

Chapter 3. Overview of the Discovered Publications¹

This chapter describes the different sources that were used to obtain the literature that is analysed and discussed in this study. It describes the process of automated literature discovery in a particularly high level of detail, since it was the most extensive source for the information that is discussed in this study. Selection criteria and procedures reduced the number of publications from an initial ‘long list’ of over 2,000 to a shortlist of 324 references (judged to be of ‘ultra-high’ relevance), which were then coded in detail. The analysis provides details of the publications’ genres. For an insight into the underlying definitions of TVET and other related terms used by the researchers, see Chapter @4. For an insight into the background, focus and context in which the publications were generated in SSA, as well as the industrial sectors that are being researched, see Chapter @5.

This chapter includes a thematic analysis; the list of themes includes both high-occurrence topics (more than 50%) and selected topics that occur less frequently (less than 50%). Additionally, an overview of the target countries for the internet search is included, which is used for the TVET policies analysis. This chapter also clarifies a number of terminologies used in this report, describes the different genres of the publications, and discusses the non-English language materials that were used.

We note that all bibliographic data used in this report is available in our [evidence library](#)² as well as in a dedicated [Zotero library](#)³. In the digital version of this report, all references are clickable and lead to the corresponding entry in the Open Development & Education evidence library; in other words, for all publications discussed in this report, basic bibliographic information is available for review. No username or password is required to look up the publications and their details. Some extended functionalities are available after login; users are invited to register [here](#)⁴ to join the shared library.

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2 †Open Development & Education, Evidence Library, available at <https://docs.opendeved.net/lib/>

3 †Open Development & Education, Zotero Library, available at https://www.zotero.org/groups/2317526/oden_tvetr-ssa/library

4 †Open Development & Education, TVET Zotero Library Registration, available at https://www.zotero.org/groups/2317526/oden_tvetr-ssa?

3.1. Sources of evidence

We consulted the following sources of evidence.

1. **Known publications.** Publications already known to the authors, as well as publications referred to in the call for proposals.
2. **Intuitive literature search.** In preparation for the automated literature search, intuitive searches were undertaken. These helped to determine the correct set of keywords and keyword combinations. However, important literature was recorded and serves as a source of evidence.
3. **Automated search and discovery.** As described in detail in the research design, an extensive, cross-repository search was undertaken.
4. **Recommendations from TVET colleagues and experts.** New literature was recommended by scientists working in the area of TVET, both through the email survey and through separate recommendations.
5. **Web-search.** Particularly in order to discover policies, we also undertook extensive web searches.
6. **Snowballing.** Where literature discovered through sources 1–5 referenced further interesting papers, ‘snowballing’ was also included (see research design in Chapter @2).

3.2. Automated search and discovery

The most extensive source of literature was the automated discovery process. Initially, the process resulted in around 40,000 publications (including duplicates). However, search engines can return irrelevant results (false positives), and this search needs to be automatically screened to ensure that at least one search term occurred in the title or abstract. After this automated screening and the automated elimination of duplicates, 12,000 publications remained. As this review specifically focuses on TVET in SSA, we only retained publications that include at least one TVET-related term and a country/region-term related to SSA. This further reduced the number to around 2,000.

These 2,000 articles were then manually reviewed; the title and abstract were manually inspected. The review took place in the order of a relevance score, automatically computed from the occurrence of key terms in the abstract and title. We initially expected that the automated relevance score would be an accurate enough measure of relevance so that the manual review could be stopped beyond a certain score. However, this turned out not to be the case, and so all 2,000 articles were manually reviewed.

As discussed in the research design (Chapter @2), articles were ranked ultra-high, high, medium, low. Due to a large number of publications, we employed the following scale:

1. **‘low’:** the publication is clearly not relevant to our research questions;
2. **‘medium’:** the degree of relevance is not immediately clear;
3. **‘high’:** the publication appears relevant;
4. **‘ultra-high’:** clearly satisfactory and selected for coding.

