[Education/Faculty Development Material]

Implementation and lessons learned from two online interprofessional faculty development programs for

educational practice improvement in the health professions in Chile and the United Kingdom in 2018-

2021

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### **Abstract**

It aimed to present the design, implementation, and lessons learned from two fit-for-purpose online interprofessional faculty development programs for educational practice improvement in the health professions. Both programs were designed to enhance teaching and learning practices in an interprofessional environment based on four pillars: professional diversity, egalitarianism, blended/online learning, and active learning strategies. A multidisciplinary mix of educators has participated, showing similar results. Three features facilitated the interprofessional environment: a professions-inclusive teaching style, a flexible learning climate, and interprofessional peer work. These lessons may be transferable to other programs seeking to enhance and support interprofessionality. Faculty development initiatives preparing educators for interprofessional practice should be an integral component of health professions education as delivering these within professional silos is no longer justifiable. As the relevance of interprofessional education grows, an effective way of promoting this is to train the trainers in formal interprofessional settings.

Keywords: Distance education; Health occupations; Interdisciplinary studies; Interprofessional education; Problem-based Learning

### Introduction

Background/rationale: Well-designed Interprofessional Education (IPE) programs amongst learners in the health professions have been found to foster professional practice, teamwork, communication, and valuing the role of others in the healthcare team [1,2]. On the contrary, poorly planned and delivered IPE initiatives may generate reluctance to engage in interprofessional collaboration and reinforce stereotypes [2,3]. Educator preparation has been reported as a critical factor supporting IPE success, especially considering its integration into accreditation standards across disciplines [4]. Therefore, to foster an optimal IPE environment, educators themselves need to support IPE and ideally have experienced it to role model best educational methods and practices [5]. This points to the need for advanced educational training as the design and facilitation of interprofessional learning activities require significant educator preparation to ensure the correct level and allow all professional groups to contribute and learn with, from and about each other. Therefore, educators must be prepared and trained to meet this challenge since they play a fundamental role in the teaching and learning of IPE.

Unfortunately, most health professions faculty development programs oriented at educational practice

improvement, covering aspects such as instructional design, teaching and learning effectiveness, and evaluation

strategies, have been traditionally delivered within uniprofessional or multiprofessional settings, with no evidence-

based justification [6]. The concept of Multiprofessional Education (MPE), where members of different professions

learn side by side for whatever reason without necessarily interacting, is often mistaken and used interchangeably with

IPE [2]. While MPE is frequently used when different professional groups have a common need to address, the

distinctiveness of IPE lies in intentionally bringing together participants from different professions around a particular

topic or task with deliberate interaction. This is expected to increase the diversity of knowledge and perspectives,

enhancing the learning of all [1]. One way to support IPE is for educators from different disciplines to be trained in

educational theory and practice in interprofessional settings to understand and become aware of each other's

disciplines, their teaching practices and potential transferability.

An additional barrier for faculty development programs is the mode of delivery, where the majority are

described as face-to-face, limiting attendance and engagement for busy clinical educators [6]. This is especially

relevant considering the impact of the COVID-19 pandemic on healthcare educators and the transition to online

learning [7]. One way to address these challenges and support IPE is to deliberately design online faculty

development programs on clinical education with participants from different health disciplines actively learning

with, from, and about each other's professions and teaching methods.

Objectives: It aimed to present the design, implementation, and lessons learned from two fit-for-purpose online IPE

faculty development programs for educational practice improvement in the health professions.

Ethics statement: It is not a human subjected study; therefore, neither approval by the institutional review board

nor obtainment of the informed consent was required.

**Study design:** It is a narrative review of a curriculum development.

Design and implementation

The Clinical Education program (Masters, Postgraduate Diploma and Postgraduate Certificate awards) at the

University of East Anglia (U.K.) and the Postgraduate Diploma in Health Professions Education at the University of

the Andes (Chile) were designed to enhance teaching, learning and assessment in an interprofessional learning

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environment. Both programs were designed to provide educators with the opportunity to understand the work ethos and professional values of colleagues from other health professions, along with experiencing interprofessional learning and collaborative work. Despite the difference in geographical location, language, and culture, the courses exhibit numerous similarities. Table 1 illustrates the main features of both programs. In addition, both courses programs/handbooks can be found in supplements 2 and 3.

