

Article

# Open Access in Vocational Education and Training Research

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Received: 25 January 2018; Accepted: 2 July 2018; Published: 5 July 2018



**Abstract:** The article presents a research project at the Federal Institute for Vocational Education and Training in Germany and reflects the perspective of researchers in the field of vocational education and training (VET). It investigates the technical and structural, policy-related, and normative and inherent academic research conditions exerting an influence on the acceptance, dissemination, and use of Open Access (OA). The research project focuses on the German-speaking countries. VET research represents an interlinking of various related academic research areas, rather than comprising a stand-alone discipline. Therefore, the assumption must be that the results of the project will be at least partially transferable to other fields within the social sciences and the humanities and will thus contribute towards findings with regard to OA across the whole of the latter domain. The background to the project is underpinned by science communication and by media theory. The empirical basis of the study has its foundations in a Sequential Mixed Method Design with a qualitative strand, followed by a quantitative strand. The qualitative exploration via focus groups will lead to hypotheses for the online survey. The online survey will be aimed at academic researchers from various disciplines who share common ground in that they address topics that are related to VET research. The realisation of the research project is planned for 2018–2020.

**Keywords:** Open Access; vocational education and training research; social sciences; humanities; sociology of science

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## 1. A Research Project at the Federal Institute for Vocational Education and Training (BIBB) in Germany

The research project that is presented here refers to the German dual system of vocational education and training (VET), which is characterised by companies and vocational schools acting as learning venues. Research in the field of VET is performed in few specialised extra-university research institutes, as well as at universities. Vocational education and training research is concerned with, among other things, training occupations, the vocational school system, didactics, methodology, career guidance, career orientation, and various target groups, such as company training staff, trainees, examiners, and vocational school teachers. Publishing with Open Access is also becoming increasingly more significant in vocational education and training research.

Since 2010, researchers at BIBB have been conducting extensive work on the subject of Open Access. For this reason, BIBB formally adopted an Open Access Policy in March 2011. In 2014, it also signed up to the “Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities”. Then, in 2016, BIBB signed an “Expression of Interest in the Large-scale Implementation of Open Access to Scholarly Journals” in order to support the “Open Access 2020” initiative.

As part of the implementation of its Open Access Policy, by now, all BIBB publications are made directly accessible in accordance with the “gold open access” principle. At the institutional level, BIBB is thus playing a pioneering role in the field of Open Access in vocational education and training research. The BIBB library supports the overall Open Access strategy by establishing a specialist repository for vocational education and training research. In this context, the question of the conditions of acceptance, dissemination, and use of Open Access in vocational education and training research is of special interest.

## **2. Open Access as an Area of Debate within Vocational Education and Training Research in Germany**

Free access to academic research literature is central to the concept of Open Access. “Free” relates to three aspects in this regard.

1. Access is free of charge. Readers do not normally need to pay for electronic access to academic research literature. No usage or licensing fees are incurred. Because editorial processing, if the necessary production and graphic preparation of the manuscripts in the run-up to publication, is nevertheless necessary and causes costs the process is currently usually financed via so-called Article Processing Charges (APC). This means that the author or institution funds the appearance of the article as an Open Access publication. The financing of OA is a problem area subject to much extensive debate. The expectation is that this aspect will also be of significance to the field of vocational education and training. For this reason, it has been taken into account within the scope of the research project.
2. Licensing is as open as possible. Legal protection of OA publications frequently takes place via a form of licensing, which fosters the dissemination of academic research literature rather than by means of copyright, which at least in Germany is highly author-centric. Creative Commons Licences (CC Licences) are one example of a common licensing model. This aspect is also likely to play a role in German VET research, and will therefore form part of the further course of the research project.
3. Open Access publications should be as easy to find as possible. The aim is that academic research literature should be simple to access and that availability should not be hindered by technical restrictions. For this reason, a standardised and meaningful meta data structure needs to be in place. Repositories or similar instruments are also required in order to provide permanent storage. Access should be unproblematic, e.g., via download therefore suitable file formats need to be used.