Publications with low relevance were discarded, and articles of medium relevance were reviewed with regard to the intercoder agreement. All publications to be reviewed further were labelled as 'high'. The publications in the category 'high' numbered around 700 (Table #3.1). As there were too many to review the full texts manually, the high-relevance publications were reviewed again and placed in a new category: 'U'. Category 'U' (ultra-high) covers those publications that were particularly relevant to the research questions, and would merit manual coding (full text). The publications in the U category numbered 324 (see Table #3.1). Where discovered publications were multi-chapter volumes, these were broken up into chapters and treated individually in the full-text review.

Table 3.1. Number of publications in the various relevance categories

| Relevance | Number of publications | | Relevance: Subdivision of H |
|--------------|------------------------|-----|-----------------------------|
| L | 1297 | | |
| M | 192 | | |
| H | 709 | 385 | H-not-U |
| | | 324 | U (H and U) |
| Total | 2151 | | |

The papers in the U-category were either:

1. annotated in Adobe Acrobat: this was used if the article makes specific relevant points, but does not warrant full coding;
2. fully coded in NVIVO: this was used if the article was relevant throughout.

3.2.1. Evaluation of research quality

Exactly half (i.e., 162) of the 324 U-publications were peer-reviewed. These 162 peer-reviewed U-publications were rated for quality (see Chapter @2, Research design). The quality ranking for these publications is shown in Table #3.2.

Table 3.2. Number of publications in the different research quality categories

| Relevance | Number of publications | Peer-review | Number | Quality | Number |
|----------------------------|------------------------|---|--------|--------------------------|---|
| U (‘ultra-high’) | 324 | Yes | 162 | ‘u’ (ultra-high) | 14 |
| | | | | ‘h’ (‘h’ without ‘u’) | 63 |
| | | | | ‘m’ (medium) | 46 |
| | | | | ‘l’ (low) | 39 (22 of which were a high ‘l’) |
| | | No (e.g., reports, dissertations, etc.) | 162 | | |

The detailed results on research quality—and discussion of those publications—can be found in Chapter @7.

3.3. Terminology used in this report

This section summarises a number of important conventions used in this report.

3.3.1. The U-list and the H-list

In this report, we will refer to publications that were categorised as ‘H’ as ‘H-publications’, or ‘publications on the H-list’. Where those publications are papers, we may say ‘H-papers’. Similarly, publications that were categorised as ‘U’ are referred to as ‘U-publications’, or ‘publications on the U-list’. Note that a U-publication is always an H-publication too. In other words, ‘H’ includes ‘U’.

3.3.2. Assessment of research quality

The research quality is discussed in more detail in Chapter @7. However, for clarity, we will describe our notation here. As mentioned in @Chapter 2, Research Design, the criteria for research quality are denoted by lowercase letters (i.e.: u, h, m, l). This is to distinguish them from the relevance criteria for which uppercase letters are used (ie: Q, H, M, L). The symbols are then combined with quotation marks, e.g., ‘U.u’ is a publication with a relevance categorisation of ‘U’ and a quality categorisation of ‘u’. For visual clarity, the abbreviation is superscripted and delimited with a slash (e.g., †^{U.u}/Cameroon: Lange, 2014). Only peer-reviewed publications were classified. Other publications, such as

reports and dissertations, have not been rated in terms of quality and are subsequently given a ‘-’ (e.g., ‘U.’ such as [↑U-/Tanzania: Machumu, et al., 2016](#)).

3.3.3. Citations and countries

We use the following citation format. All citations are clickable hyperlinks; this is indicated by the symbol ‘↑’ appearing before the link. To aid readability as well as in the translations of this report, we found it advantageous to place references at the end of sentences. Therefore, when constructing sentences, we refer to the publication using the author’s name, and we place that actual reference at the end. For example, we might state that Ackah-Baidoo undertook work in Ghana, and place the full reference at the end of the sentence ([↑Ghana: Ackah-Baidoo, 2016](#)). Similarly, we refer to the work of two authors by naming both authors, such as the work by Mulder and Roelofs, and again place the reference at the end of the sentence ([↑South Africa, Ghana: Mulder & Roelofs, 2012](#)). Finally, where more than two authors collaborated, we use the phrase ‘and colleagues’ in the sentence, but use ‘et al.’ in the reference. For example, Kluve and *colleagues* collaborated to write an article ([↑South Africa, Uganda, Kenya, Liberia, Malawi, Ethiopia: Kluve, et al., 2016](#)). Mainly in lists and tables, publications are also listed with the author outside brackets, as the list below in Section @3.5.1 illustrates.

