

# From Theoretical Debates to Lived Experiences: Autoethnographic Insights into Open Educational Practices in German Higher Education

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## Abstract

The Open Science Fellow Program built a community where researchers learned how to work openly. Within this environment, questions emerged on what it means to teach openly, i.e. which practices represent open learning and teaching and which examples can be shared amongst colleagues and peers? Different concepts of open educational practices (OEP) aim at giving answers to open learning and teaching. At the same time, OEP still lack a common definition and many discussions on the topic only give minimal or implicit guidance to concrete approaches of being open —despite the creation and sharing of open educational resources.

Investigating how we as practitioners implement concepts of OEP in the classroom was the starting point for the autoethnographic study we describe in this paper. We conducted a literature review to map explicit concepts of OEP, we reflected those concepts regarding the adaptation in our own teaching and our experiences with OER-based and other open teaching concepts. We discuss four research papers and our respective position as practitioners in higher education in Germany. We reflect on the current state of ideas of OEP and their practical adaptation and implementation in learning and teaching scenarios.

## Keywords

open educational practices, open educational resources, autoethnography, higher education, Germany

# 1. Introduction

One goal of the Open Science Fellows Program<sup>\*1</sup> was to foster the interdisciplinary dialogue regarding open science. The program supported knowledge spaces where participants learned about open science practices and where they shared their experiences. Here, questions among participants—fellows and mentors alike—queried on how to open up one’s learning and teaching. A few fellow projects investigated open educational resources (OER). For instance, they prepared and shared material as OER, such as learning content on social entrepreneurship<sup>\*2</sup> and a textbook of statistical proofs<sup>\*3</sup>. Those projects demonstrate the increasing importance of openness in research and education in the “collaborative, interactive culture of the Internet” (Cape Town Open Education Declaration 2007). Digital resources can be easily shared, a fact that became highly relevant during the COVID-19 pandemic (Van Allen and Katz 2020). Other fellows have expanded their project goals and focused not only on sharing reusable material, but also aimed at involving a community. They invited research peers and students to create high-quality resources and let different groups take part in the process. Two examples are OpenRewi<sup>\*4</sup> and the teaching project<sup>\*5</sup> of this paper’s author Naomi Truan (Truan and Dressel (2021), Truan and Dressel (2022)). The project managers raised questions on what it means to teach openly, i.e. which practices do we mean when we speak of teaching openly, and are there any teaching concepts we can endorse?

For research, concepts of open science practices evolved with the goal of making research processes transparent and accessible (Bartling and Friesike 2014). FOSTER<sup>\*6</sup> presents an overview of topics related to open science. Discussions on open education often capture a broader perspective referring to education as a human right, the access to education, and education as a public good (Blessinger and Bliss 2018, Kerres 2019, UNESCO/UNICEF 2008). In relation to these discussions, openness in concrete teaching and learning situations concerns the operationalization and impact of two interrelated concepts, i.e. open educational resources and open educational practices. Open educational resources (OER) are openly licensed educational material. In the broadest definition, OER are any kind of material and any medium that can be used for teaching and learning, such as single worksheets and books as well as complete online courses (UNESCO n/A). Open educational practices (OEP) can be seen as an expanded idea of OER, with a focus not on the availability of learning and teaching material only, but on open practices within learning and teaching contexts.

OER have many intentions, such as being a driver “to make education both more accessible and more effective” (Cape Town Open Education Declaration 2007), improving the quality of learning and teaching (Farrow et al. 2020, Orr et al. 2015), and fostering collaboration and economic development (Johnstone 2005). In retrospect, those politically charged debates on the use and creation of OER and their contribution to opening up education preceded rather disillusioning results on the uptake of OER amongst educators (Kerres 2019). Framing the idea of OER as a component of open practices like OEP involves further problems, in particular as the latter lacks a common

understanding. While definitions of OER share core aspects — differences appear e.g. with regard to concrete licensing (Kerres and Heinen 2015) and whether OER include explicit learning and teaching material or all openly licensed material, OEP still lack a common definition (Bellinger and Mayrberger 2019, Mayrberger 2020). The term itself seems to suggest concrete practices. Expanding on the OER movement, the most explicit practices in many OEP concepts include use and creation of OER. But what other practices do OEP comprise? For an educator interested in opening up their teaching, this question is not only a matter of descriptions of open practices, but to a concrete implementation and adoption of them in their teaching contexts. In other words: How do OEP concepts translate into practice?

Investigating how we as practitioners implement OEP concepts in the classroom was the starting point for the autoethnographic study we describe in this paper. We conducted a literature review to map explicit concepts of OEP, we reflect those concepts with regard to their adaptation in our own teaching and our experiences with OER-based and other open teaching concepts.

In the second chapter, we give a brief history of the main debates and studies on OER and OEP, before introducing our methodology in chapter 3. We present and discuss our results in chapter 4. Chapter 5 summarizes our findings.

