## **Systematic Review Workshop Proposal**

(Sächsisches Doktorandenprogramm 2021 – TU Chemnitz)

Workshop Title	Configurative Systematic Reviews in the Social Sciences
Workshop type	Methodological
Facilitator	Prof. Dr. Olaf Zawacki-Richter
	Carl von Ossietzky Universität Oldenburg (Germany)
Abstract	Conducting a systematic review is a fruitful exercise for early career researchers and doctoral students, to gain a solid overview of a given topic, in order to develop their own research topics and agendas. This workshop provides a dense introduction to the basic steps in systematic review methodology: the development of a review question and search strategy, documentation of the systematic review process, screening and coding of studies based on clearly defined selection criteria, synthesis and reporting, and finally publishing of results. Participants will be exposed to various software tools to support the process of systematic reviews, and content analysis in general. The workshop will be facilitated by the lead editor of the recently published book "Systematic Reviews in Educational Research – Methodology, Perspectives, and Application" (2020, Springer Open). Participants are encouraged to bring in their own research questions. On completion of this workshop, they will be able to launch their own systematic review project – which could be the first study in a paper-based dissertation.
Duration	Two days, 2 x 270 min  This workshop aims to give an overview of the whole systematic review process. In order to provide participants with the opportunity to engage in a first theoretical introduction and then explore first steps into the setup of a systematic review, the time frame of 2x 270 minutes is needed.
Needs analysis	In any research field, it is crucial to embed a research topic into the broader framework of research areas in a scholarly discipline, to build upon the body of knowledge in that area and to identify gaps in the literature to provide a rationale for the research question(s) under investigation. All researchers, and especially doctoral students and early career researchers new to a field, who develop their own research topics and agendas, have to familiarize themselves with the existing and relevant body of literature on a given topic. Conducting a systematic review provides an excellent opportunity for this endeavor.
Learning objectives	Participants are encouraged to bring in their own research questions for a systematic review. On completion of this workshop, they will  • have gained a solid overview of the systematic review process and learned how to document each step in a review protocol,  • be able to generate a review question based on the PICO framework,  • have learned how to develop a search strategy and to select studies using selection criteria,  • be able to discuss the quality of included studies,  • get acquainted with software tools for systematic reviews, and  • be exposed to published examples of systematic reviews in the social science.
Comment	Please note, that the topic of meta-analysis as part of aggregative systematic reviews will NOT be covered in this workshop.

# **Session Description and Methodology**

Day 1 - Activities	Time	
Getting to know each other	30 min	
Who is who?		
And what is the topic for your own systematic review project?		
Getting started: Introduction and Overview	60 min	
What is the rationale for systematic reviews?		
What are basic steps of the systematic review process?		
What is the difference between configurative and aggregative reviews?		
What is a PRISMA flow chart?		
A first systematic review example.		
(Presentation by workshop facilitator)		
Leading you all the way: The review question	60 min	
How to generate a review question?		
What is the PICO framework?		
(Based on the introduction of the PICO framework, a group activity is		
scheduled, in which participants in small groups of max. 4 develop review		
questions, some examples of which will then be discussed and provided		
feedback on in the workshop group)		
Coffee / Tea Break	15 min	
What you search is what you find: Search strategy and protocol	30 min	
<ul> <li>What elements does a search strategy have?</li> </ul>		
What is the importance of a search protocol?		
<ul><li>In which databases should I search, and in how many?</li></ul>		
What are potential pitfalls?		
<ul> <li>How do I translate my review question into a search string?</li> </ul>		
<ul> <li>In which databases should I search, and in how many?</li> </ul>		
What are potential pitfalls?		
(Presentation by workshop facilitator)		
Lunch Break	60 min	
Getting started: Developing a search string	30 min	
How do I translate my review question into a search string?		
Develop a search string for a given review question (either alone or in		
pairs/groups)		
Discussion and Feedback: Developing a search string	20 min	
Participants present search string examples		
Discussion and feedback from the group and facilitator		
(Short presentation by the participants, plenary discussion)		
Coffee / Tea Break		