Note that the SSA country to which the work pertains is included in the citation. However, where publications cover additional countries outside SSA, those additional countries are listed only if necessary to make a specific point.

3.3.4. LMICs

Note that we use the term ‘*low- and middle-income country/-ies*’, abbreviated as LMIC(s), instead of older terminology such as ‘*developing countries*’ or ‘*Global South*’. The term LMIC is preferred because the concept of developing country or Global South is increasingly inaccurate. The divide is no longer between developed and developing countries but, more often, between more affluent and more deprived regions or areas within the same country, such as a rural-urban divide. Typically, there are additionally non-geographical divides, of which gender is one. There is no clear North-South divide in terms of countries, though it may be worth noting that in certain countries there may well be economic divides that map onto geographical divides. One example is Ghana, where the North has fewer opportunities or reduced access to trade due to the greater distance from the coast and the more arid climate. The group of LMICs, of course, includes many countries from SSA, but we only use the term LMICs if we wish to refer to the whole global group explicitly. Where we just focus on SSA, we always use the term SSA.

3.3.5. Effectiveness and efficiency

The terms effectiveness and efficiency are used in the usual senses.

Effectiveness is a measure of outcomes and impact. An intervention is effective if it results in, e.g., an increase in the level of education or the socioeconomic status of the participants—ideally in comparison to a (real or hypothetical) control group.

Efficiency is a measure of the results and impacts relative to the effort 'inputs'. This includes results relative to both general and quantifiable expense (e.g., financial, 'value for money'). This distinction is important, as global cooperation often only considers effectiveness. However, efficiency (in our definition) is crucial for social justice and equity, scalability and sustainability.

3.3.6. Gender-neutral language

The German-language report (†Haßler, et al., 2019) used gender-sensitive language. Similarly, this English-language report uses gender-sensitive language, including non-binary gender. For example, we avoid 'he' and 'she' in favour of 'they'; we avoid 'craftsmen' in favour of 'craftspeople'.

3.4. Description of genres

The discovered literature falls into the usual range of genres occurring in academic publishing. It can be divided into:

1. **Articles.** Short-form publications (up to around 20–30 pages):
 - a. Articles featuring primary research or other article-format contributions (such as book chapters);
 - b. Literature reviews.
2. **Volumes.** Long-form publications:
 - a. Multi-author volumes such as multi-author/edited books on specific topics;
 - b. Conference proceedings;
 - c. Special issue journal volumes.
3. Other long-form publications:
 - a. **Dissertations** (masters and PhD);
 - b. **Reports** (research reports, project descriptions; authored collectively as a report);
 - c. **Books** and monographs (often developed on the basis of a PhD thesis; otherwise authored collectively).

Where relevant to our work, multi-author volumes and conference proceedings were broken up into chapters (i.e., short-form publications). We now describe the key genres in turn.

3.5. Description of various publications by genre

In this section, we offer a brief overview of the genres that have relatively few publications.

3.5.1. Description of the literature reviews

We discovered 14 English literature reviews pertaining to SSA. An additional reference was suggested to us by one of the participants of the SCR. As noted above, the SSA countries covered in the review are listed in brackets in the list below. The 14 reviews were:

1. †Ghana: Ackah-Baidoo (2016);
2. †Tanzania: Baker, et al. (2013);
3. †South Africa, Nigeria, Uganda, Kenya: Couper, et al. (2018);
4. †various: Hartl (2009);
5. †South Africa, Namibia, Mauritius, Seychelles: Hlongwane (2018);
6. †South Africa, Uganda, Kenya, Liberia, Malawi, Ethiopia: Kluge, et al. (2016);
7. †Sierra Leone: Kingombe (2011);
8. †South Africa: Kim, et al. (2014);
9. †various: Mulder & Roelofs (2011);
10. †South Africa, Ghana: Mulder & Roelofs (2012);
11. †Kenya: Tripney & Hombrados (2013);
12. †Nigeria: Oluwafemi, et al. (2015);
13. †South Africa, Uganda, Rwanda: Ridge, et al. (2018);
14. †Uganda, Ghana, Malawi: Wellard, et al. (2013);

In addition, two reviews focusing on countries outside Africa were considered because they had relevant content, and will be referred back to later:

15. †Schaap, et al. (2012) on Students' Learning Processes during School-Based Learning and Workplace Learning in Vocational Education;
16. †Yasak & Alias (2015) on ICT integration in TVET.