In the OA debate, a distinction is drawn between the two publication pathways of “gold open access” and “green open access”. Gold open access refers to initial publication of an article in OA journals or in the form of an OA monograph. Works are thus available on the Internet free of charge immediately following publication. Green open access denotes the additional publication in repositories of academic research works, which have already been issued in printed form by a publishing house. This may either take place at the same time as print publication or at a later date following the expiry of an “embargo”. Repositories may either be institutional in nature, e.g., belonging to an institute of higher education, or be disciplinary repositories that collect literature from a single area of academic research. Examples of disciplinary repositories that relate to the field of vocational education and training research are SSOAR, PsyDok, EconStor, and peDOCS. The Federal Institute for Vocational Education and Training is currently working to establish an internationally aligned repository for vocational education and training research (VET Repository), and this is scheduled to go live in 2018.

In Germany, various stakeholders at both the policy making and academic research level are undertaking tremendous efforts to drive forward Open Access. Examples of the strides made include the OA Strategy adopted by the Federal Ministry of Education and Research in 2016 “Open Access in

Deutschland” [Open Access in Germany] and the “OA 2020—initiative for the large-scale transition to Open Access”, as initiated by the Max Planck Digital Library, and to which BIBB has also signed up.

In the field of science, technology and medicine (STM) OA is a well-established publication model and its benefits are widely recognised [1] (p. 29). Based on our experiences, we submit the hypothesis that the humanities and social sciences<sup>1</sup> tend to exhibit a greater degree of reticence. OA endeavours in this area are also an object of criticism in Germany. Within the field of vocational education and training research, the supposition is that scepticism and uncertainty are more prevalent because the status of knowledge regarding the topic of OA is lower. This particularly applies in respect of questions that are relating to quality standards, usual financing models, and licensing. Within the scope of an unpublished feasibility study carried out by BIBB for the establishment of a repository, various interviews were conducted with academic researchers in the field of vocational education and training. These were guided expert interviews on the use of Open Access and repositories for academic publications. The Repository project was also presented at a conference that was hosted by the Vocational Education Division at the German Educational Research Association (DGfE). The attitudes that are expressed in the interviews and the controversial debate that occurred during the presentation suggest that views regarding OA tend to be sceptical [3,4].

Only two investigation results on OA as a publication model in the humanities and social sciences in Germany are currently available:

Ulrich Herb: “Open Science in der Soziologie” [*Open Science in sociology*] [5] and Doris Bambej: “Fachliche Publikationskulturen und Open Access. Fächerübergreifende Entwicklungstendenzen und Spezifika der Erziehungswissenschaft und Bildungsforschung” [*Specialist publication cultures and Open Access. Cross-disciplinary tendencies and specific characteristics of the educational sciences and education research*] [6].

The work that was carried out by Herb [5] focuses on the topic of Open Science and provides an inventory within the discipline of sociology. According to Herb, the term Open Science describes a cultural shift in practice and communication in academic research. Computer-aided work and digital communication are facilitating a more effective and more open exchange of information within the academic research community and are fostering the transfer of results to society. Open Access to academic research publications, research data and research software in a way that is limited by as few financial, technical, and legal barriers as possible is expanding transparency and opportunities for quality assurance of academic research work. Better provision of information is increasing the efficiency of academic research and is enhancing the innovation that takes place on the basis of research findings by making it easier to transfer knowledge to trade and industry and to society [7].

Within this context, Herb views Open Access as one of several sub-sections of Open Science. The author investigates the dissemination of Open Science on the basis of a literature study and presents arguments for and against. He also explores the extent to which the openness of academic research is encouraged and has already been realised. In addition, he uses database analyses to compare the status quo of Open Science in German-language sociology with the area of STM. In his investigation, Herb [5] (p. 417) arrives at the conclusion that in the area of sociology OA does not appear in any way to be a phenomenon that has been disseminated to a below-average extent (. . . ). The main focus is on specialist journals; monographs seldom being published in OA form. Herb surmises that this could be connected to the OA publishing houses’ lack of reputation [8]. Because sociology is a related academic discipline of vocational education and training research, the supposition is that the reputation of publishers could also play a part in the decision of whether to publish a VET research text via OA or in a closed-access publishing house. It is unclear whether the role of the publishing houses has a similar

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<sup>1</sup> In accordance with Max Weber, we understand social sciences to include all research disciplines which analyse the phenomena of human co-existence. We generally relate the term humanities, particularly with regard to the clear way in which it is delineated from the sciences, to the tradition of thought which emerged in Germany following the Enlightenment [2].

level of significance to that identified by Herb in the field of sociology. It remains to be seen whether the importance of the reputation of publishing houses will emerge as a possible inherent condition within the academic research system with regard to acceptance of Open Access within the further course of the research project, and particularly in the exploratory phase of data collection.