What you see is what you get: Scoping searches		
<ul> <li>Why conducting a first scoping search in a literature database?</li> </ul>		
(Group activity: Participants try out a scoping search together using their		
previously developed search strings in different databases)		
Homework/Preparation for the next day		
<ul> <li>Participants revise their search string, apply it in different databases,</li> </ul>		
<ul> <li>and list a set of inclusion and exclusion criteria.</li> </ul>		
<ul> <li>Documentation of search results in the review protocol</li> </ul>		

Day 2 - Activities	
Checking in	
Urgent questions from yesterday?	
What you see is what you get: Scoping searches	
<ul> <li>Participants present the results of their scoping searches.</li> </ul>	
Discussion and feedback from the group and facilitators	
(Group activity: Participants try out a scoping search together using their	
previously developed search strings)	
When it gets hard: Software	60 min
Why use software for systematic reviews and reference management?	
Which software to use?	
Zotero for duplicate removal	
Ryyan for screening based on titles and abstracts	
EPPI Reviewer, a more sophisticated system	
Add-on: Content analysis with the text-mining software Leximancer	
(A mixture of Q&A, being integrated into the presentation by the workshop facilitator)	
Coffee / Tea Break	
Getting things done: Imports and exports	60 min
<ul> <li>Exports and imports between literature databases and Zotero</li> </ul>	
Removal of duplicates and setting up the systematic review in Ryyan	
Updating the PRISMA flow chart	
(Participants use various software tools to prepare reference for screening)	
Drilling down on content: Screening based on titles and abstracs	45 min
How to screen abstracts and studies?	
What is the role of intercoder reliability?	
(Review teams do blind screening of training sets and calculate interrater	
reliability).	
Lunch Break	

Drilling down on content: cont.	
(Review teams do blind screening of training sets and calculate interrater	
reliability).	
Digging deeper: Screening and coding based on full texts	
How to retrieve documents using Citavi?	
What to include in a coding scheme and how to execute it?	
(Presentation by workshop facilitator)	
How good is good: Quality assessment	
Why do quality assessment?	
How to do it?	
(Presentation by workshop facilitator)	
Coffee / Tea Break	
Coming to an end: Results and Dissemination	
How to do and write a synthesis?	
How and where to publish your review?	
(Analysis of exemplary published reviews)	

## Requirements

Material requirements	The workshop is based on the following book, edited by the workshop facilitator (open access):
	Zawacki-Richter, O., Kerres, M., Bedenlier, S., Bond, M., & Buntins, K. (Eds.). (2020). Systematic reviews in educational research: Methodology, perspectives and application. Springer Open, Wiesbaden, Germany. https://doi.org/10.1007/978-3-658-27602-7
	Other workshop material (e.g. videos, software, further readings, published systematic review examples, and templates) will be made digitally available in a reader available to the participants prior to the workshop.
	Participants need online access to a literature database via their university library during the workshop.
Space requirements	Workshop will be offered for a maximum number of 20 participants.
Equipment needed	Digital projector, flip chart and markers
Further comments	In order to have a rough idea on what participants are working on, we kindly ask participants to send us their topic and stage of the PhD, as well as the reason why the want to participate prior to the workshop.

#### **Workshop Facilitator**

Professor Olaf Zawacki-Richter is the Director of the Center for Lifelong Learning (C3L) and Director of the international Center for Open Education Research (COER) at Carl von Ossietzky University of Oldenburg, Institute of Education.

His research focuses on online distance education, open learning and open educational resources, educational technology, and international education in higher and adult education settings.

Olaf Zawacki-Richter is editor of 14 books and author of more than 160 journal articles and book chapters. He sits on editorial boards of the SSCI journals "International Review of Research in Open and Distance Learning" and "Distance Education", as well as "Open Learning", and the "Zeitschrift für Hochschulentwicklung".

#### Profile on Google Scholar:

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