Appendix 2. Research Design for the Interviews and Structured Community Review

This appendix presents the methodology of the interviews we conducted, and of the Structured Community Review (SCR). It begins with an extension of the methodologies of the interviews and SCR that were presented in Chapter 2. Descriptive statistics of the interviews and SCR participants are then presented. The outcomes of the interviews and the SCR were mainly discussed in Chapters 14 and 15, but also interspersed in the findings of the other chapters.

2.1. Methodological approach

As explained earlier in the report, it is not possible to address all of our research questions and provide strong recommendations for action on TVET (or TVET research) by means of a literature review alone. In order to adequately develop an overall picture, further methods must be used. Among those methods are interviews, which were therefore carried out alongside the SCR. The term 'community' is used here to refer to both TVET researchers and TVET teachers. The first stage of our community data collection process was the interviews, which followed an initial email survey. The second stage was the SCR, which was followed by another email survey. This second stage also included focus group sessions using WhatsApp.

Figure 2.1 below provides a summary of the stages of the community consultations. Methodological details on each stage are provided in the following sections. Notably, in an earlier chapter (Chapter 2, Figure 2.1), we described the stages of the research design, with the literature review stages included. Figure 2.1 abbreviates the stages focusing on the literature review, and instead focuses on data collection from the TVET research community participants.

We note that the German report (†Haßler, et al., 2019) was not designed to incorporate the interviews and focus groups. Instead, the interviews and focus groups informed an unpublished internal report (in German). The present, expanded English report (†Haßler, et al., 2020) includes the insights from the focus groups and interviews, incorporated throughout the report and within a number of new chapters.

Figure 2.1. Community consultations and how they were used in this report. The Phases are cross-referenced with the chapter describing the research design (Chapter 2).

Community consultations

Phase 1: Community consultations in conjunction with literature research (Chapter 2, Section 2.3.).

- Activity 1b. First online survey (at the start of literature review; see: Literature scoping, Section 2.3.2).
 - The outcomes were incorporated in Chapters 1–13 (†German version / †English version).
- Phase 1 also contains these non-community activities: **Activity 1a.** Literature discovery and analysis (Section 2.3.1.) and **Activity 1c.** Literature analysis and synthesis (Section 2.3.3.).

Phase 2: Interviews, surveys, review, focus groups (2.4.)

- Activity 2a. Interviews (Section 2.4.1.):
 - Essential elements incorporated into Chapters 1–13 (†German version);
 - Full insights incorporated into Chapters 1–13 (*English version);
 - Contributed to new chapters (Chapters 14, 15; †English version).
- Activity 2b. Online survey 2 (Section 2.4.2.). Survey prior to the SCR:
 - Essential elements incorporated into Chapters 1–13 (†German version);
 - Full insights incorporated into Chapters 1–13 (†English version);
 - Formed new chapters (Chapters 14, 15; †English version);
 - Demographic of participants described in this Appendix.
- Activity 2c. Structured Community Review (Section 2.4.3.). The SCR conducted a review of Chapters 1–13 in a draft †English version). The outcomes are available a follows:
 - Full insights incorporated into Chapters 1–13 (†German version / †English version);
 - Formed new chapters (Chapters 14, 15; †English version);
 - Formed new Appendix 3., which describes the changes that were made to the report as a result of the SCR's comments (†English version).
- Activity 2d. Focus groups (Section 2.4.4.):
 - Essential elements incorporated into Chapters 1–13 (†German version);
 - Full insights incorporated into Chapters 1–13 (†English version);
 - Contributed to new chapters (Chapters 14, 15; †English version).

2.1.1. The interviews

The purpose of the interviews was to look at the topics identified earlier in the report in greater depth, as well as to answer research questions that could not otherwise be answered. They also served to add first-hand perspectives from members of relevant organisations and to uncover new material that had not yet been published. Amongst the types of organisations that interview participants came from were authorities, NGOs and research institutions. Particular emphasis was placed on carrying out interviews with people in national government ministries (responsible for TVET) as well as with people from funded projects (e.g., organised by Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ). It was also important to speak to researchers based in SSA so that informed action-oriented recommendations could be made to help direct the strategic cooperation of the German Federal Ministry of Education and Research (BMBF) with organisations in SSA . Those recommendations are specifically important in driving empirical research and the establishment, or further development, of SSA institutional research capacities.