According to Herb, greater emphasis should also be placed on the broader reach of OA publications. However, he also notes that there is an absence of studies dealing with this thematic area ( . . . ) [5] (p. 418). The author also identifies that there is absolutely no tradition of OA in sociology in the field of research data and software. The same applies in respect of “Open Review” or “Open Metrics” procedures. Herb [5] (p. 419) thus arrives at the following overall conclusion with regard to Open Science. The culture of open knowledge is not widespread in sociology. Even in the case of Open Access to journals ( . . . ), there is very little evidence of open information within the meaning of Open Definition.<sup>2</sup> Open Access journals in the field of sociology very rarely use licences that meet the requirements of Open Definition.

Bambey [6] presents the current status of OA in the educational sciences and uses a literature analysis to investigate the effect of specialist and socio-cultural constellations on publication behaviour. She also looks at the constellations of publishing houses on the market and at information structure conditions. In addition, Bambey takes an empirical survey as the basis for analysing the user behaviour of readers at the peDOCS Repository, which is a full-text database.

She concludes that, ( . . . ) the respective specialist cultural starting points and economic constellations of interests very strongly [determine] how the Open Access paradigm materialises, the impact it achieves and the acceptance it enjoys” [6] (p. i). Therefore, the important conditions from Bambey’s point of view are the specialist cultures and the economic interests that are associated with the dissemination of academic research texts. She states that both of these exert an influence on the acceptance and impact or dissemination of OA. She further concludes that status-related differences in publication behaviour are becoming visible. Bambey writes that more than half of the professors surveyed have already published via Open Access ( . . . ), whereas this is true to a much lesser extent for the group of young academic researchers [6] (p. 277). The intention is for the research project to draw on these considerations and results with the goal of identifying conditions that favour the acceptance, dissemination, and use of OA. A further objective is to investigate whether the dependency between publication behaviour and status of the person and an influence of specialist cultures from related disciplines can also be found in vocational education and training research.

The “Study of Open Access Publishing” (SOAP) is a further important source that has looked specifically at OA in the humanities and social sciences. This was a project financed by the European Commission. During the period from 2009 to 2011, it studied the attitudes that were adopted towards Open Access by academic researchers all over the world and also examined their experiences of OA publications [10]. The study concluded that respondents were highly supportive of OA, although financing and quality assurance were viewed as major hurdles. Pending more precise analysis of the investigation, one criticism that must be levelled is that respondents were contacted via mailing lists from cooperating OA publishing houses such as BioMed Central or Thomson Reuters, and the supposition must therefore be that they were already familiar with OA. 52 percent of participants stated, for example, that they had already published an OA article.

Against this background, the research project will investigate the issue of which technical and structural, policy-related, and normative conditions (legislation), and which conditions inherent within the field of vocational educational and training research are effective with regard to the acceptance, dissemination, and use of Open Access as a publication model. In doing so, the attitudes, evaluations,

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<sup>2</sup> Herb refers to the definition produced by the Open Knowledge Foundation [9] “Open means anyone can freely access, use, modify, and share for any purpose (subject, at most, to requirements that preserve provenance and openness)”. The aim of the research project is to investigate this assessment and to examine which conditions exert an influence on the acceptance and dissemination of OA within the field of vocational education and training research.

and inhibitions of researchers in their role as authors are to be disclosed for this field of academia. The project will also look at the area of conflict between authorship and use of academic research publications. Authors are always users of academic research publications, and this means that their interests in these two capacities may diverge.

Because vocational education and training research includes contents from various disciplines [11] (p. 610), [12] (p. 79), and given the fact that these are influenced by a range of academic research approaches and work methods and by different publication traditions and behaviours [13] (p. 658), the supposition must be that the results that emerge from the research project regarding publishers' conduct and attitude towards OA in VET research will be at least partially transferable to other social sciences and humanities.