## 2. Development of OER and OEP concepts

Within the paradigm of openness in education, OER and OEP were developed in two phases (Ehlers 2011). The first phase was mostly concerned with OER, a term established by the UNESCO (2002). The *Paris OER Declaration* (UNESCO 2012) defines OER as “teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions”. Bliss and Smith (2017) summarize it as the two major components of OER: “it is available for free to all and it is adaptable to serve the needs of the user”. Going further, OER are guided by five principles, the ‘5 Rs of openness’ (Wiley n/A): One can *retain* and *reuse* them (e.g., in a seminar or on a website), *revise* them (i.e., adapt or alter the content), *remix* them (i.e., combine them with other OER), and *redistribute* them (e.g. upload them to open repositories). The responsible use of OER is warranted by a system of licensing, for example by the Creative Commons licensing framework<sup>\*7</sup>.

The potentials of OER rest in their free accessibility. The UNESCO stresses their potential specifically for disadvantaged regions (Johnstone 2005). Open textbook initiatives e.g. in the UK try to reduce students’ paying for expensive study resources as well (Farrow et al. 2020). Beyond accessibility, the 5 Rs aim for more collaboration and communication, not only amongst educators, who might create common OER and share capacities, but also amongst educators and students. DeRosa and Robison (2017) argue that the openness of the resources enables a “shift” in how students conceptualize learning, as the engagement moves from one between the student and the content to an interaction

between students and students and instructor. The creation and reuse of OER thus goes beyond the mere production of resources insofar as “students asked to interact with OER become part of a *wider public* of developers, much like an open-source community” (DeRosa and Robison 2017; also see Truan and Dressel 2022).

Despite their potential, OER are not widely used in education. Studies from the U.S. have shown that “the levels of awareness of OER, the licensing tied to it, and overall adoption of OER materials, remains low” (Seaman and Seaman 2017: less than a third of faculty members (30%) are either “very aware” (10%) or “aware” of OER. Other studies reveal similar results (Boston Consulting Group 2013, Heck et al. 2020a) and show that reasons for a low OER uptake lie in not finding high quality OER or specific content for one’s context or discipline, not having the time to create and share OER, and not seeing any benefits in using or creating OER in one’s specific teaching context.

The second phase identifies a shift from OER to OEP (DeRosa and Robison 2017, Ehlers 2011, Karunanayaka et al. 2015, Ossianni-Isson et al. 2020), together with the promise that OEP will “unleash the power” of OER (Ehlers and Conole 2010). While the idea that “[o]nly the use of OEP leads to open education” (Mayrberger 2020, p. 1) is now widely shared in the scientific community, there is no consensus on how OEP are defined, nor on how to describe their relation with OER. While OER have been closely scrutinized, OEP have remained underinvestigated (Wiley and Hilton III 2018, p. 21), which can be explained by the fact that OER are *resources* that can be grasped (Bellinger and Mayrberger 2019, p. 23): you can create them, reuse them, criticize them. In other words, OER are visible in concrete results. OEP, on the other hand, are *practices*, i.e. they include processes that may lead to OER, and for this reason seem harder to define and describe.

OEP have been defined in several slightly different ways. In their exploratory literature review on OEP, Cronin and MacLaren (2018) note that the first reference to digital OEP was published in 2007, followed by “a slow but steady increase” (Koseoglu and Bozkurt 2018). Besides the term “OEP”, other terms that referring to similar concepts are *open pedagogy* (Hegarty 2015, DeRosa and Jhangiani 2017), *open digital practices* (Gallagher and Lamb 2016), and *OER-enabled pedagogy* (Wiley and Hilton III 2018). In most cases, the terms are used as quasi-synonyms, and in the following we refer to OEP, while also taking into account the literature that uses alternative terminology.

First understood as “a set of activities and support around the creation, use and repurposing of OER” (Conole 2010), OEP must be assessed according to two important dimensions: (1) “the stakeholders engaged with creating, using or supporting the use of OER”; (2) “the range of mediating artefacts that can be used to create and support the use of OER”, including “tools and resources”, “technologies”, and “contextual factors which impact on the creation, use or support of OER” (Ehlers and Conole 2010, p. 2). In an expanded definition of OEP, one might “us[e] OER in a way that learning experiences improve and educational scenarios are innovated” (Ehlers 2011, p. 2). This is usually meant to encompass “collaborative practices that include the creation, use, and reuse of Open Educational Resources, as well as pedagogical practices employing participatory

technologies and social networks for interaction, peer-learning, knowledge creation, and empowerment of learners” (Cronin 2017, p. 4).