The interview questions were based on our research questions, and were further refined through the results of our literature review. As we wanted to have roughly comparable results between participants, the interviews had to be structured, as well as having very specific questions that needed to be answered. However, we also deemed it necessary to allow participants free and open-ended reflection so that the answers we received would not be entirely constrained, thus preventing us from seeing a full picture. A semi-structured interview process was therefore deemed most appropriate. Interviews took place by telephone or 'voice over IP' (Skype, WhatsApp). Upon completion of the interviews, the interview notes were sent to the respondents to ensure validity and to invite any further reflections. Following our checks on the validity of the responses received, a thematic analysis of the interview notes was conducted. This qualitative thematic analysis was carried out in Dedoose, a cross-platform app that enables collaborative exploration of the data, regardless of the location of the researchers.

2.1.2. The Structured Community Review

Beyond interviews, we also carried out a Structured Community Review (SCR). The researchers and trainers involved in the SCR worked simultaneously to achieve the following two main goals:

- reviewing an early draft English version of the †German version of this report;
- Conducting a design-experimental assessment of the extent to which the community is ready (or to what extent certain community members are willing) to work towards a clearly defined common goal that is useful to the community. Our common goal was the creation of a a joint report (an English 'community' version of the earlier † German version).

An invitation to join the SCR was created via existing community channels (via well-known researchers and the UNEVOC Forum). Community members who expressed interest in the SCR were then registered via an online form and given access to the document

to be discussed. The SCR required active communication with the community such as in a discussion forum, by email or with comments on documents (Google Docs and email / WhatsApp). The review consisted of successive stages in which parts of the document were checked by the participants, after which there were scheduled targeted discussions. At the end of each stage, the ideas and suggestions were summarised. This summary can be read in Appendix 4.

As the SCR is not only a review but also a design-based experiment to assess of the process of a community review, we ensured that all participants in the SCR were clear, and agreed, that the process itself is also the subject of research. The process assessment analysed the behaviour of participants in the review process to reveal possible barriers to and benefits of conducting a SCR. The SCR was also used to pursue other goals, such as the formation of sub-groups for potential future collaboration.

Our review process was iterative and, therefore, did not end with a narrative analysis. Instead, the key messages were checked again in a survey at the end of the SCR process, and participants were assigned to focus groups. The SCR was therefore itself reviewed through the survey, and again through focus groups, ensuring that the feedback we received was comprehensive, valid and reliable.

The SCR has the great advantage of broad participation by the research community, drawing on pan-African (SSA) TVET expertise without favouring certain countries. Previous research has shown that a network approach is an effective way of strengthening research capacity. The Community is conceptualised as such a network. The SCR is therefore useful in determining whether such a network approach is welcomed by the Community, and the extent to which they are actually willing to get involved.

2.1.3. Ethics

The inclusion of all interview extracts in this report was checked with the respective participants for accuracy and permission.

2.1.4. Reporting

A data reference with all quotes and the respective attributions to focus group sessions and interviews is available, see further materials in Appendix 5. We note that some additional sources, particularly regarding COTVET in Ghana, were provided by GOVET.

2.2. The participants

This section gives additional information on the participants in the interviews and the SCR, specifically, statistics on the participants in each stage of the report research process. We asked 93 people for interviews in stage one. Ultimately, 27 people responded to the interview request and completed the interview (29%). Of those 27 people, 12 (44%) read our summary notes of their interviews, thus validating our recorded responses from them, and also making further suggestions where necessary. Most

interview participants were male and were from SSA, but the few participants from outside the region were not excluded.

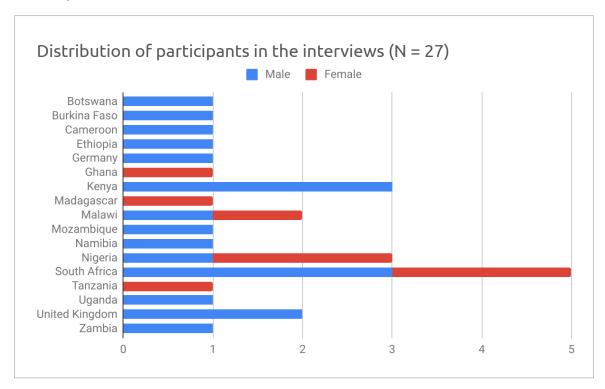
Following the interviews, we conducted the SCR in stage two. Fifty-one researchers registered for the SCR and were added to an email group. In addition, 4 were added via WhatsApp. Participation by email was sporadic and limited to 16 researchers (31%). Of the 55 researchers, 32 were interested in a discussion via a WhatsApp group (63%). Of the 32 researchers in the WhatsApp group, 27 (84%) participated actively. Again, more SCR participants came from SSA, and were male. As there is overlap between the email and WhatsApp discussion, the broader discussion thus involved around 30 people in total. Graphical representations of the descriptive statistics on the interview and SCR participants, as well as the institutions they came from, are provided in the figures below. This Appendix concludes with a section detailing the qualifications of the participants in our study.

