Guide No.3: Evaluating Interprofessional Education. *Journal of Interprofessional Care*. 29 (4) pp. 305-312
27. Roberts, C. & Kumar, K. (2015) Student Learning in Interprofessional Practice-Based Environments: What Does Theory Say? *BMC Medical Education*. [Online] 15 pp.211 [Accessed: 12th June 2017] Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4662027/>
28. Thistlethwaite, J.E. (2013) Practice-Based Learning Across and Between the Health Professions: A Conceptual Exploration of Definitions and Diversity and Their Impact on Interprofessional Education. *International Journal of Practice-Based Learning in Health and Social Care*. 1 (1) pp. 15-28
29. Vygotsky, L.S. (1978) *Mind in Society: Development of Higher Psychological Processes*. London: Harvard University Press
30. World Health Organization (WHO) (2010) *Framework for Action in Interprofessional Education and Collaborative Practice*. WHO/HRH/HPN/10.3. Geneva:WHO

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