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## Interprofessional educators' competencies, assessment, and training – IPEcat: protocol of a global consensus study

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### ABSTRACT

Contemporary practice in interprofessional education (IPE) has evolved predominantly focusing on the competencies for interprofessional collaboration (IPC) that learners must acquire. Competencies that educators need to successfully deliver IPC have been overlooked. This lack of attention is further confounded by a field replete with inconsistent terminology and standards and no global consensus on the core competencies needed for IPE facilitation. There are no globally accepted tools to assess interprofessional educators' competencies nor are there established training programmes that might be used as the basis for a collective global approach to these issues. The International Working Group for Interprofessional Educators Competencies, Assessment, and Training (IWG\_IPEcat) seeks to address this gap using a sequential mixed-method approach, to deliver globally developed, empirically derived tools to foster IPE educator competencies. This article presents the protocol of the research project.

### ARTICLE HISTORY

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### KEYWORDS

Interprofessional education (IPE); IPE core competencies; educators; assessment; training programme; global framework; guidelines

### Introduction

There is a global drive to promote interprofessional education (IPE) to enhance interprofessional collaboration (IPC; Rogers et al., 2017). IPC seeks to address the increasing complexity of service provision and delivery in the health and social care system; the complexity is related to demographic changes and rising numbers of chronic conditions and comorbidities (Bähler et al., 2015). Additionally, IPC may improve shortages of health and social care workers, and patient safety (Körner et al., 2014).

The effective delivery of IPE requires competent educators<sup>1</sup> to create and maintain an optimal learning environment (Oandasan & Reeves, 2005). Apart from the generic educators' skills of understanding their role, IPE educators should also demonstrate positive attitudes toward IPC, and develop interprofessional values, knowledge, concepts, and an interprofessional identity (Botma, 2019). Only well-equipped IPE educators can facilitate learners' interactions to understand and negotiate roles and responsibilities and develop creative interprofessional solutions for optimal patient outcomes (Reeves et al., 2017). However, the implementation of IPE has been unstandardized across learning environments.

Hitherto, researchers have focused on competencies that learners need to acquire for IPC, overlooking those of educators for IPE facilitation. Most of the literature is derived from institution-specific programmes. There is no

global consensus on these competencies nor on terminology to describe them. Consequently, there are no globally accepted assessments of IPE educators' competencies nor comparable educator training programmes. The IWG\_IPEcat seeks to address this gap through the global Interprofessional Educators' Competencies, Assessment, and Training (IPEcat) study.

### Aim of the project

This project (IPEcat) aims to develop a global consensual framework and guidelines for IPE facilitation, including:

- A set of health and social care educators' core IPE competencies (IPEc);
- An instrument for assessing health and social care educators' core IPE competencies (IPEca);
- An educators' training programme to foster IP educator development (IPEcat).

Terminology and culture-specific understandings concerning competencies, training pathways, and care-practice hierarchies in different contexts will be addressed. We are sensitive to culture-specific issues relating to the continuum of siloed health and social care delivery to team practices (Anderson et al., 2017).

## Method

### Design

The project follows a sequential mixed-methods approach (Robson & McCartan, 2016).

### Procedure

The project comprises six phases (Figure 1). Cooperation partners (IWG\_IPEcat) will be involved in all phases. Currently, there are 29 cooperating institutions from 18 countries worldwide (details regarding the partners is available<sup>2</sup>).

#### Phase A. Identification of IPE educators' competencies and assessment tools

A scoping review will identify the IPE health and social care educators' competencies and associated assessments. Based on this, an online survey to elicit learners' and educators' perceptions of key competencies expected of IPE educators will be developed for use in Phase B.

#### Phase B. Prioritization of IPE educators' competencies

The online survey will be distributed to learners and educators in all partner institutions. Participants will prioritize competencies on a seven-point scale from 0 (*not at all important*) to 6 (*very important*). Competencies will be ranked by average rating across collaborating countries (Müller & Kals, 2004). All competencies with mean  $\geq 4$  will be considered to represent a common

competency. Also, the competency with the highest mean from each country will be included (Huber et al., 2019). We anticipate that the survey will result in several items for measurement determination representing a broad construct (Embretson, 2015). The number of competencies will be reduced to a consensual set by cooperation partners applying the same prioritization method. Differences in IPE competency ratings between educators and learners have been previously identified (Kerry et al., 2021), therefore, we will compare the two groups. Differences will be emphasized in the consensus process via critical reflection.