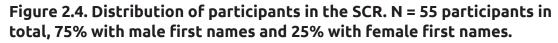
Figure 2.2. Participants in the different phases of the project

Interaction	Number	Percentage
Total number of people approached over lifetime of project	158	
Email survey (1st survey)	42	
Email surveys received	16	38%
Interview requested	93	
Interview completed	27	29%
Interview transcripts returned	12	44%
Second survey completed and joined mailing list for the SCR	51	
Participated in mailing list for the SCR (% compared to joined)	16	31%
Joined WhatsApp group for the SCR (% compared to mailing list)	32	63%
Joined SCR WhatsApp group only	4	
Participated in WhatsApp Group for the SCR (% compared to joined)	27	84%
Contributions to SCR (i.e., reviewing the report; % compared to mailist list)	13	25%
Named on presentation	8	
Participants from SSA	112	79%

Participants who engaged in some manner (surveys, interviews or SCR)	86	54%
Participants from SSA who engaged in some form	73	46%
Participants with female first name	34	22%

Figure 2.3. Distribution of participants in the interviews. N = 27 participants in total, 70% with male first names and 30% with female first names.





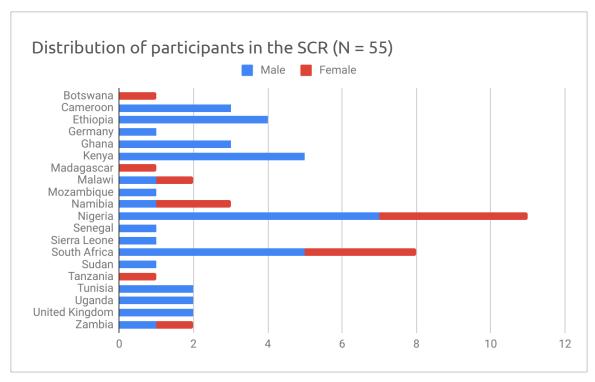


Figure 2.5. Institutions of the participants in the SCR

Colleges / TVET providers

Arusha Technical College (Tanzania)

Buffalo City TVET College (South Africa)

Department of Fine and Applied Arts, College of Education (Nigeria)

Ekurhuleni East TVET College (South Africa)

Eldoret National Polytechnic (Kenya)

Ken Saro-Wiwa Polytechnic (Nigeria)

Malawi Polytechnic (Malawi)

National Vocational Training Institute (Ghana)

Port Elizabeth TVET College (South Africa)

South West Gauteng TVET College (South Africa)

Yaba College of Technology (Nigeria)

Universities

Durban University of Technology (South Africa)

Higher Institute of Technology Antsiranana (Madagascar)

Jimma University (Ethiopia)

Michael Okpara University of Agriculture (Nigeria)

Nelson Mandela University (South Africa)

Oslo Metropolitan University (Norway)

Pedagogical University of Mozambique

Technische Universität Dresden (Germany)

United States International University – Africa (Kenya)

University of Abuja (Nigeria)

University of Eldoret (Kenya)

University of Malawi

University of Nigeria

University of Nottingham (United Kingdom)

MInistries and other governmental organisations

Ghana Education Service (Ghana)

Inspectorate of Pedagogy for Industrial Education, Ministry of Secondary Education (Cameroon)

Namibia Training Authority (Namibia)

National Board for Technical Education (Nigeria)

National Commission for Colleges of Education (Nigeria)

National Vocational Training Institute (Ghana)

Ministry of Higher Education (Zambia)

Ministry of Professional Education and Employment (Tunisia)

Technical Education and Vocational Training Authority (Pakistan)

