# Potential of synchronous digital teaching & learning scenarios for interprofessional learning

Analysing the interaction of part-time, working students from nursing care, physiotherapy, occupational therapy and speech therapy in interprofessional virtual case discussions

 Wibke Hollweg\*

 First supervisor:
 Prof. Dr. Ursula Walkenhorst, Universität Osnabrück

 Second supervisor:
 Prof. Dr. Theda Borde, Alice Salomon Hochschule Berlin

## Background/current state of research

In order to achieve better interprofessional collaboration in practice, made necessary by more complex tasks [1], interprofessional teaching must be established as early as in the education and training of healthcare professionals [2]. Interprofessional learning (IPL) requires interaction of learners from different professions [3]. Learner-centred methods that promote interaction, such as case-based learning, problembased learning (PBL), peer-to-peer learning, as well as reflection on IP learning processes are recommended methods for IPL [4,5]. At the same time, digital teaching and learning formats are becoming increasingly important in training healthcare professionals and have evolved significantly since the outbreak of the Covid-19 pandemic in early 2020 [6]. They are also suitable for interprofessional case-based learning in both synchronous and asynchronous digital learning environments with a view to promoting interaction in the process of jointly solving problems and to moving towards shared decision-making and building knowledge through communication, collaboration, and the activation of prior knowledge [7,12].

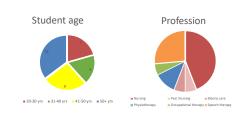
### Method

Exploratory qualitative research

- Analysis of secondary data: 16-20 interprofessional synchronous virtual case discussions in small interprofessional groups.
- Qualitative analysis of content according to Kuckartz & Rädiker [5].

#### Sample description / field access

- Natural field (digital learning environment)
- Recorded online conferences (video & audio)
- 34 part-time, working students in online
- interprofessional bachelor course, 2<sup>nd</sup> semester
- Students with prior vocational qualification
- Part-time students working in healthcare
- Practical work experience 1 to > 30 years



## Research goal

To date, research has mainly focused on asynchronous digital teaching/ learning environments for interprofessional learning, rarely synchronous settings. This is why it remains largely unexplored **how interaction for interprofessional learning takes place in synchronous digital learning scenarios** [6]. This research project aims to gather knowledge for designing interprofessional synchronous digital teaching and learning environments.

**ILEGRA** 

## **Research questions**

Which learning activities described as important for interprofessional learning can be identified in synchronous digital interprofessional case discussions?

Sub-questions:

- What change in learning activities can be observed over the course of eight weeks (six case discussions) in a learning group?
- Which characteristics can be identified in the synchronous digital learning environment in parallel verbal interaction and in chat communication?

Virtual case discussions according to the "Problem-based learning (PBL)" Concepts: online, weekly programme of students:

Preliminary case discussion (90 min) with formulation of learning goals

Self-organised study, literature research and study Case follow-up and reporting, information sharing, collaborative problem-solving & evaluation

- Qualitative analysis of content with deductive-inductive formation of categories
- Presentation of results
  Discussion integrating
- theoretical background and current state of research
- Deriving recommendations for the conceptualisation of synchronous digital interprofessional teaching & learning environments

3] Wallenhost U. & Heinzelmann B. (2019). Interprofessionelle Ausbildung zur Weiterentwicklung der Kommunikation im Gesundheitswesen. Zeitschrift für mediainische Ethik. 65(4): 387 – 398

[4] Huber M., Spiegei-Steinmann B., Schwärzler P., Kerry-Krause M., Dratva J. (2019). Kompetenzen zur Interprofessionellen Zusammenheit und geeignete Unterrichtsformate, Schluszbericht der Studie M3, ZHAW.
[5] King S., Greidanus E., Carbonaro, M. Drummond J., Boechler P.C., Kahlke R. (2010). Synchronous Problem-Based e-Learning (ePBL) in Interprofessional Health Science Education, Journal of Interactive Online Learning (92), 133-150

[6] Jones A.J., Vidal G., Taylor C. (2020). Interprofessional education during the COVID-19 pandemic: finding the good in a bad situation, Journal of Interprofessional Care 34(5), 633-646





Gefördert von der

Speech

therapy



Physiotherapy Next steps

Interprofessional learning activities

- [5,9,10,11,12]
- Sharing different perspectives
- Sharing expertise
- Sharing experience
- Negotiating goals
- Shared decision-making
  Reflecting on interprofessional group process

[7] Evens S., Ward C., Reeves S. (2019). Online Interprofessional Education: A Scoping Review , Medical Teacher, 41(2), 15-222

[8] Kuckartz U. & Rädiker S. (2022). Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstitzung (5<sup>th</sup> edition), Beltz [9] Charles G., Bainbridge L, Gilbert J. (2010). The University of British Columbia model of Interprofessional education, Journal Interprofessional Care, 24(1), 9-18

[10] O'Keefe M., Henderson A., Chick R. (2017). Defining a set of common interprofessional learning competencies for health pre students, Medical teacher 39 (5), 463–468

Hammick M., Olckers L., Campion-Smith C. (2009). Learning in interprofessional teams: AMEE Guide no 38. Med Teach. 31(1),1–12.

[12] Jennings D. (2006). PBLonline: a framework for collaborative e-learning. In: Savin-Baden M. & Wilkie (Eds.) Problem-based learning online, Berkshire, England: Open University Press

Occupational therapy

Nursing Care

#### Contact:

Wibke Hollweg \*Dipl. Lehr- und Forschungslogopädin Charité Universitätsmedizin Berlin wibke.hollweg@charite.de Associate member ILEGRA Graduiertenkolleg