#### Phase C. Definition of the set of core competencies and development of the assessment tool

Partners will be invited to participate in a virtual conference to reach a consensus on a definitive set of core competencies, using iterative discussion (Michels et al., 2012). Second, they will determine whether each competency is observable and measurable, if not, it will be reformulated. Third, participants will define criteria for use of the core set for assessment including the type of: (a) tool (e.g., self-rating vs. observational tool or two distinct versions), (b) descriptors that reflect the different levels of experience, (c) grading descriptions, and (d) standard of use (how to apply the tool, defining values, how to analyze, and how to interpret results). Face validity will be obtained during the negotiation process. We will consider how these competencies can be developed by describing step-by-step levels from novice to expert, taking into account different approaches to learning and teaching. This is a complex, non-linear process that may necessitate iterative discussions.

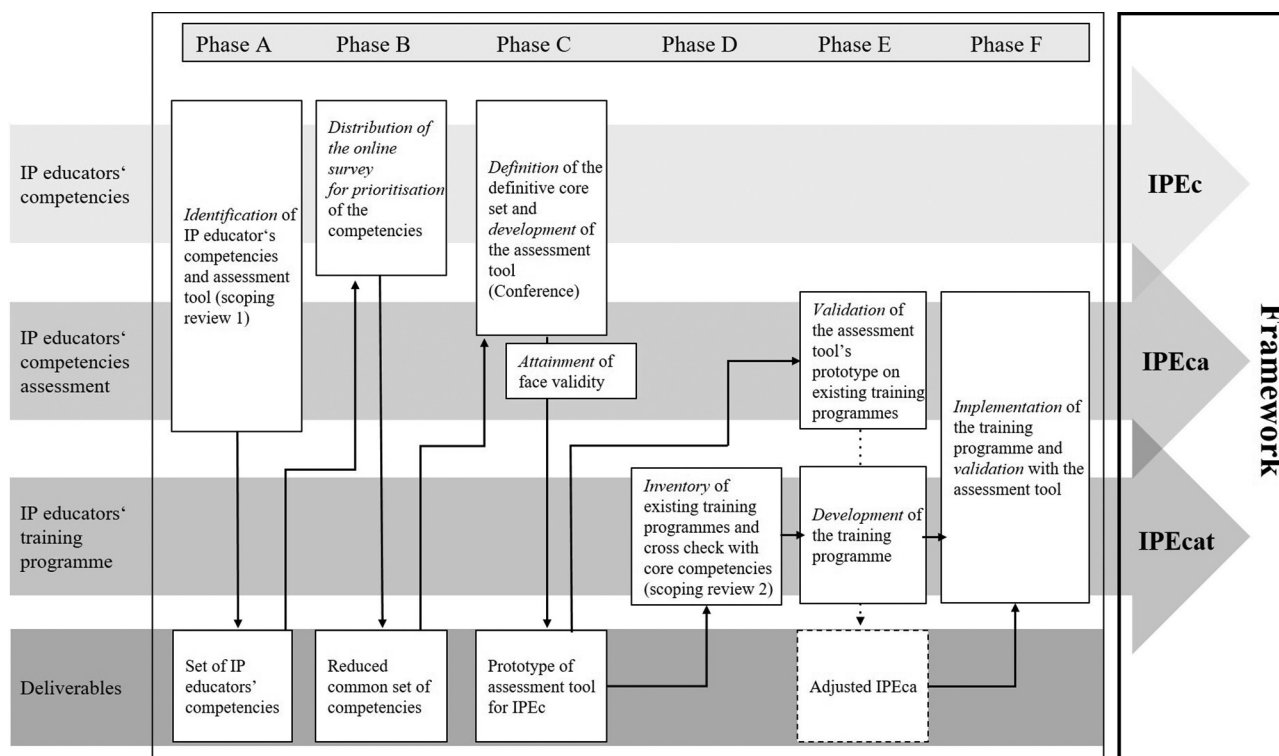


Figure 1. Six phases of the project

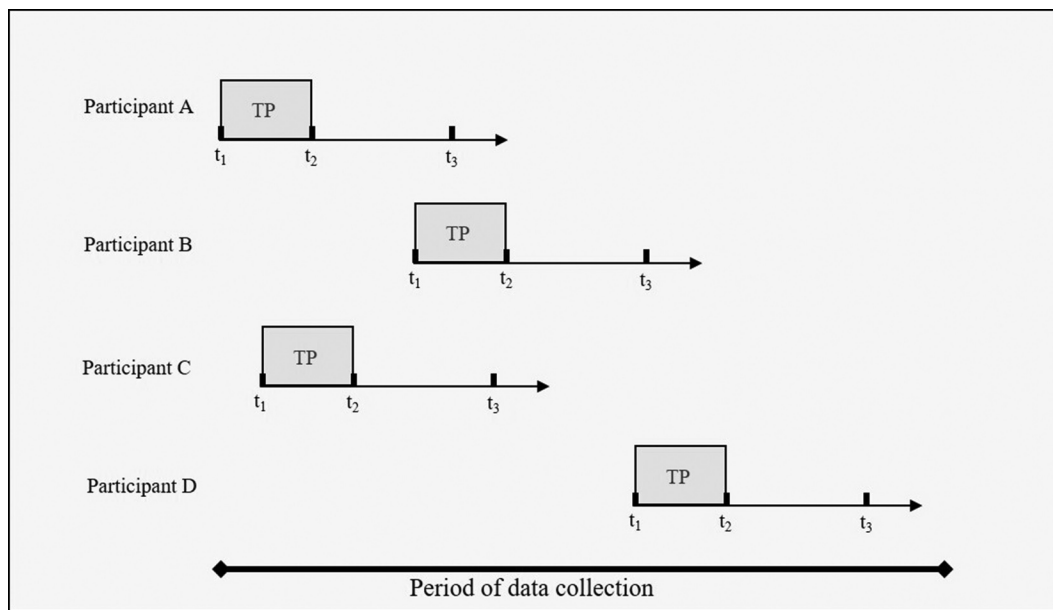


Figure 2. Multiple baseline design

#### **Phase D. Inventory of existing IPE training programmes for interprofessional health and social care educators as preparation for phase E**

To develop a global IPE educators' training programme, a second scoping review will identify existing programmes, focus on their methodology, and compare them to the IPE educators' core competencies defined in Phase C using a thematic analysis approach (Braun & Clarke, 2021).

#### **Phase E. Validation of the assessment tool and development of an IP educators' training programme**

A pilot validation will be performed with the assessment prototype (IPEca) on extant partner institution training programmes. Results will be compared with: (a) institution-specific internal evaluations, and (b) the Interprofessional Facilitation Scale – IPFS (Sargeant et al., 2010), as tools for comparison to establish: (a) convergent validity, (b) psychometric properties, and (c) the responsiveness of the new assessment tool.