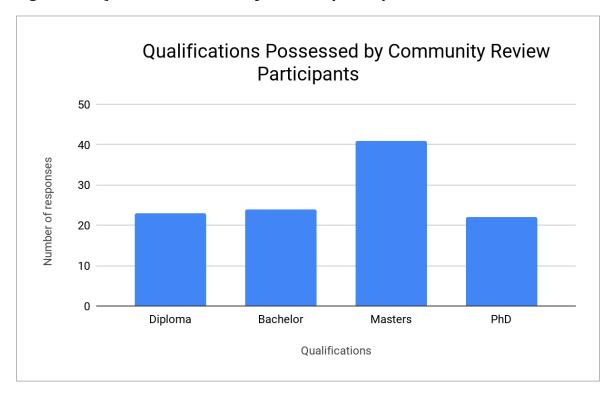
TVET Authority (Kenya)

2.2.1. Qualifications

All SCR respondents had at least a higher education degree. The vast majority had obtained a Masters or PhD qualification as well. There were 49 valid answers to this question. A total of 4 had a Bachelor degree as their highest qualification; 23 had gone on to further education obtaining additionally a Masters degree. The remaining 22 had also obtained a PhD.

Since there can be differences in the national qualifications frameworks between countries, our questionnaire provided tick-boxes with Diploma, Bachelor, Masters and PhD as options, and respondents were asked to tick all the degrees they possessed. Figure 2.6. shows the breakdown in qualifications of the participants who responded to the questionnaire.

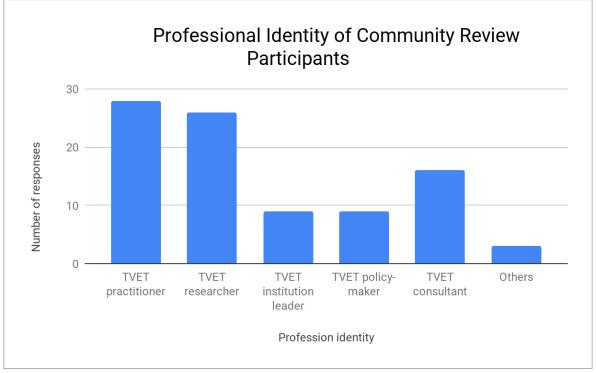
Figure 2.6. Qualifications held by the SCR participants



2.2.2. Professional activities

The questionnaire also allowed for multiple choices to be selected regarding the participants' self-reported professional identity. The options in the questionnaire included: TVET practitioner, TVET researcher, TVET institution leader, TVET policy-maker, TVET consultant and Other. Many selected more than one option, with TVET Researcher and TVET Practitioner being by far the most frequent activities.

Figure 2.7. Stated professional identity of the participants



2.2.3. Research experience

As most participants had at least a Masters degree and 45% of respondents had obtained a doctorate, when asked about their research experience, the vast majority indicated having intermediate or greater research experience. Only one participant stated that they had no research experience at all, and three judged that they had little experience.

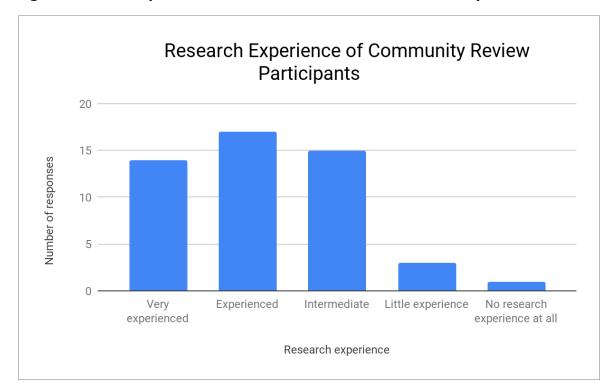


Figure 2.8. Participants' self-assessment of their research experience

2.2.4. Digital skills

We seized this opportunity to also collect data on participant's digital skills, particularly those related to collaborative and web-based ways of working. Specifically, we explored their acquaintance with and knowledge of the tools we intended to use for the community review, such as Google Docs and Zotero reference manager. Their familiarity with the former was fairly high. All participants had at least heard of Google Docs; 10 consider themselves somewhat familiar, using this tool occasionally; 16 used it sometimes; and an additional 10 participants reported being very familiar with it, using it a lot. However, 28% (14) of those in this sample had not used Google Docs before. This could have inhibited a more extensive contribution to the literature review report from these 14 individuals. The familiarity and use of Google Docs on a smartphone or tablet was slightly lower: 10 and 11 participants reported, respectively, never or rarely using Google Docs on these devices, representing 42% of the answers received. Yet the numbers of respondents making frequent and intermittent use of Google Docs on these mobile devices were higher: very often (8); often (6); sometimes (15).