All of these reviews are part of our U-list. We note that:

- We did not find any rigorous literature reviews in German, French or Portuguese.
- We did not find any reviews prior to 2009.

3.5.2. Multi-author volumes

There were several multi-author volumes, such as edited volumes, conference proceedings and special issues. From the following volumes, several chapters were reviewed:

1. †Maclean & Lai (2011);
2. †Botswana, eSwatini, Lesotho, Mauritius, Mozambique, Namibia, South Africa: Akoojee, et al. (2005);
3. †Various: Latchem (2017);
4. †Namibia: Eicker, et al. (2017);
5. †General: Akoojee (2013);
6. †JOVACET (Vol 1, No 1, 2018).

These volumes, and several chapters selected from them, are part of our U-list. From the following two volumes we used one publication each:

7. †[General: Schmidt, et al. \(2017, German\)](#): We primarily used one article; (†[General: Bauer and Kühnrich, 2017, German](#)). However, we note that other articles are generally relevant to promoting TVET, entrepreneurship as trade in SSA. This volume and article are on the U-list;
8. †[Central African Republic, Gabon, Ivory Coast, Senegal, Tunisia: Ginestié, et al. \(2012, French\)](#): We primarily used one article †[General: Lebatteux \(2012, French\)](#); however, the volume in itself is of interest.

Only one article was used from each of these volumes:

9. †[Ghana, South Africa, West Africa: Maclean & Wilson \(2009\)](#);
 - a. Article used: †[West Africa: Ahadzie \(2009\)](#);
10. †[Kaiser & Krugmann \(2017\), conference proceedings](#);
 - a. Article used: †[Various: Eicker, et al. \(2017\)](#);
11. †[Global: Kaiser & Krugmann \(2018\), special issue](#);
 - a. Article used: †[General: Kaiser & Krugmann \(2018\)](#);
12. †[Global, South Africa: Latiner Raby \(2018\)](#);
 - a. Article used: †[Various: Assignon \(2018\)](#).

The above volumes and indicated articles are on the U-list.

The following two volumes were of interest (and are on the U-list), but no specific articles were extracted:

13. †[South Africa: Moran & Rumble \(2004\)](#);
14. †[Burkina Faso: Ndoye & Walther \(2012\), conference proceedings, French](#).

3.5.3. Additional materials in Portuguese, French and German

This section details additional materials available in Portuguese, French and German. As noted in Chapter @2.5., our search included German as one of the languages, as this work was commissioned by the German Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF).

Doctoral dissertations in Portuguese

There were very few articles in Portuguese (see below). However, due to the Brazilian policy of publishing PhD theses online, there was a comparatively large number of PhD theses in Portuguese, including:

1. †[Various: Rubio \(2012, Portuguese\)](#);
2. †[General: Bittencourt \(2017, Portuguese\)](#);
3. †[Cape Verde: Andrade & others \(2009, Portuguese\)](#);
4. †[Cape Verde: Mendonça \(2014, Portuguese\)](#);
5. †[Alvim \(2016, Portuguese\)](#).

Reports in Portuguese

We also highlight the following reports in Portuguese:

1. †[South Africa: Bilo & others \(2017, Portuguese\)](#);
2. †[Angola, Lesotho, Mozambique, Namibia, eSwatini: Aitchison \(2012, Portuguese\)](#);
3. †[Guinea, Guinea-Bissau, Cape Verde: Cá & Ocuni Cá \(2015, Portuguese\)](#).

Articles in Portuguese and French

The articles in English are provided in the chapter bibliographies and are too numerous to list here. They are discussed in the following chapters. However, there are fewer journal articles in Portuguese and French. We highlight the following ones:

1. †[Gabon: Moussone & Metougue Nang \(2018, French\)](#);
2. †[Ghana, Burkina Faso, Ivory Coast: Azoh, et al. \(2012, French\)](#);
3. †[Angola: Veloso & Rodrigues \(2016, Portuguese\)](#);
4. †[General: Vieira \(2015, Portuguese\)](#).