The IPFS is currently the only published and validated tool, however, it focuses on IPE for health care practitioners in practical settings. The criteria for the assessment of IPE educators' core competencies, together with the inventory of existing interprofessional educators' training programmes, will form the basis for the elaboration of a global training programme. If existing programmes align with a set of core competencies, they will be used as a basis for a common training programme. The major goal of this process is to obtain a globally accepted open-access training programme designed for any health and social care professional with facilitation experience, interested in developing IPE educators' competencies tailored for experience.

#### **Phase F. Application of IPE educators' training programme**

The newly developed training programme will be implemented in all partner institutions. The effect of the training programme on IPE educators' competencies will be measured with the IPEca (self-rating and/or observation, depending on the type of assessment tool defined in phase C) using a multiple-baseline design (Figure 2). Finally, the resources developed (IPEc, IPEca, and IPEcat) will be compiled into a framework for international use and dissemination through Interprofessional.Global<sup>3</sup> to begin the process of uptake.

#### **Discussion**

IPE is acknowledged as necessary for the training of future health and social care practitioners (Interprofessional Research.Global, 2020). This project will lay the foundation for a programmatic advancement of IPE by building a standardized framework of interprofessional facilitation, defining a set of core competencies (IPEc), developing a tool for their assessment (IPEca), and elaborating an IPE educators' training programme (IPEcat) that can be adapted to local/national cultural contexts. Long term, this framework aims to foster IPE and IPC, strengthen the consistency and quality of IPE, and enable comparisons.