To be truly considered as open, OEP rely on interrelated principles, sometimes also listed as attributes or features of openness. Among them are collaboration and sharing of information, connected communication about learning and teaching, collectivity to grow knowledge and resources, critique for the promotion of scholarship and serendipitous innovation (Conole 2013). Hegarty (2015) expanded those perspectives according to eight concrete attributes, describing each of them in detail. OER in this context are applied within the “new culture of learning”. The eight attributes are seen as a metalevel of open pedagogy, where in such an environment, concrete practices can be implemented and promoted. As earlier papers did, Hegarty (2015) gives us a conceptual framework to make OEP more tangible, i.e. to provide educators with a better picture of open practices. In her interview study with practitioners in higher education, Cronin (2017) reveals the motivations underlying OEP. The study gives insights into how OEP can translate into daily teaching practices and which factors foster or hinder their use.

Other studies have investigated learners’ perceptions in concrete teaching scenarios such as the co-creation of learning scenarios with students and staff (Bovill et al. 2016) , or the qualitative analysis of students’ positioning towards open science (Truan and Dressel 2021. Wiley and Hilton III (2018) have likewise investigated benefits and obstacles of OEP in concrete scenarios, and see a need for more evidence-based decisions to uptake OER and OEP. In their paper on OER-enabled pedagogy, they do not investigate any study, but try to explicate what OEP scenarios can look like and how they can be classified to avoid an “openwashing” of OEP concepts.

In summary, the literature on concepts of OEP shows a broad variety of definitions and understandings. Researchers applying new approaches of empirical studies come to the conclusion that more evidence is needed on the impact of OEP. The increasing amount of literature on this new topic has led to recent review papers that try to synthesize findings ( Bellinger and Mayrberger 2019, Koseoglu and Bozkurt 2018) and others classify OEP activities based on recent literature (Bellinger and Mayrberger 2019, Mayrberger 2020).

Regardless but also because of the wide breadth of approaches to OEP and OER, our research question remains: Do these papers on OEP give practical hints for educators to apply OEP, and if so, can practitioners translate them into their daily teaching activities? In other words: What benefits and barriers do educators detect when reflecting on the ideas of OEP from the literature? We opt for a cutting-edge methodological strategy we refer to as autoethnographic approach to address these questions. It depends on reading and reflecting on research papers critically. In the following, we will delve into the method and choice of research papers.

### 3. Methodology: Our autoethnographic framework

Starting from our research interest to identify consistencies and inconsistencies in theoretical understandings of OEP and their practical implementation and adoption, we developed a research design comprising four phases. As a first step, we reviewed relevant literature on OEP. We highlighted relevant conceptual and empirical papers that either include explicit descriptions of practices or are based on practices coming from empirical work. Note that at this stage, we did not base our literature choice on a systematic search.

Fig. 1

In a second step, we engaged in collaborative reading and discussion with the mentioned sources while keeping our research question in mind, i.e. “do these papers on OEP give practical hints for educators to apply OEP?”. After gaining an overview, we observed that we all had a keen interest in dealing with four very diverse, yet we think complementary papers. We chose four papers published in English that enabled us to position ourselves towards their claims. We opted for Cronin (2017) for the highly empirical focus that allowed for us to reflect our experiences as practitioners, while Hegarty (2015) and Mayrberger (2020) propose lists of attributes that we wanted to discuss. This set of papers was complemented by Wiley and Hilton III (2018) because they show a clear focus on the relationship between OER and OEP and give many examples. Moreover, the papers represent different and temporal and geographical perspectives, with Hegarty from New Zealand presenting an early extensive concept of OEP from 2015, following Cronin presenting empirical data from Ireland studying practitioners in higher education, complemented by Wiley and Hilton III from the U.S. classifying explicit case studies of OEP, and Mayberger from Germany as a very recent paper that tries to synthesize existing OEP concepts and derive specific activities from them.

The third step mostly concerned the phase of joint data collection. The work was guided by autoethnography as a methodological approach that was carried out in a particular collaborative manner, inspired by the project AEDiL (Autor:innengruppe AEDiL et al. 2021). The method of collaborative autoethnography can connect the individual experiences, perceptions and emotions of various researchers participating in the autoethnographic study (Chang 2013). The authors of this study, hereinafter named as practitioners, therefore took notes of their individual autoethnographic reflections of how each theoretical OEP related papers (Cronin 2017, Hegarty 2015, Mayrberger 2018, Wiley and Hilton III 2018) met their individual academic teaching experiences and practices. The individual autoethnographic reflections are deposited at Zenodo (Fahrer et al. 2022), and as well in the appendix (Suppl. material 1).

Wherever we refer to our autoethnographic reflections, we use our initials:

- Sigrid Fahrer: S.F.
- Tamara Heck: T.H.

- Ronny Röwert: R.R.
- Naomi Truan: N.T.

The last and fourth step of the research design was characterized by collaborative approaches towards finding common themes among practitioners. We read and commented on the individual autoethnographic reflections made in step three in order to find overarching topics covered by at least two or three individual reflections. We found four main overarching topics that describe important issues linking theoretical approaches of OEP and concrete educational practices. These topics are discussed below.