Publications in German

Our search did not find German-language publications in peer-reviewed journals. We came across relevant German publications in trade journals (*Fachzeitschriften*), which were not available online. We were not able to obtain copies for review.

The following doctoral theses were also included:

- †[Ethiopia, Mozambique, South Africa: Haseloff \(2017\)](#);
- †[Nigeria: Raji \(2012\)](#);
- †[Sudan: Ahmed \(2011\)](#).

In interviews, we received information about a (small) number of other doctoral theses. However, it was not possible for us to locate and review these.

3.5.4. Introductory publications

In this section, we offer a subjective selection of publications which are particularly suitable for an introduction to the topic of this report. In addition to the above literature reviews (Section @3.5.1.) and journals (Section 3.5.2, for example, †[Various: Tripney & Hombrados \(2013\)](#); †[Namibia: Eicker, et al., 2017](#); JOVACET⁵), we recommend the following publications:

- †[Various: Assignon, et al. \(2018\)](#);
- †[South Africa: Bijl & Taylor \(2018\)](#);
- †[Botswana, Ghana, South Africa: Eichhorst, et al., \(2012\)](#);
- †[Cameroon, Ghana, South Africa, Tanzania: Grijpstra \(2015\)](#);

⁵ †JOVACET, Home, available at <http://jovacet.ac.za/index.php?journal=JOVACET>

- †South Africa: Oketch (2007);
- †Kenya, Ghana and Botswana: Oketch (2017).

3.6. Internet search and policy analysis

For our internet search, we selected specific countries based on their occurrence in a number of publications. As part of our criteria, in addition to the number of publications, we also considered the language(s) spoken and whether there were any indications of a dual system. In Table #3.3, the countries are listed in order of number of publications (cf. Chapter @5), followed by the coverage of that country in this report, followed by a note on the dual system (if available in that country) and the language(s) spoken. For more information on the use of the dual system, see Section @8.1.2.

Table 3.3. Countries included in internet search and policy analysis

| Countries | Covered in our policy analysis chapters | Dual system ⁶ | Colonial language spoken |
|--------------|---|--------------------------|--------------------------|
| Benin | no | | fr |
| Botswana | yes | possibly | en |
| Burkina Faso | no | | fr |
| Cameroon | no | | fr/en |
| Ethiopia | (partially) | possibly | - |
| Ghana | yes | | en |
| Kenya | yes | | en |
| Malawi | (little information online) | possibly | en |
| Mali | no | possibly | fr |
| Mozambique | no | possibly | pt |
| Namibia | (little information online) | | en |
| Nigeria | yes | | en |
| Rwanda | not covered | | en |
| Senegal | no | | fr |
| Sierra Leone | (little information online) | | en |
| South Africa | (partially) | | en |
| Tanzania | yes | | en |
| Uganda | yes | | en |
| Zambia | (little information online) | | en |
| Zimbabwe | no | | en |

6 The term 'dual system' (German: 'duales System') in this report refers to courses with a high percentage of work-based learning. This model will be further discussed in Chapter @8, under programmatic and pedagogical designs categorised as Type K2 (involving approximately 70% workplace-based activity and 30% of activity at a dedicated learning centre) and Type K3 (almost entirely workplace-based, with limited learning centre engagement).

3.7. Thematic analysis

The topics that emerged from the content analysis (see Chapter @2) are shown in Table #3.4. The research question (RQ) is stated for each of the topics. Topics are derived deductively from the research questions, as well as inductively from the publications. Inductive topics are marked as such. The total number of publications is 324 (U-list).

The following subdivisions have been used: L1 (research question, e.g., RQ7), L2 (sub-question, e.g., RQ8.a), and L3 (according to inductive analysis). 'P%' indicates the percentage of releases coded accordingly (not exclusive between categories). 'P#' indicates the number of publications with this code.

Themes with high occurrence (more than 50%) include: programme design, types of TVET, key features, practical programme components, pedagogy (RQ7), and technological, social, economic, legal factors or challenges (RQ11).