With standardized delivery of IPE facilitation, we anticipate that health and social care practices will become more inter-professional, ultimately leading to improved quality of care and patient safety (Reeves et al., 2017). Furthermore, downstream economic efficiencies in health and social care systems and delivery are envisaged (Guck et al., 2019). It is anticipated that this project will contribute to increased job satisfaction for healthcare professionals, leading to less burnout, higher workforce retention rates, and less staff turnover in healthcare

institutions (Körner et al., 2014). Effective IPC is seen as playing an important and significant role in achieving these goals when taught and facilitated by well-trained IP educators.

## Conclusion and Rigor

Difficulties in reaching consensus are anticipated and will need to be appropriately and effectively managed. Depending on the health and social care system, different perspectives with respect to IPE, IPC, and teaching-learning approaches will undoubtedly surface. We will enable space for these perspectives to be discussed whilst still building consensus. Additionally, the management of an international group of participants will require understanding and flexibility.

## Notes

1. The term educator includes academical or clinical educator in health and social care at all levels of IPE experiences and in some systems includes patients/service users and carers involved in teaching roles.
2. <https://drive.google.com/drive/folders/1MslFZ-3LEp6TuMuDBmAt5BilEx9mUdjl?usp=sharing>
3. Interprofessional.Global is the Global Confederation for Interprofessional Education and Collaborative Practice. <https://interprofessional.global/>

## Acknowledgments

We thank members of the IWG\_IPEcat for their critical review and helpful comments on this manuscript.

## Ethics

The study does not fall under the scope of the Swiss Evaluation of Human Research Act (Federal Assembly of the Swiss Confederation). If further review by an ethics committee is necessary in any of the cooperation partner countries/institutions, this will be requested.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

No funding to declare. The project will be submitted for funding.

## Notes on contributors

**Adeline Paignon**, Dr. psych.: Dr. Paignon is the head of the research platform at the CiS. She has been conducting quantitative and qualitative research projects for more than 15 years, with a specific interest for topics related to social science and health. She has a solid experience in the study of social interactions and skills transfer between individuals. In her current position, she is in charge of developing research and education programmes in interprofessionalism. Her work focuses on the impact of IPT on outcomes such as professional perceptions, clinical practices and institutional cultures. She also develops teaching and assessment methods and tools dedicated to improve the skills of IP trainers and trainees. Dr. Paignon is co-PI of the proposed project and contributes especially to the assessment tool.

**Patricia Schwärzler**, Dr. phil.: Dr. Schwärzler graduated in Anthropology of Health (University of Basel; lic. phil. 1997). In parallel to her PhD research in Epidemiology (Swiss TPH Basel 2013) she coordinated the international inter- and transdisciplinary health work package of the SNSF/SDC funded NCCR North-South at the Swiss TPH (2005-2013) and was involved in many projects of the programme. She has been working in and for the global South, particularly in West and Central Africa, since more than 25 years in social sciences health research, applied anthropological research, humanitarian aid and as a consultant. Patricia is a Research Associate in the IPECP team at the ZHAW where she conducts research and teaches IP and science related modules. Patricia will serve as project leader and contributes with her expertise on cultural aspects of the project and qualitative methodology.

**Matthew Kerry**, PHD: Dr. Kerry is currently a Scientific Associate at the ZHAW's Institute of Health Sciences, where he conducts research as a member of the IPECP team. Previously, he served for 2.5 years in a post-doctoral appointment at ETH Zürich following his PhD in Quantitative Psychology at the Georgia Institute of Technology, USA. Matthew has more than 45 scientific peer-reviewed publications, including journal articles, book chapters and conference proceedings. His extensive publication record includes pertinent works to the proposed project including, for example, systematic reviews. IPE/T measurement validation, as well as advanced-quantitative methods in IPE/T research. Dr. Kerry also currently serves as Editor of the Journal of Interprofessional Care. Matthew will serve as Main Statistician in the current project.

**David Stamm**, Dr.: Dr. Stamm worked as an assistant teacher of German at Petworth, West Sussex, England, 1986-87 and later on as a bookseller (Däniker's Bookshop, Zurich). He is a specialist in medical and academic English. His current position is module coordinator in interprofessional teaching at the Department of Health at the Zurich University of Applied Health Sciences ZHAW.

**Monica Bianchi**, Dr. phil.: Monica Bianchi currently works at the Department of Business Economics, Health and Social Care, University of Applied Sciences and Arts of Southern Switzerland as Professor in Interprofessionalism and Head of Master of Science in Nursing. Monica does research in Nursing Science, Interprofessional Education and Collaboration. Their current project is 'New project.'