## 4. Empirical findings: The four core topics

We as practitioners met for a group discussion of the autographic reflections to identify common issues and overall threads found in the four texts. Four main topics could be established. First, we were all preoccupied with the *relationship between OER and OEP*, particularly the question of whether OER are mandatory for OEP or can be simply an optional component. Second, the scope of *participation* was a common concern, as was the issue of how to truly engage in a participatory learning culture with students. Third, the issue of the *values and attitudes* underlying OEP arose, specifically whether and how values and attitudes toward openness in education can be reflected in teaching practices. Fourth, the limitations to OEP caused by *institutional and structural boundaries* emerged as a critical topic and almost as a tipping point for OEP implementation. Although these four issues are shared concerns, each of us has a unique perspective shaped by our experiences - see below.

### 4.1. Necessary core or unnecessary complication: The role of OER in OEP

The relationship between OER and OEP is widely discussed in the research literature (for an overview, see Mayrberger 2020). The four articles examined in the autoethnographic study also attempt to understand and explain the relationship between the two concepts. They arrive at different conclusions. Cronin understands the connection as just one “interpretation” (Cronin 2017, p. 2), Hegarty (2015) finds OER are “essential” to OEP, Mayrberger (2020) establishes that OEP “include the use and reuse of OER”, and Wiley and Hilton III (2018) see a “close association”. The various models themselves are not always accurate, blurring the lines even further at times. For example in Mayrberger’s text it remains unclear how OER are defined, as the “narrow view” mentions “OER along the 5R”, which implies a difference to OER that do not or do not fully comprise the 5R.” (T.H.). However, three interpretation lines can be found in the four research texts.

Reducing *OEP to the simple use of OER* as readily available material is viewed by some of the researchers as a counterproductive limitation. This results in being “relegated to the ‘back benches’” (Hegarty 2015). Similarly, taking a strictly product-oriented approach to OER, thus focusing on technology, may be detrimental to OEP (Mayrberger 2020). Putting too much emphasis on the material aspect of OER as OEP appears to some of us

to be limiting (R.R., N.T.). However, using OER in the classroom should not be dismissed lightly because most of us have done so with positive results. (S.F., T.H., N.T.). N.T. even believes “that the potential of OER does not only lie in their creation, but also in students knowing [about] their existence and being ready to re-use existing OER”.

*When OER are seen as enablers of OEP in the context of the 5Rs*, they are defined as integral components of OEP in some studies (Hegarty 2015), sometimes even synonymous to OEP (Wiley and Hilton III 2018, p. 135). The emphasis here is on the course work enabled by the 5Rs. Wiley and Hilton III (2018) give some practical examples which have proven to be helpful (T.H.). Although some of us have experienced the idea of the non-disposable assignment as a motivating factor for students (N.T., R.R.) and teachers (S.F.), all of us are very skeptical about putting OER at the center of OEP. One of the main concerns is that creating OER presents too many challenges. Both students and teachers need specialized knowledge in the field of openness (S.F., T.H.). Producing OER adds to the workload, especially when it comes to licensing all class materials (R.R.), and there are little incentives for lecturers to do so (N.T.). Furthermore, institutional boundaries such as credit and course requirements may be incompatible with the production of OER (S.F., T.H.). OER created in class must be measured up to academic quality standards, which cannot be guaranteed when OER are student-produced (T.H., N.T.). Finally, students cannot be forced to openly license their material if they are dissatisfied with the outcome (N.T.).

Consequently, the assumption that OER are automatically beneficial for teaching needs to be revised, especially if they are only viewed from a teacher's perspective (NT). In some cases, the creation of OER can even result in a different type of exclusion, for example, if students are not used to project-based learning methods (S.F.). This outcome might seem paradoxical at first glance, but Kerres (2019) contends that the mechanisms of openness and exclusion are both inherent in any discussion of open education. He argues further that understanding and analyzing openness and mechanisms of opening in relation to closeness can help to counteract the often political-emphatic charge in the discussion about openness in scientific discourse (Kerres 2019). Regardless of our reservations about creating OER, most of us have had classroom experience producing OER, ranging from blogging to collections of interesting links to writing Wikipedia articles (S.F., T.H., N.T.).

*When OER are classified as one component of OEP*, the definition of OEP is broadened to include more than just course work (Mayrberger 2020). In that context, OER can contribute to “a new culture of learning” (Hegarty 2015, p. 11). R.R. supports this claim by pointing out that OER can help students gain a better understanding of broader concepts of learning. However, Cronin (2017) demonstrates in her study that OER are still neglected in higher education, and lecturers hardly use them. For R.R., this omission is yet another indication that concepts focusing merely on the material side of OER are unimportant to open practitioners. He thinks “contemporary pedagogy as way more than just the mode of working with teaching and learning materials and the licensing of that”. Cronin (2017) even reverses the relationship between OEP and OER, stating that since OEP are present in higher education, and OER are one element of them, OEP can lead to



OER. Hegarty (2015) takes a similar stance, claiming that the OEP dimensions she developed, when implemented in policies and strategies can increase OER adoption.