The interprofessional environment was built on four pillars: professional diversity, egalitarianism, blended learning, and active learning strategies. The learning experience was enhanced by the diversity of core academic teams contributing to the teaching and by the educators from different professional backgrounds and work experience enrolled in the programs, thus reinforcing a culture of interprofessional practice. Both programs are delivered to create a climate within which the contributions of educators coming from different disciplines are acknowledged and valued.

In terms of mode of delivery, the programs have used blended and fully online learning to make the courses flexible and available off-campus, acknowledging the busy working schedules and needs of 21st-century health professionals who are unlikely to commit their time for fully face-to-face courses.

Regarding teaching and learning strategies, the successful creation of learning communities in faculty development programs has been described as utilizing diverse educational methods grounded in adult learning theories, including experiential learning and peer learning, reflection, and feedback [5,8]. Therefore, both programs' learning activities have been designed to facilitate critical thinking, collaboration and interaction, practical applications to their educational practice, and workplace-based reflection and learning. This has facilitated inclusivity and has promoted learning and acknowledgment of the educational practices of each others' healthcare disciplines, supporting their roles as educators in health and social care environments in which professional collaboration is increasingly essential.

The design and delivery of the programs have attracted a multidisciplinary mix of educators that have participated and interacted with each other throughout the different cohorts. Table 2 shows the diversity of health professions involved in the cohorts from 2018 to 2021. The interprofessional diversity in the core academic teams has also provided the opportunity to model interprofessional teaching and facilitation of learning, which has been enhanced by the associated tutors that teach and mark across the different modules coming from health and non-health-related disciplines.

Educators and the core academic teams have reported positive feedback across both programs' internal quality assurance reports and from students' evaluation surveys. For the Postgraduate Diploma in Health Professions

Education at the University of the Andes, 91% (n=111) of students expressed being overall very satisfied with the course and 86% (n=111) expressed being very satisfied with the collaborative and interactive features of the course. For the Clinical Education program at the University of East Anglia, students' qualitative comments r eflect their satisfaction with the online learning environment, the approachability and presence of the core acad emic team and applicability and interactive nature of the learning activities. In addition, there has also been ext ernal validation for the Clinical Education program being accredited for Fellowship of the Higher Education A cademy (FHEA) and Membership of the Academy of Medical Educators (MacadMEd). This shows an alignme nt with the U.K. Professional Standards Framework for Teaching and Learning [9] and with the Professional Standards for Medical Educators set by the Academy of Medical Educators [10].

#### Lessons learned

Program leaders across both courses have jointly reflected and agreed that the interprofessional environment created was mainly facilitated by three features; (1) a professions-inclusive teaching and facilitating style, (2) a flexible learning climate, and (3) interprofessional peer work. These constitute the main reflection points and lessons learned from the experience of planning and delivering both online IPE faculty development programs for educational practice improvement, which may well be transferable to other faculty development programs seeking to enhance and support the interprofessionality of their courses.

Regarding a professions-inclusive teaching style, the interprofessional setting was facilitated by designing neutral online resources and not favoring any healthcare discipline over the others. Teaching and facilitation were conducted through fully online and blended learning activities, where the core academic teams delivered tutorials using a mix of examples, resources, applications, and guided readings of the literature coming from different health professions and focused on topics that provided common ground, such as clinical and student-centered teaching. The multidisciplinary core academic teams encouraged educators to appreciate each other's backgrounds so that all gain the best experience from the courses. This constitutes an essential part of the interprofessional hidden curriculum delivered, as previous research shows that learners report clinical faculty behaviors as influencing their own practices and, therefore, could promote interprofessional practices in their own educational settings [5,11].

Concerning the development of a flexible learning environment, it was essential to implement personalized tutorials, online office hour meetings, and catch-up recordings of sessions to support educators' needs and personal interests. Furthermore, planning a reasonable workload that suited busy health professionals, flexible attendance and assignment submission, and balanced face-to-face/synchronous and asynchronous contact contributed to support the engagement of a mix of clinicians with demanding schedules. These practices have been reported as desirable for online learning programs' success, especially in light of the abrupt transition to online education as a result of the COVID-19 pandemic [6,7].

Finally, interprofessional peer work was conducted by employing on-campus and online discussions, debates and teamwork, with a balance of professional membership in groups, and through different peer-assessment activities in which the core academic teams deliberately conducted an interprofessional matching. As IPE involves learning 'with, from and about' and it is not just a mix of people acquiring the same knowledge or developing the same educational skills, programs should be designed to include plenty of opportunities for interaction and exchange [1,2]. This may facilitate the readiness of educators to work and seek opportunities for interprofessional collaboration in their daily practice.