### 3. Background to the Research Project with Regard to Media Theory and Research on Science Communication

The research project is based on media theory and research into science communication in order to identify, describe, and reflect developments in the field of Open Access. The aims are to create an understanding of the economic relevance of knowledge and of science, and to present the sequences of science communication and the publication systems that vary according to disciplines. These form the context for the research issue centring on the conditions governing the acceptance, dissemination, and use of Open Access.

The transformation of the work and industrial society into a knowledge society [14] (p. 19), which began in the 1990s, and the consideration of knowledge as a production factor alongside land, capital, and labour have ushered in a new economic era by establishing specific infrastructures for the distribution of knowledge [14] (p. 19). Lyotard [15] (p. 31) emphasises the increase in the significance of knowledge in terms of its value as a commodity. Within this context, the focus is no longer primarily on the utility value of knowledge. The emphasis has now shifted to its exchange or sale value [16] (p. 104). This economisation of knowledge is also not being held up by the science system and by the publication and communication structure that pertains there. Academic publishers are now using the massive price increases that have ensued in the wake of this development to achieve impressive returns on sales in a field, which was once non-commercial [15] (p. 31), [17] (p. 7). Publishing houses are benefiting from one particular aspect of research knowledge in this regard. Research results published in such media usually need to be original. This means that research results may not already have been published either in whole or in part. Publication in relevant academic journals turns research knowledge into a unique commodity, the dissemination of which is then managed by the publishing houses. This circumstance is joined by a further economisation factor in the shape of the constantly growing number of research publications. Taubert/Weingart [18] (p. 23) trace various reasons for this development. One such cause is the increasing quantitative measurement and the evaluation of research outcomes. This is leading to "salami slicing", i.e., the dividing up of research results across several individual publications. Two further phenomena are "cascading peer review", the passing on of rejected manuscripts within a publishing house or between publishers for the purpose of publication in a less prestigious journal, and a growth in the number of publications in so-called "predator journals"<sup>3</sup> [18] (p. 23). The authors also state that the possibility of secondary publication is also leading to an increase in the publication volume.

This growth in research publications is both making it harder for researchers to assess the relevance of results as well as hampering the work of academic research libraries. In their capacity as infrastructure institutions of universities and research institutions, the remit of the latter is to facilitate full access to current research results for researchers. For this reason, libraries face the dilemma of not

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<sup>3</sup> The term "predatory journal" was popularised by the American librarian Jeffrey Beall in 2010. It describes journals which publish articles in exchange for fees without having a transparent quality assurance procedure in place [19].

being able to fall back on lower cost research results, and are thus compelled to pay the rising prices of publication media. This further complicated by the fact that most academic research journals (up to 50.1% of the high ranking journals in the Web of Science) are in the hands of six major publishing houses. This means that a small number of stakeholders is able to exercise a monopoly. This is a significant economic factor, which, in combination with falling or stagnating library budgets, is leading to the so-called “journal crisis”, as this development has also been referred to since the 1990s [18] (p. 12), [20] (p. 11).

Alongside the economisation of knowledge, the opportunities that are brought by digitalisation are also fostering a shift in the formal communication of science, for which Taubert/Weingart [18] (p. 5) deem an examination of the claim to truth of research results by specialist colleagues (peer review) to be essential. The consequence of the so-called revolution in information and communication technologies has been that: The Internet has fundamentally changed the practical and economic realities of distributing scientific knowledge and cultural heritage. For the first time ever, the Internet now offers the chance to constitute a global and interactive representation of human knowledge, including cultural heritage and the guarantee of worldwide access [21] (p. 1). This has brought about a change in mass media communication and in the science communication system [22] (p. 5). The research and publication cycle has become digital. Regardless of publication media, researchers are able to act in an unhindered and free way in publishing their texts via the “green open access road” by using such means as self-archiving in the form of secondary publication on their own websites, on Web 2.0 platforms or in repositories. There are also the opportunities that are afforded by “gold open access”, via which an article appears as an initial publication in a freely accessible OA journal or in the form of an OA monograph [17] (p. 10). For the sake of completeness, mention should be made at this point that manufacturing costs for the creation of high-quality products are also incurred in the case of OA publications.