In conclusion, we argue for being less strict about OER as a requirement for OEP. OEP should exist without producing OER. The use of openly licensed material, as well as free content, should be recognized as open practice (T.H., N.T.). If OER are created in class, they do not have to be published openly; they can simply be used in the classroom and published through closed course management systems available at university (S.F., N.T.). And if the teaching method is to focus on the production of OER, it should be at least developed in collaboration with students (S.F., N.T.).

## **4.2. Participation: Moving beyond participatory tools to a culture of collaborative learning**

The papers on OEP as well as our own perspectives share the idea of *participation*. Broadly defined, *participation* refers to a culture of collaborative learning; narrowly defined, it mostly refers to participatory tools and technology (Mayrberger 2020, p. 1). Participatory pedagogy in general is an approach geared towards fully involving the students as co-creators in the learning process, and participatory technologies in particular serve this purpose by giving all participants digital tools to interact with each other. All practitioners usually emphasize both aspects (see for instance the definition by Cronin 2017, but “participatory technologies”, the first attribute mentioned in Hegarty (2015), sometimes takes over, relegating didactic and pedagogical considerations to the background. When moving from the narrow view on participatory tools and technology, the four texts highlight the orientation towards students or learners in how they co-create content, leading to OER. Participation then becomes a condition and consequence of a learner-centered view on learning and teaching, fostering “shared responsibilities” (T.H).

First, a decisive element in participation, easily forgotten when practitioners focus on participatory tools and technologies, is *students’ motivation*, which emphasizes “the value of the social factor within learning processes” (R.R., referring to Cronin 2017). Because they value “social learning” related to moving “away from a didactic lecturing style and to encourage more student engagement” (T.H), OEP stress students’ co-creation and participation. OEP are then one of the pedagogical options (“a variant practice” according to S.F.) focusing on “engaging students, fostering collaboration and technological enhanced learning” (S.F., referring to Mayrberger 2020. In their discussion of “renewable assignments”, as opposed to “disposable assignments” which are created for one course only and never shared or reused, Wiley and Hilton III (2018) indeed show that knowing that expanding the learning process beyond one specific class may be exciting and empowering for students (N.T.). As they become part of a larger community, “learners might be more motivated and take the results of their learning processes more seriously if it is published in the internet sphere” (R.R, cp. N.T.).

Second, when moving beyond the mere use of participatory tools and technologies and considering how a participating culture can empower learners, a crucial aspect in

designing participatory pedagogical practices consists in taking *students' needs and apprehensions* seriously (also see, as a counterpoint, *learners' motivation* in 4.4). Teachers always have to navigate between students' heterogeneous needs, e.g. passing an exam, learning concrete skills, with more abstract and long-term oriented values such as openness (T.H.). Therefore, S.F. is for instance critical about “introducing more than two new tools”, as too many unfamiliar tools, no matter how participatory, may be overwhelming, especially when the students are already conversant with the learning management system of their institution, which is usually closed for other people from outside a teaching course. Moreover, our teaching experience shows that publishing their own material might decrease the students' feeling of trust and thus openness. Students' motives for *not* sharing their work—and thus not fully embracing a culture of participation towards the outside world—include, but are not restricted to the following motives: “they may benefit more from a personalized feedback that they will not share with others, they may be reluctant to upload versions of their work they consider incomplete or needing improvement, they may want to protect their public image, etc.” (N.T.). How, then, do OER and OEP actually help create participatory, but also inclusive learning spaces that take into account students' needs (R.R.)? Openness can indeed become a vehicle to exclude the students who may not have the time or energy to engage in high-consuming open practices (S.F.). When openness is being perceived as a supplementary workload, students' boundaries may be crossed in the name of a participatory culture that considers ‘sharing with the world’ more important than what is happening in the classroom (Truan and Dressel 2022).

Third, a key question in the discussion on participation asks *where* participation takes place, with a focus on the dynamic relationship between fostering OEP in the classroom and producing OER for an audience outside the classroom. Our teaching experiences invite us to recenter the discussion on *participation* at the level of the seminar: how much openness do the students want, do they benefit from it, are they willing to invest time and energy in making their work open? Merely publishing all teaching materials under a CC license does not mean that the practices leading to OER or based on OER are participatory (R.R., N.T.). A way to tackle the challenges associated with OER, then, is to shift the discussion from their *creation* to their *reuse*: the potential of OER also ‘simply’—and this is often overlooked—“in students knowing their existence and being ready to reuse existing OER” (N.T.) or in being able to find and critically assess “user generated content openly available on the internet” (S.F.). Another idea to foster openness while enabling students' participation is to move to a meta level, for instance by encouraging “a reflection on Knowledge Equity (who produces knowledge, who is legitimate, who is recognized, by what control mechanisms, etc.)” (N.T., also see Kruschik & Schoch, this issue). It is only by recognizing who feels legitimate to participate in knowledge production, especially as these issues are intertwined with gender, class, race, etc. that we can avoid that “the open teaching process can lead to a different form of exclusion” (S.F.). In sum, participation cannot only be viewed as a process oriented towards others, aiming at presenting results outside the classroom (N.T.), as “participation activities [often] start in a closed environment (LMS)” (T.H.).