Themes with low occurrence (less than 50%), often determined inductively, include: Integration enablers or barriers (RQ12), EdTech, E-learning, M-learning, ICT (inductive topic), policy impact (RQ20.c), career development (for all employees, inductive), impact and effectiveness of TVET (RQ10), level of industry involvement in TVET (RQ8.a, b, c), TVET reform (inductive topic), research and evaluation (inductive topic), general development issues and SDGs (inductive topic) and networks (inductive topic).

We note that Table #3.4 references research questions. Table #2.7 in Section @2.6.4. can be used to find the corresponding chapters, with Chapters @8 to @13 focusing primarily on the outcomes of the content analysis.

In the following chapters, specific themes are expanded and literature analysis is undertaken: for example, in the context of 'training for the informal sector' or the 'role of TVET in development' (e.g., †[McGrath, 2012](#), †[McGrath & Powell, 2016](#); †[Powell & McGrath, 2019](#)).

Table 3.4. Thematic analysis. For the various topics, the research question (RQ) is stated (both for the deductive analysis and the inductive analysis; cf. Section @3.7).

| L1 | L2 | L3 | Notes | P% | P# |
|----|----|---|---|------------|------------|
| | | | Programme design, types of TVET, main features, practical programme components, pedagogy (RQ7) | 70% | 212 |
| | | | Programme design, types of TVET, key features (RQ7.a) | 57% | 172 |
| | | Provision of TVET, TVET delivery and TVET systems (including: Formality vs. informality, RQ7.c) | <p>Mode of education provision (10%)</p> <ul style="list-style-type: none"> • Informal apprenticeship (includes: formalisation thereof) • Informal sectoral conditions • Regional differences: <ul style="list-style-type: none"> • Coastal West Africa: informal–formal • Sahel: informal–family • Tanzania: informal–informal. <p>Dual system (2%)</p> <p>Justification, advantages and disadvantages, successes and failures of the <i>‘export of the dual system’</i>, dual system experiments in different countries (Botswana, Ethiopia, Mali).</p> <p>Provision of TVET (2%)</p> <p>Distance learning (and international partnerships), company-based training and its impact on productivity, holistic models, flexible approaches.</p> | 13% | 39 |
| | | Curriculum | Curriculum reform, adaptation of curricula (abandonment of colonial curricula), need for participatory and decentralised curriculum development, qualifications and attitudes of graduates, reform of in-service courses for ICT-based workplace requirements and ICT in society. | 7% | 21 |

| | | | | |
|--|---|---|------------|------------|
| | Provision of TVET (General) | TVET, design and implementation of TVET, TVET (Small Business and TVET), Post-Training Intervention, Practical Learning, Quality of Teaching and Learning, TVET is commonly geared towards formal employment (not helpful). | 6% | 17 |
| | Practical parts of programmes (especially 'off-site', 'A-B', dual; RQ7.e). Work-integrated learning (WIL), relationships between TVET and industry. | | 26% | 79 |
| | Pedagogy (RQ7.d) | | 22% | 67 |
| | Technological, social, economic, legal factors or challenges (RQ11) | | 53% | 160 |
| | Economic Barriers and Financing | | 9% | 26 |
| | Infrastructure, lack of resources, Open Education Resources (OER), personnel / educators (e.g., salary and incentives; shortages of qualified teaching), potential for public-private partnerships (including local relationships at the locations of colleges). | | | |
| | Supply and Demand | | 4% | 11 |
| | Changing supply-side systems to modern on-demand TVET systems, skills needed compared to provision of programmes, staff turnover. | | | |
| | Social factors | | 3% | 10 |
| | Perception of TVET, self-perceived educational needs, colonial factors (adoption of colonial attitudes and post-independence curricula), purpose of TVET (e.g., economic development vs. equity and poverty-reduction measures), perception of TVET in SSA vs. perception of SSA refugees in Germany. | | | |
| | Other topics | | | |
| | Relationships between companies and universities (including micro and informal enterprises), context realities, expectations of graduates. | | | |
| | Integration enablers or challenges (RQ12) | | 20% | 61 |
| | Gender (gender-based violence, sexual and reproductive health, women's roles) | | 5% | 15 |
| | Social justice | | 2% | 5 |
| | Inclusion and disability | | 1% | 3 |
| | EdTech, E-Learning, M-Learning, IKT (inductive topic) | | 18% | 55 |
| | EdTech, e-learning, m-learning, mobile learning, ICT for student learning, ICT for teacher learning, optimal/fair technology, allocation of ICT for teaching and learning with organisations (colleges), unrealised and unrealistic expectations regarding the impact of EdTech. | | | |