Although the prospects associated with OA for a higher degree of reception of an author’s own publications and for better availability of research results are obvious [23] (p. 35), OA tends to be a recognised publication medium in the natural sciences, rather than in the social sciences and humanities, where it has not yet made its mark. In order to answer the question as to why the publication behaviour of researchers in the field of STM is significantly different to those in the humanities and social sciences, it will be helpful to take a look at the necessity for publication in academic research journals. The number of publications in renowned journals that deliver a high impact factor [24] (p. 35) and presence in prestigious places [25] (p. 237) continue to be important for professorial appointments, recruitment procedures, and the granting of tenure. Researchers still need to build up a reputation and stabilise their record. This makes clear the mutually dependent effects that are exerted between the scientific publication system and the reputation system. Individual media, such as journals, book series, and publishing house programmes within a discipline hold a greater or lesser reputation that has its basis in the reputation of the authors published and in the papers that they produce [22] (p. 13). The gaining of reputation is important for publishing houses and academic researchers alike. The reputation of the researchers is, however, also created via recognition received from specialist colleagues. Academic research disciplines differ in terms of choice of preferred publication medium. In the STM field, publication in journals is more likely because the focus is on putting out new findings first [13] (p. 658), [23] (p. 305). In the humanities and social sciences, it is frequently the case that the quality of research papers (. . . ) can only be appropriately evaluated by specialist colleagues who are not merely investigating the same object of research, but who also share the same theoretical and methodological premises [13] (p. 658). In order to make it clear that the same theoretical and methodological premises are being shared, the humanities and social sciences tend to use the monograph as a publication medium for the dissemination of research results [13] (p. 659), [26] (p. 31). The economisation of knowledge described and the journal crisis are focused on academic journals that are of importance in the field of STM. Monographs and other publications that do not necessarily appear periodically are affected to a significantly lesser degree. Accordingly,

the assumption must be that pressure to act is stronger in the STM area and that Open Access is considerably more attractive as a publication model than in the humanities and social sciences.

Publishing in prestigious specialist journals has a further purpose in terms of scientific communication and the publication system. The increasing number of publications is contrasted by a limited capacity of perception on the part of researchers. Taubert and Weingart, with reference to Luhmann, assume that the increased volume of scientific publications calls for procedures or mechanisms that reduce complexity. Luhmann describes this process as an orientation towards symptoms instead of the matter itself, which is the meant object. According to Luhmann, “reputation itself is drawn from symptoms and serves as a symptom of truth” [25] (p. 237), [22] (p. 171). To put it more simply, the scientific system needs reduction procedures, such as peer review and the attribution of reputation to a publisher and a published journal. The reputation of the journal is partly based on the reputation of the scientists who publish in it. Based on the reputation of the journal reviewed, a reviewed journal article is considered to be highly relevant, and the quality of the scientific work itself is thus no longer questioned by the readers. Instead, the journal’s reputation is trusted. Experts, alongside the Impact Factor Journals, are perceived by young scientists as gate keepers. It is questionable as to whether these quality assurance systems actually function in the manner that is assumed (for the debate see, for example [27–31]). Publishing in OA journals does not differ from subscribed journals in terms of quality assurance. Here, too, peer review is often used; a list of peer-reviewed OA journals is available on the Directory of Open Access Journals (DOAJ) platform.

#### 4. Issues Leading the Research and Methodological Approach

Analysis of the literature listed indicates that technical and structural, policy-related, and normative and inherent academic research conditions may exert an influence on the acceptance, dissemination, and use of OA. Table 1 summarises the findings from the literature. The terms acceptance, dissemination and use of OA are understood by the authors, as follows. Acceptance signifies that the authors understand, endorse, and support the OA model by publishing with Open Access. Use signifies that the authors use Open Access publications for their own scientific work (even if their stance on OA is in fact a critical one). By dissemination we mean the different models for making Open Access publications accessible (green open access road, gold open access road).

Technical and structural conditions include factors that affect the storage, archiving, distribution, and findability of OA publications. The operation of repositories to serve as a location for the systematic storage of documents is one example in this regard. The financing of OA publications, e.g., by means of a publication fund, represents a further aspect.