### 4.3. Personal values can push OEP, but there are real challenges

The understanding of *openness* and its associated values and attitudes differ in the papers' outline and argumentations. The four levels of OEP (Mayrberger 2020) focus on practical implementations of educators, like using and remixing OER or co-creating knowledge items. With their even more concrete teaching examples, Wiley and Hilton III (2018) as well report on practical implementations of OEP and open pedagogy. In contrast, Cronin (2017) concludes from her interview study on the perception of being an open educator that "openness as not just a practice but an ethos, a way of being" (Cronin 2017, p. 13). The teachers she interviewed are "motivated by personal values" (Cronin 2017, p. 13) and did not mention concrete practices like using OER. The eight attributes of Hegarty (2015) relate to personal attitudes (like developing trust and confidence for working with others) as well as concrete practices like interacting via social networks.

The different concepts of OEP show the two sides connotated with *openness*. On the one hand, OEP and related concepts are discussed as attitudes or mindsets towards a different understanding of learning and teaching, based on personal values and embracing broader concepts like "open learning design" (Hegarty 2015, p. 4) and "the formation of a participatory culture" (Cocciolo 2009, p. 114). On the other hand, the articles reflect on *translating* these attitudes and mindsets into concrete practices to foster a change in learning and teaching, i.e. "enacted OEP" (Hegarty 2015, p. 11). The *translation* of Mayrberger (2020) identifies four levels of OEP. In the autoethnographic reflections, the practitioners discuss both connotations at different levels, while being more critical with vague concepts of OEP that relate to values and attitudes and where a measurable practice is missing (N.T.).

*Openness as an attitude or value* is reflected as part of one's personality: "I try to understand myself as a teacher with open pedagogy understanding, though still without a clear definition" (R.R.). This attitude evokes an even broader understanding beyond in-class teaching practices, like "constant professional development" and relations to "social learning" (R.R.). Concrete practices become part of this self-portrait as an open practitioner, like the "importance of peer-exchange" (R.R.). As such, educators should embrace specific OEP to have an open mindset: "The integration of research on teaching and learning as well as trying to research my own teaching practices, is key for me to feel as an open practitioner" (R.R.).

N.T. introduces a further perspective while reflecting on Cronin (2017). In her understanding, "using OEP" means either "being open" and/or "explicitly teaching openly" (N.T.). Here, openness as an attitude and open practices are interwoven, one is not possible without the other. S.F. points at a similar understanding in Cronin (2017), i.e. "educators can shape and/or be shaped by openness". Interestingly, T.H. remarks that the lecturers interviewed in Cronin (2017) understand openness as a social value and do rather not see it as a teaching practice. Valuable goals that shape practice according to the autoethnographic reflections are "focusing on engaging students in the process, fostering collaboration and technological enhanced learning" (S.F.). The learner-

centered approach is at the core of OEP. Cronin (2017) relates this aspect to the value of social learning. Moreover, student co-creation and active participation are related to crucial elements of research-oriented learning (T.H.) (cp. Heck and Heudorfer 2018).

*Translating an open mindset into practices* seems more difficult. The autoethnographic reflections show that a concreteness and clear distinctions between different levels of open practices might not reflect everyday teaching practices. One practitioner embraces the statements in Mayrberger (2020) as they show that “that OEP is not a binary concept in the sense that either teaching and learning practices are open only or closed only. [...] Therefore, full degrees of openness can maybe never be reached” (R.R.). The practitioner sees the four levels of OEP (Mayrberger 2020) as different “ranges” that show a “realistic impression of what OEP could be in concrete settings” (R.R.). Similarly, though arguing against a strict distinction of the four levels, T.H. states that her teaching is “highly fluctuating” and a concrete assignment of her teaching to one of the levels of OEP might be difficult. Although N.T. assigns her teaching experiences to some of the levels, she admits that she as well has difficulties to differentiate between levels.

However, for N.T. and S.F. the four levels of OEP are helpful and stimulate their own reflections on their practices. The practitioners reflect on the different teaching contexts they experienced and the difficulty to fit those contexts to specific “levels of openness”. Mayrberger (2020) also says that OEP is “highly contextual”. Thus, seeing the proposed levels as a range of OEP practices on a nominal scale would best resemble OEP in teaching scenarios. Wiley and Hilton III (2018) suggest four questions for practitioners to check if they are in line with OER-enabled pedagogy. These concrete criteria are seen as “too strict” and might impede “putting the creation of OER into practice” (S.F.). Reflecting their teaching practice, it seems that the practitioners are upholding their values on OEP, but concurrently consider contextual situations. For example, students need to learn to be open (T.H.), and forcing them to publish their material “might decrease their feeling of trust” (R.R.). Course size and exam requirements are other factors in real-life teaching that do not always conform with students’ creation of OER. Further structural boundaries exist, discussed below.