**Andreas Xyrichis**, PHD: Dr Xyrichis is a senior academic researcher at the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care; ranked top Faculty for nursing in the UK and second in the world (QS 2020). Dr Xyrichis is the Chair of the Research Ethics Panel for psychology, nursing and midwifery; Director at the European Nursing Research Foundation; and Trustee of the renowned Centre for the Advancement of Interprofessional Education. He is also the Editor-in-Chief of the international Journal of Interprofessional Care, the most influential academic journal in the field of interprofessional science currently ranked in the top quartile of Thomson-Reuters impact factor list of Health Policy & Services journals. Dr Xyrichis has held clinical, research and policy posts in London and Brussels; and his training has been in nursing, research methodology, health policy and sociology. He holds a BSc, a MSc and a PhD, all from King's College London.

**John Gilbert**, C.M., Ph.D., LLD (Hon.), FCAHS: John Gilbert has been a seminal leader in the education of health professionals in British Columbia, Canada and globally. His vision and leadership led to the concept of interprofessional education being developed as a central tenet of collaborative person-centred practice and care. Dr. Gilbert is founding Principal and Professor Emeritus, College of Health Disciplines, University of British Columbia. He is a Senior Scholar, WHO Collaborating Centre on Health Workforce Planning and Research, Dalhousie University; Adjunct Professor, Faculty of Graduate Studies, Dalhousie University. He holds the DR. TMA Pai Endowment Chair in Interprofessional Education & Practice, Manipal Academy of Higher Education, India, and is an Adjunct Professor, Faculty of Health, University of Technology, Sydney. He is Founding Chair, The Canadian Interprofessional Health Collaborative and has given over 220 keynote presentations in the past 10 years.

**Jon Cornwall**, Dr.: Dr Jon Cornwall is a Senior Lecturer in the Centre for Early Learning in Medicine, Otago Medical School. Originally trained as a physiotherapist and clinical anatomist, Jon works in medical education and has research interests in posthumous human assets, including the posthumous utility of bodies, organs, and health information in healthcare and education. His other research interest is the functional morphology of spinal muscles, and muscle biology including age-related change in spinal muscle function.

**Jill Thistlethwaite**, MBBS, MMed, PhD, FRCGP, FRACGP: Professor Jill Thistlethwaite is a health professions education consultant and a practising family physician. She is affiliated to the University of Technology, Sydney (UTS) and the University of Queensland. Jill received her medical degree from the University of London and was a general practitioner in a semi-rural practice in the north of England for 12 years. She became an academic medical educator in 1996, and subsequently obtained her Masters in Medical Education from the University of Dundee and her PhD in shared decision making and medical education from the University of Maastricht. Jill has been working in Australia since 2003. Her major interests are interprofessional education (IPE), communication skills and professionalism. She has written one book on values-based interprofessional collaboration, co-authored 4 books and co-edited three – the most recent on leadership development for IPE and collaborative practice. She has also published over 80 peer-reviewed papers and book chapters. In 2014, Jill spent 4 months as Fulbright senior scholar at the National Center for Interprofessional Practice and Education.

**Marion Huber**, PhD, PT, HP: Dr. Huber is a physiotherapist, psychologist, neuroscientist and IP specialist. She worked nearly 20 years as a physiotherapist, a nurse and later as a neuropsychologist in a transprofessional ward with severe brain injured patients. Since 2008, she is an IP educator at the ZHAW, where she acts as deputy head of the Interprofessional Education & Collaborative Practice (IPECP) unit and leader of the IPECP research group. Since 2014 she is a professor of interprofessional collaboration and communication. She serves as the chair both in the Committee of Interprofessionality of the German Medical Association (GMA) and in the Association of Interprofessional Healthcare (IP-Health, former InZIG). She is an associated member of the international group of the Centre for the Advancement of Interprofessional Education (CAIPE), the international research group of CAIPE and the Pan European IPE and research Interest Group. She played a major role in the development of the ZIPAS® concept and is now co-responsible for the facilitators' IPTtTP and the evaluation. During the last three years, she was the principal investigator (PI) of a project of the FOPH within the framework of the funding programme for interprofessionalism in her quality as a mixed-methods specialist. Marion is co-PI of the proposed project and contributes to all methodological aspects.

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