

* ailyn.bornmueller@bih-charite.de

1. Berlin Institute of Health (BIH) at Charité, BIH QUEST Center for Responsible Research



Visit the FoRR course

Introduction

At the QUEST Center, we developed the *Fundamentals of Responsible Research (FoRR)* course for medical doctoral students, focusing on research integrity (RI) and good scientific practice (GSP). To scale this course, we created a train-the-trainer program. This case study details the design of the train-the-trainer format for postgraduate researchers with diverse natural science backgrounds and limited teaching experience. After training, the new trainers taught the FoRR course. We evaluated their training success and teaching quality. Of the first six postgraduate researchers trained, five became trainers, taught 22 students in total and participated in the evaluation process.

Design Principles

Malcolm Knowles, an expert in adult learning, identified four principles that help to create an environment where adults learn best. Three of which form the basis of our training concept:

- A Focus on **learning subjects**, that have immediate **relevance** and impact on participants work
- B **Participants involvement** in the planning and evaluation of their instruction
- C **Direct learning transfer**

Training & Supporting ,Trainers' Learning

Workshop (Theoretical Part)

Format: 2 days in presence, blended learning and flipped classroom
Content: Principles 'A & B' are covered

Additional Toolbox (Moodle)

Guided teaching (Practical part)

Format: 2 Interactive tutorials and 1 Colloquium in presence
Content: Principle 'C' is covered

Credits

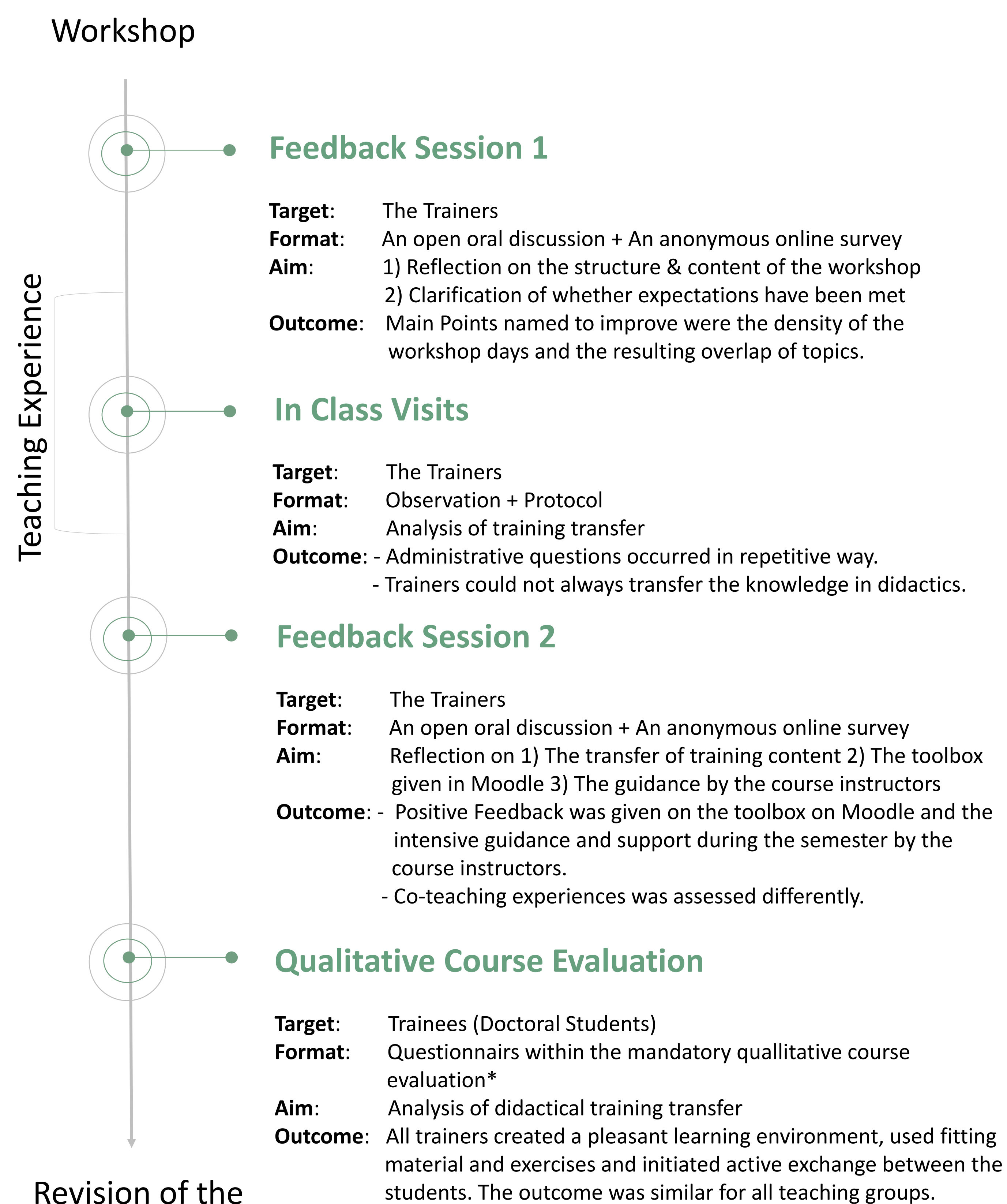
As part of the 'Qualification Program for Teachers' at the Charité, trainers receive a confirmation of attendance and credits for further didactical education. Teaching hours can be accredited for German habilitation.

Feedback by Instructors

Trainers could discuss their teaching plans with course instructors anytime. **In-class visits** provided direct feedback without involving active teaching or co-teaching by instructors. Administrative, organizational, and technical support was available during teaching events.

Evaluation and Key Findings

Evaluation strategy to analyze the training satisfaction and effectiveness



Train the Trainer courses

Five steps to ensure the quality of teaching RI and GSP, a case study

Training Revision & Conclusion

After the received feedback in the evaluation we will implement the following adjustments:

- **Three days workshop**, that offers the possibility to:
 - separate the different training topics.
 - invest more time in the didactic part and in demonstration of teaching.
- **Shorter administrative part within the workshop**, while offering support during the teaching experience.
- **Offering both teaching models**, co-teaching and teaching alone, for fitting the individual needs.



Visit the TtT course

Our approach is that the teaching of scientific integrity and good scientific practice must not only be imported, but must meet the individual needs of different institutions and target groups. For this purpose, it is important that teaching increasingly concentrates on qualitative rather than quantitative aspects.

Acknowledgements: I would like to thank Maren Hülsemann ¹ and Friederike Kohrs ¹, for the revision of my poster and their moral support. Funding provided by the Foundation Innovation in Higher Education Teaching.

References:

1. Knowles, M. (1978). *The adult learner: A neglected species* (2nd ed.). Gulf Publishing.