#### **4.4. Structurally limited openness: OEP within given educational institutions and structures**

Teaching and learning, whether realized in an open or closed manner, always happens in a given setting and infrastructure. These structural conditions exercise a significant influence on concrete educational practices and thus frame the unfolding potential of openness within educational practices. All autoethnographic reflections investigated in this study cover certain aspects of these *structures* that represent breaking points between theories and practices when trying to implement OEP, mainly because theoretical concepts often miss mentioning structures and their influence on openness. We understand *structures* in the context of educational practices as nonmodifiable institutional conditions underlying concrete academic teaching and learning. How and

why do institutional structures limit opportunities to foster OEP proposed in theoretical accounts?

Within their reflections on their own educational practices, T.H. and S.F. underline the importance of *skills and knowledge* related to openness and OER as important prerequisites. A decisive element related to prerequisites, easily taken for granted when practitioners focus on openness in learning and resource co-creation, are students' and teachers' "knowledge about open licensing, knowledge about the use of open digital tools, collaborative working skills, and knowledge in didactic design" (S.F., referring to Wiley & Hilton III 2018). T.H. offers an example in correspondence with Mayrberger (2020): "If I'd aim for a narrower or stricter concept of OEP, a teaching scenario would imply that students create OER in a fully open environment (like an open Wiki). I did that once, with advanced BA students, who were asked to write blog entries (although at this time open licenses did play no role). My experience was that some students were not fully aware of the openness in this activity." Thus, OEP rely on necessary awareness building among learners. Our autoethnographic reflections point out that the concrete implementation of OEP often meets structural barriers in the sense of skill and knowledge limitations that need to be better addressed by institutional measures such as media skill development and separate openness awareness courses in order to reach "full adoption of open pedagogy principles including general frameworks and institutional and political governance" (Mayrberger 2020, p. 4).

There are not only awareness and skills related aspects among learners that attribute for the implementation of open dimensions within teaching and learning practices. All individual autoethnographic reflections deal with the issue of inadequate *structural motivation and incentives for university lecturers* to foster OEP. In most cases, the autoethnographic reflections question the normative assumption of highly intrinsically motivated teachers when it comes to openness aspects. In response to the empirical investigation by Cronin (2017) based on qualitative interviews with lecturers in higher education, N.T. identifies structural limitations for her own OEP: "In my view, the most central aspect is the reluctance to add to their already overwhelming academic workloads, as teaching remains undervalued in contrast to research when it comes to grant funding and professorships. The time issue is crucial: as long as teaching in general and open education in particular are not as valued as research outputs, I do not see a culture of openness become more prevalent in academia." Similarly, S.F. relates personal motivational issues also to those of learners by questioning comparable normative assumptions within the framework of Wiley and Hilton III (2018): "The myriad of tasks are not only overwhelming for the teacher and the lesson plan but for the students as well." All the different autoethnographic reflections share the deep conviction that openness cannot be an add-on without any form of compensation. For teachers in highly competitive academia and its research-oriented incentive structure, compensation possibilities could (and maybe should) be taken into consideration: how does our OER output add up to career decisions and precarious working conditions (for an extensive discussion of the debate on precarious working conditions in academia commonly referred to #IchBinHanna, Bahr et al. 2022).

Besides structural limitations related to the individual level such as motivation and skills, the different autoethnographic reflections also share similar views on the role of broader *institutional limitations* that influence the realization of OER and OEP. Within the reflection of S.F. in response to Wiley and Hilton III (2018), several concrete institutional factors are mentioned: course size, exam requirements and teaching infrastructure. The individual reflections value the fact that all investigated theoretical approaches highlight the importance of institutional support for OEP, but in practice, this is precisely what is missing. In response to Mayrberger (2020), R.R. clarifies that “academic teaching always takes place in a given setting and infrastructure. I often cannot choose the learning management system, nor the video conference tool, nor the way the lecture is embedded in the curriculum. Therefore, full degrees of openness can maybe never be reached.” S.F. points to the European educational contexts: “All in all, Cronin’s framework got me into thinking about if and how the uniformity of higher education, shaped by the Bologna Process, and OEP, guided by a learner centered e.g. individualistic pedagogy, fit together.” N.T. even takes a wider perspective, which entails the “full adoption of open pedagogy principles” with institutional support, as happening loosely coupled from institutional support, as “an approach I have never been able to adopt, as I design my classes independently of macrostructures at my university, like most lecturers in my department.”