The implementation of educational practices that led to these lessons learned from both faculty development programs has a unique role in promoting IPE as they address the major barriers to teaching and learning described above at both the individual and organizational level, with the added value of providing educators with the knowledge and skills needed to design and facilitate IPE as part of their own educational role.

### Conclusion

Faculty development initiatives that seek to prepare educators for interprofessional learning and collaborative work should be an integral component of health professions education as delivering these courses within professional silos is no longer justifiable. The successful implementation and delivery of these two programs, in culturally diverse settings and with similar experiences across both institutions, showed that IPE was facilitated by creating an environment

conducive to collaborative working and learning from each other. Course developers carefully considered the

pedagogical approaches used, the learning environment created, and the use of social learning to support communities

of learning and interprofessional collaboration. This enabled educators from various professional backgrounds to

learn together and from each other, with the support of a flexible and adaptable core academic team able to collaborate

and continually learn about, from, and with each other. The latter was possible, partly due to the values and practices

brought by the multidisciplinary teaching teams and the programs' structure. Future research should explore and

evaluate the perception and effectiveness of these interprofessional settings for educators, along with potential

transferability to their teaching practices. As relevance of IPE grows, an effective way of promoting it is to train the

trainers in formal and explicit interprofessional settings.

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Conflict of interest

Cesar Orsini has been an Editorial Board Member of the Journal of Educational Evaluation for Health

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## Supplementary materials

Supplement 1. Audio recording of the abstract.

Supplement 2. Clinical education (Masters, Postgraduate Diploma and Postgraduate Certificate) course program/handbook

Supplement 3. Postgraduate diploma in health professions education course program/handbook

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**Table 1.** General overview of the structure of both programs.

## **Clinical Education** PGDiploma in Health Professions Education (Master-PGDiploma-PGCertificate) University of the Andes (Chile) University of East Anglia (U.K) Since 2018-19 (3 cohorts) Since 2012-13 (9 cohorts) Purpose Enhance and refresh clinical teachers' educational practices in an interprofessional learning environment Learners Clinical educators from multiple health-related disciplines Academic Team A multidisciplinary team of tutors Blended learning (face-to-face and online learning Mode of Delivery Online learning options) **Curricular Structure** Modular with a Core & Options component Modular Teaching & Learning Learning & Teaching, Assessment, Curriculum, and Management & Leadership in Health Professions Components Education Systematic reviews, Quantitative and Qualitative Research Components None research modules, and a master's Dissertation Synchronous and asynchronous activities: online tutorials/eWorkshops, videos, guided readings, live workshops **Online Learning** and seminars, Discussion boards/Blog activities, student-led activities and presentations, one-to-one tutorials Activities and guidance. Formative and summative: Essays, presentations, formative quizzes, lesson plans, written exams, critical Formative and summative: Discussion board entries, Online assessment reflective portfolios, formative quizzes, peer and selfappraisal of the literature, work-based project, Activities research proposals, and submission of a research assessment activities, presentations and essays. dissertation. **Focus** International Regional (Latin America) Language of delivery English Spanish

Table 2. Interprofessional student and staff profile of both programs (2018-2021)  $^{*}$ 

	Student Profile		Core Academic Team Profile	
	Clinical Education (Master-PGDiploma- PGCertificate) – University of East Anglia (U.K)	PGDiploma in Health Professions Education – University of the Andes (Chile)	Clinical Education (Master-PGDiploma- PGCertificate) – University of East Anglia (U.K)	PGDiploma in Health Professions Education – University of the Andes (Chile)
Assistant Practitioners	1	0	0	0
Biological Sciences	0	0	1	0
Dentists	1	54	1	4
Dietitians	0	4	0	0
Midwives	0	1	1	0
Medical Technologist	0	1	0	0
MBBS Students (intercalating Degree)	51	0	-	-
Nurses	23	11	1	1
Occupational Therapists	1	1	0	0
Paramedics	2	0	1	0
Pharmacists	1	0	0	0
Physical Therapists	2	6	0	1
Physicians	46	32	2	0
Veterinarians	0	1	0	0
Total Participants	128	111	7	6

<sup>\*</sup>Student and staff profiles are presented from 2018 to 2021 in order to make data comparable.