Familiarity with the Zotero reference manager was significantly lower. Zotero is the application we used to make the publications retrieved through the extensive literature review carried out in the first phase of this research freely available to all participants. Twenty-two have not heard of Zotero before and another 21 participants had heard of it, but not used it. This represents 88% of the TVET stakeholders who took part in this phase of the research. Among the remaining 22% (6 stakeholders) who provided information about their familiarity with Zotero, 4 stated they use it a lot, use it sometimes, while one other participant uses it only occasionally. We asked those who had a Zotero account to kindly provide us with their Zotero ID, so that we could give them fuller access to the library. However only two participants complied: one based in the UK, the other in Ghana.

It is possible that the use of a different popular reference management tool such as Mendeley or EndNote might have had an effect. However, we cannot ascertain this without data on a usage of a broad range of reference management tools, and Zotero is one of the most well-known and widely used of these tools. It is also the tool that the key authors of this report used most extensively previously. The fact that about 40% of the participants had heard of Zotero, but had not used it until our data collection point, might indicate a lack of use of reference management software in general in their work, rather than unfamiliarity with, specifically, Zotero.

We also explored whether participants had personal websites or an online presence otherwise. The results suggest that the online presence of the participants was generally low, at least with respect to personal websites and popular social media websites based in the Global north. Only 24 had LinkedIn accounts, and 20 had a Twitter account. We note that we asked questions about the latter because it has rapidly increased its relevance in the academic field in recent years (*Budge, et al., 2016). Taking into account the low adoption of accounts on the social media platforms of interest to this research, the low number of participants that have a personal website (3) should come as no surprise.

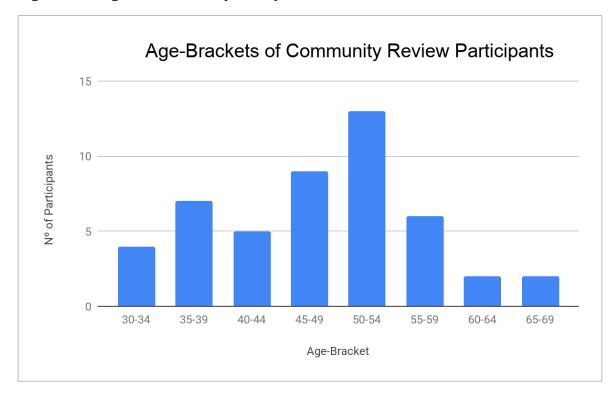
2.2.5. Language of preference

Regarding the preferred language of communication, English was by far the most popular, with 37 responses. English in addition to another language was chosen by an additional 9 participants, with French being the second most popular language (4 responses). The remaining language combinations of preference were: English, French and Arabic; English, German and Dutch; English and Portuguese; English and Amharic; and English and kiSwahili. Arabic was preferred by one of the participants. The remaining 5 participants did not provide us with information concerning their preferred language of communication.

2.2.6. Age brackets

As shown in Figure 2.9 below, the ages of the participants ranged from under 20 years old to over 70. The youngest participants were between 30–34 years old, and the oldest was under 70 years old. The majority of participants were between the ages of 45–54 years old; this age bracket represented 46% of respondents.

Figure 2.9. Age brackets of participants



2.3. Appendix bibliography

This bibliography can be accessed from the †entry for this document in our evidence library.

- Budge, K., Lemon, N., & McPherson, M. (2016). Academics who tweet: "messy" identities in academia. Journal of Applied Research in Higher Education, 8(2), 210–221. https://doi.org/10.1108/jarhe-11-2014-0114 (*record)
- Haßler, B., Stock, I., Schaffer, J., Winkler, E., Kagambèga, A., Haseloff, G., Marsden, M., Watson, J., Gordon, R., & Damani, K. (2019). Berufsbildung in Sub-Sahara Afrika: Stand der Forschung (Berufsbildung in SSA). VET Repository, Bundesinstitut für Berufsbildung, Bonn, Germany. https://doi.org/10.5281/zenodo.3334690 (†record)
- Haßler, B., Stock, I., Schaffer, J., Winkler, E., Kagambèga, A., Haseloff, G., Marsden, M., Watson, J., Gordon, R., Damani, K., Khalayleh, A., McBurnie, C., Allier-Gagneur, Z., & Adam, T. (2020). Technical and Vocational Education and Training in Sub-Saharan Africa: A Systematic Review of the Research Landscape. VET Repository, Bundesinstitut für Berufsbildung, Bonn, Germany. https://doi.org/10.5281/zenodo.3572897 (?record)