## 5. Conclusion

As our autoethnographic study shows, theoretical concepts of OEP require a sound foundation in the practical realities of academic teaching. Only then will they provide the necessary framework and helpful assistance to further OEP adoption. Following this shift, openness as an ethos and social value should take a back seat in favor of more “manageable” practices. We thus advocate for a focus on OEP that is less concerned with achieving the ideal of complete openness through the “royal discipline of producing OER” (S.F.), and more concerned with allowing a variety of practices with varying degrees of openness. This broader stance, for example, resonates with R.R.’s self-conception as an “open educator with respective open practices though only parts of my concrete teaching practices might be considered as fully open” and reflects T.H.’s teaching experiences in higher education “as highly fluctuating, seeing it in total.”

Above all, more emphasis should be placed on the contexts of academic teaching. This includes both the students’ needs and the discipline’s requirements (S.F., T.H.). Other important aspects to consider in OEP are the workload and the role of teaching in the academic career (N.T.). OEP must extend beyond the classroom as well. Openness policies, on a structural level, can create more incentives and new opportunities for opening up teaching. “If universities introduce openness policies it might therefore be a wise idea to accompany it with propaedeutic courses that convey necessary skills for OEP” (S.F.). First and foremost, OEP should address pressing issues in higher education, such as using OEP to “foster social learning, especially in times of distance” (R.R.), reducing “inequalities within the classroom [...] by working with OER” (R.R.) or combining

OEP with a reflection on “Knowledge Equity (who produces knowledge, who is legitimate, who is recognized, by what control mechanisms, etc.)” (N.T., see Kruschick & Schoch, this issue).

Overall, we value the four papers on OEP as sources of inspiration and tools for reflecting on our classroom experiences. This reflection, structured and intensified through the use of the autoethnographic methodology we developed, proves to be an important step not only in improving our own open teaching practices, but also in developing a more practice-oriented framework for OEP.

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## Author contributions

Authors appear in alphabetical order. All authors contributed to this article in equal measure.

## Conflicts of interest

The authors declare no conflict of interests.

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- \*6 <https://www.fosteropenscience.eu/resources>
- \*7 <https://creativecommons.org/>

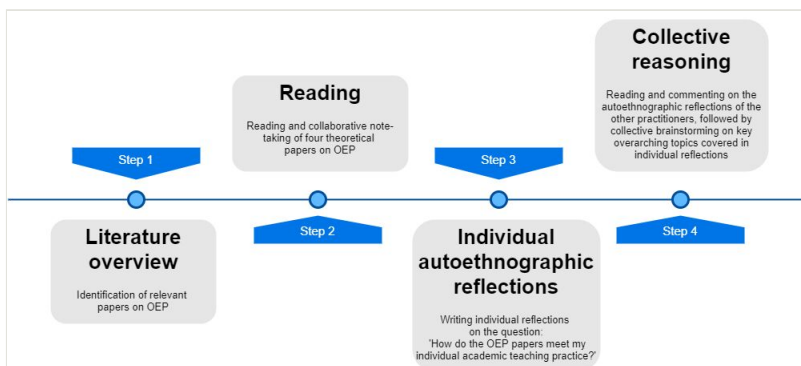


Figure 1.

Figure 1. Research design and process (own illustration).

## Supplementary material

### Suppl. material 1: Stories on Open Educational Practices in German Higher Education

**Authors:** Fahrer, S., Heck, T., Rößert, R., Truan, N.

**Data type:** Data set on autoethnographic reflection

**Brief description:** The stories are part of the autoethnographic reflections of the four practitioners. They are based on the following research papers:

Cronin, C. (2017). Openness and Praxis: Exploring the Use of Open Educational Practices in Higher Education. *The International Review of Research in Open and Distributed Learning*, 18(5). <https://doi.org/10.19173/irrodl.v18i5.3096>

Hegarty, B. (2015). Attributes of Open Pedagogy: A Model for Using Open Educational Resources. *Educational Technology*, 55(4), 3–13. [https://upload.wikimedia.org/wikipedia/commons/c/ca/Ed\\_Tech\\_Hegarty\\_2015\\_article\\_attributes\\_of\\_open\\_pedagogy.pdf](https://upload.wikimedia.org/wikipedia/commons/c/ca/Ed_Tech_Hegarty_2015_article_attributes_of_open_pedagogy.pdf)

Mayrberger, K. (2020). Open Educational Practices (OEP) in Higher Education. In M. A. Peters (Ed.), *Springer eBook Collection. Encyclopedia of Educational Philosophy and Theory* (pp. 1–7). Springer. [https://doi.org/10.1007/978-981-287-532-7\\_710-1](https://doi.org/10.1007/978-981-287-532-7_710-1).

Wiley, D., & Hilton III, J. L. (2018). Defining OER-Enabled Pedagogy. *The International Review of Research in Open and Distributed Learning*, 19(4). <https://doi.org/10.19173/irrodl.v19i4.3601>

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