Policy-related and normative conditions mainly relate to the statutory foundations of OA. These range from Article 5 (1) of the Basic Law of the Federal Republic of Germany and its implications for transparency and the democratic decision-making process to regulations contained within the German Freedom of Information Act (IFG) and extend to encompass provisions from the Copyright Act (UrhG), such as the right to secondary publication (§ 38 (4) UrhG) and further limitations on copyright (§§ 44a–63a UrhG) [17] (p. 4) [32]. Consideration also needs to be accorded to the new regulations that are promulgated in the Gesetz zur Angleichung des Urheberrechts an die aktuellen Erfordernisse der Wissensgesellschaft (UrhWissG) [Copyright Law Knowledge Society Act].

Legal certainty regarding the use of OA publications that are created by the application of alternative licensing models such as Creative Commons Licences is a further aspect. These assure users that the author has the right to issue the publication, as well as showing them whether and how they may reuse such publications.

Conditions inherent within the academic research system include quality assurance procedures, such as “peer review” and the reputation system. Our assumption is that quality assurance in the OA publication model is a crucial factor for the acceptance, dissemination and use of OA publications. Against the background of the prevailing pressure to publish that exists in the field of research (“publish or perish”), we need to look at how quality and this publication pressure relate to each other

with regard to Open Access, and thus constitute the acceptance and use of OA. This also gives rise to the question as to the significance accorded to OA in VET research from the point of view of the academic researchers themselves, particularly with respect to status and career issues.

The following matrix summarises possible conditions relating to the acceptance, dissemination, and use of OA.

The aspects and questions summarised in the RLTW Matrix show the complexity of the object of research. It will help us to structure our findings during the different steps of the analysis during the research process.

To answer the research question we will carry out an empirical analysis, which will follow a Sequential Mixed Design [33] (p. 21). It will combine a chronologically occurring qualitative strand and a quantitative strand.

Focus Group [34] is the research method chosen for the qualitative strand. It allows for the topic of Open Access to be explored and hypotheses to be generated. By conducting Focus Group, we aim to establish a picture of relevant technical and structural, policy-related, and normative and inherent academic research conditions that exert an influence on the acceptance, dissemination, and use of Open Access in vocational education and training research.

**Table 1.** RLTW <sup>1</sup> Matrix on possible conditions for the acceptance, dissemination and use of Open Access in vocational education and training research.

Matrix of the Possible Feature Space	Perspective of the Authors		
	Acceptance of OA	Dissemination of OA	Use of OA
Technical and structural conditions	Which technical and structural conditions influence the acceptance of OA? e.g., proofreading for quality assurance/impact measurement procedures/IT structures of long-term archiving	Which technical and structural conditions influence the dissemination of OA? e.g., publication and financing models	Which technical and structural conditions influence the possible uses of OA? e.g., access/research opportunities, usefulness, reliability, quality
Policy-related and normative conditions	Which policy-related and normative conditions influence the acceptance of OA? e.g., support for (IT) infrastructure and academic research career opportunities	Which policy-related and normative conditions influence the dissemination of OA? e.g., copyright, limitations on copyright, funding conditions	Which policy-related and normative conditions influence the use of OA? e.g., legal certainty via alternative licensing models, financial support
Conditions inherent within the academic research system	Which conditions inherent within the academic research system influence the acceptance of OA? e.g., structuring of science communication/peer review procedures for quality assurance	Which conditions inherent within the academic research system influence the dissemination of OA? e.g., change in communication opportunities	Which conditions inherent within the academic research system influence the use of OA? e.g., acceptance of academic research, reputation

<sup>1</sup> The matrix is named after the authors of the application, and the abbreviation comprises the initial letters of their surnames.

The research concept presents two to three Focus Groups with five to eight participants who are professionals in the field of vocational education and training research. Characteristics, such as scientific status and professional position, the academic degrees they hold, age, and gender will vary between the participants of each group. This course of action will enrich the discussion with different opinions and experiences concerning (acceptance and use of) Open Access, as well as mechanisms of the scientific community (e.g., ways to gain reputation and develop an academic career). Personal contacts to researchers in the field of VET will lead to participants from VET research institutions and universities fulfilling the described requirements. The Focus Groups will take place in different locations in Germany near to these institutions and universities.