| | | |
|--|------------|-----------|
| Impact of policy (RQ20c) | 14% | 42 |
| Policy | 4% | 13 |
| Lack of impact of policies, harmonisation of TVET policies with other policies (e.g., measures to promote small businesses), recognition of prior learning (RPL), institutional learning and strategic framework for TVET. | | |
| TVET development (for all employees, inductive topic) | 16% | 47 |
| Professional development of TVET educators | 13% | 39 |
| Educators delivering TVET (teaching at TVET colleges, teaching TVET in schools, lecturers, trainers, instructors), professional development must be practice-oriented, specific professional development programmes, entrepreneurship, teacher training, general human resource development, professional development for researchers, teaching style, links between TVET colleges and tertiary education, qualifications for TVET college teachers. | | |
| Professional development for leadership and management | 3% | 10 |
| Leadership and management in general, leadership and management at TVET colleges, leadership curriculum, leadership education, leadership for micro and small business managers (managing their business activities: South Africa , Burkina Faso and other countries). | | |
| Professional development for masters (occupational development needs for crafts people, master crafts people, artisans) | 1% | 2 |
| Impact and effectiveness of TVET (RQ10) | 16% | 47 |
| Impact of youth employment programmes on the labour market | 4% | 12 |
| (Lack of) employment, employability, labour market opportunities, adaptation of TVET to the needs of the labour market, labour market information systems. | | |
| Programme efficiency (lessons learned) | 2% | 7 |
| Degree of industry participation in TVET (RQ8.a, b, c) | 13% | 38 |
| TVET reforms (inductive topic) | 8% | 24 |
| Innovation (innovation in general, allocation systems for apprenticeship places or employment, 'massification' of education) | 3% | 8 |
| New ideas | 3% | 10 |
| TVET reforms for enabling interdisciplinary work, renaming of 'TVET' in the context of modernising TVET, improvement of TVET system responsiveness, 'three party' model, broader skills for apprentices (such as nonviolent communication (NVC) for social inclusion and self-confidence). | | |
| Transition to work , support for graduates in business, entrepreneurship, change in the qualifications framework (TVET qualifications should be upgradable to university qualification) | 1% | 3 |
| Upgradeable repositioning of TVET to meet challenges (for and against certain TVET programmes, TVET, education vs. general education) | 1% | 3 |

| | | | |
|--|--|-----------|-----------|
| Research and evaluation (inductive topic) | | 8% | 25 |
| Need for research and data collection | | 6% | 18 |
| | Need for better data (both programmes and systems, EMIS), need for TVET research, need to improve research capacity, capacity building programmes for TVET research. | | |
| Research priorities | | 2% | 7 |
| | Identification of facts based on sound research (vs. reference to second-hand improvement), specific interventions to be explored, research has to be relevant to practice, the existing type of research (findings) are not consistent with the needs on the ground (i.e., existing research does not serve to inform actual policy and practice). | | |
| Research methods | | 1% | 3 |
| | Few concrete proposals on research methods; action research, human/user-centered design. | | |
| General development issues and SDGs (Inductive topic) | | 5% | 15 |
| Contemporary international development practices | | 4% | 12 |
| | Few concrete proposals for contemporary approaches in international cooperation; adaptive/agile management, the need for cooperation and donor coordination, evidence-based measures (or their absence), general barriers to intervention in national systems, good intentions that cannot be translated into change, focus on results (or lack thereof), scalability, sustainability, causal loop diagrams, Theory of Change. | | |
| Sustainable Development Goals | | 1% | 2 |
| | Few goals for sustainable development, environmental sustainability, health (HIV/AIDS). | | |
| Networking (Inductive Topic) | | 4% | 13 |
| | Benefits of networking, partnerships with civil society, ECOWAS, RAIFFT, college–industry networks. | | |

3.8. Chapter bibliography

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