Each Focus Group will start with a stimulus to introduce the topic of Open Access. The following phase of discussion with low moderator involvement will allow for the participants to focus on aspects that are of high relevance from their point of view. Interaction will show differences in valuation. A second phase of discussion with substantial involvement of the moderator will follow in order

to refer to research results and public strategies of Open Access. Questions and assertions from the moderator will provoke comments. This phase secures results concerning aspects such as reputation via Open Access publications, financing, or quality insurance in case the first phase of discussion did not cover these.

The Focus Group discussions will be audio recorded, and a specific software for Qualitative and Mixed Methods Research (MAXQDA) will enable us to analyse the transcripts of the recording. They will undergo a Thematic Analysis, which is a special method of Qualitative Content Analysis in accordance with Mayring [35] and Schreier [36]. This method allows for the deductive and inductive coding processes to be combined in one coding system. Concept-driven, deductive categories will come from the RLTW Matrix. Data-driven, inductive (sub-)categories are filtered out from the material itself following the principles of Inductive Category Formation [35] (p. 79). An intra- and intercoder check will enhance reliability and objectivity, and, by comparing the categories with the research question, the validity of the process will be benefited.

The aim of the Thematic Analysis is to allocate each category and subcategory to one of the nine fields of the RLTW Matrix. The vertical assignment shows if it deals with acceptance, dissemination, and/or use of Open Access. The addressed conditions—technical and structural, policy-related, and normative or conditions that are inherent within the academic research system—indicate the row. The analysis will show which conditions are more important to the researchers and if it is acceptance, dissemination, or use of Open Access that concerns them most.

The results of the Thematic Analysis will lead to hypotheses for the quantitative strand of the study. This strand consists of an online survey with a questionnaire that focuses on selected conditions of acceptance, dissemination, and use of Open Access in the field of vocational education and training research. The selection will be based on the results of the Thematic Analysis. The aim is to reduce the conditions dealt with in the questionnaire to a reasonable number as well as to focus on aspects of relevance for the VET researchers participating in the survey. We regard all academic persons who are scientifically dealing in one way or another with VET topics as ‘researchers in the field of VET’.

A large-scale internet search will lead to email addresses of VET researchers in Germany, as well as additional information e.g., name, academic status, institution, academic discipline/field, research focus, and publication experience. We assume that there are at least 1000 researchers in the field of VET. Nevertheless, the number of VET researchers in Germany is still unknown and it will be revealed as a by-product of the research project.

We plan to encourage all researchers in the field of VET in Germany to participate in this online survey. They will receive a personal link to open the questionnaire. The information that is gained from the internet search helps us to assess the representability of the sample that answered the questionnaire. Statistical analysis of the closed-ended questions using a Likert-type scale will be carried out with a specific software (e.g., SPSS). However, details are determined through the first strand of the study and they will evolve during the research process.

All research will be conducted in the spirit of an “Open Science” project. This means that all texts, methods, (raw) data, evaluations, questionnaires, etc. will be published on a project homepage insofar as this is compatible with the stipulations of the Data Protection Act. Interactive tools (such as a commentary function) will be made available via this homepage in order to permit networking to take place with those members of the general public who are interested.

## 5. Conclusions

As described, OA is a well-established publication model in the field of science, technology, and medicine. In the humanities and social sciences, which include vocational education and training research, there is greater restraint. The reason for this is assumed to be the low level of knowledge about OA and its possibilities and advantages. Currently, only a few research results on OA as a publication model in the humanities and social sciences are available. The intention of the research project is to investigate this desideratum of research and to reveal VET researchers attitudes toward OA.

**Author Contributions:** Conceptualization, K.L., B.R., K.T. and M.W.; Methodology, M.W.; Resources, K.L., B.R., K.T. and M.W.; Writing-Original Draft Preparation, B.R.; Project Administration, B.R.

**Funding:** This research received no external funding.

**Acknowledgments:** Language Service of the Federal Institute for Vocational Education and Training (BIBB).

**Conflicts of Interest:** The authors declare no conflict of interest.

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