



LEADVET



Erasmus+

Mapping networks and roles in Vocational Teacher Education Project Results 1

J. Seitle, K. Wilbers, M. Schäfer, A. B. Emstad, B. K. Støen Utvær, C. Nyberg, M. Saranpää,
R. Bayındır

Leadership Interaction in Sustainable Partnerships to Enhance
Continuous Improvement of Vocational Teacher Education- LeadVET

Project Result (PR) 1

2024

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Abstract

This report on PR 1 aims to map networks and roles in Vocational Teacher Education. In a literature review, first of all techniques for determining the roles of TVE/VET leaders should be identified. In a second step, a network analysis is carried out using the snowball technique to identify the networks for each partner. A survey is to be conducted to assess the relevance of individual network activities for overcoming HR challenges. Furthermore, this survey aims to identify areas where this is particularly difficult and to assess alternative teacher recruitment options from the schools' perspective.

Keywords

Leadership, literature review, network, analysis, HR Process, Attraction, Recruitment, Induction, Onboarding, In-Service-Training, Retention, VET, Vocational Educational Training, VTE, Vocational Teacher Education

Table of contents

| | | |
|----------|---|-----------|
| 1 | Framework for Mapping Networks and Roles in VTE – Project Results 1 | 7 |
| 1.1 | Purposes of PR1 | 7 |
| 1.1.1 | Initial situation, needs analysis and target group | 7 |
| 1.1.2 | Interlocking of PR 1 with the other PRs, expected impact and transferability potential..... | 7 |
| 1.1.3 | Course of work | 8 |
| 1.2 | The conceptual model | 8 |
| 1.2.1 | Leaders in LeadVET..... | 9 |
| 1.2.2 | Networks in the context of LeadVET..... | 10 |
| 2 | Research design of and methodological approach to PR 1 | 12 |
| 2.1 | Division into qualitative and quantitative elements and presentation of tasks | 12 |
| 2.2 | Literature review to identify techniques for determining the roles of TVE/VET leaders | 13 |
| 2.3 | Network analysis via snowball technique to identify the networks for each partner..... | 15 |
| 2.4 | Quantitative element of the research: Empirical survey | 16 |
| 2.4.1 | Objectives and construction of the survey instrument..... | 16 |
| 2.4.2 | Sampling and collection method..... | 17 |
| 3 | Results of the research of PR 1 | 18 |
| 3.1 | Results of the literature review..... | 18 |
| 3.1.1 | Attraction of teachers..... | 18 |
| 3.1.2 | Recruiting of teachers..... | 19 |
| 3.1.3 | Induction of teachers | 19 |
| 3.1.4 | Education of teachers before service..... | 19 |
| 3.1.5 | Education of teachers in service | 20 |
| 3.1.6 | Retention of teachers | 20 |
| 3.1.7 | Additional findings of the literature review..... | 21 |
| 3.2 | Network maps as a result of the network analysis | 22 |
| 3.3 | Results of the survey | 22 |
| 3.3.1 | Overall survey data..... | 22 |
| 3.3.2 | Results for each country | 23 |

| | |
|---------------------------------------|-----------|
| 4 Transfer possibilities | 38 |
| 5 Conclusion..... | 39 |
| References | 41 |

Table of figures

| | |
|---|----|
| Figure 1: Leaders in LeadVET | 9 |
| Figure 2: Networks in LeadVET | 11 |
| Figure 3: Excerpt from the open survey for the first iteration (School, Higher Education, company)..... | 16 |
| Figure 4: Postions of the participants of the survey | 23 |
| Figure 5: Results to question 1 from Germany | 24 |
| Figure 6: Results to question 2 from Germany | 25 |
| Figure 7: Results to question 3 from Germany | 26 |
| Figure 8: Results to question 1 from Finland | 27 |
| Figure 9: Results to question 2 from Finland | 28 |
| Figure 10: Results to question 3 from Finland | 29 |
| Figure 11: Results to question 1 from Norway..... | 30 |
| Figure 12: Results to question 2 from Norway..... | 31 |
| Figure 13: Results to question 3 from Norway..... | 32 |
| Figure 14: Results to question 1 from Türkiye | 33 |
| Figure 15: Results to question 2 from Türkiye | 34 |
| Figure 16: Results to question 3 from Türkiye | 35 |
| Figure 17: Total results of question 1 | 36 |
| Figure 18: Total results of question 2 | 37 |
| Figure 19: Total results of question 3 | 38 |

1 Framework for Mapping Networks and Roles in VTE – Project Results 1

1.1 Purposes of PR1

1.1.1 Initial situation, needs analysis and target group

The overarching ambition of the LeadVET project is to enhance the roles of leaders in Vocational Education and Training (VET), to extend sustainable partnerships and networks, to improve teacher education for vocational schools and thus to enhance VET generally. Effective leadership in VET relies heavily on the strength of these networks, as they facilitate collaboration among key stakeholders — schools, universities, employers — which are often disconnected. By fostering robust networks, VET leaders can bridge the gaps between these stakeholders, improve knowledge exchange, and provide the resources and support needed to address the sector’s challenges. Networks are also vital for recruiting high-quality teachers, especially in fields like computing, construction, health, and social care, where demand is high. Strengthening these connections is essential for developing sustainable partnerships and addressing the weaknesses currently hindering effective recruitment and teacher retention. The target groups that are affected by this problem and accordingly need innovations at this point are vocational schools, university vocational teacher education departments, employers, prospective and current VET teachers, and vocational teacher educators.

1.1.2 Interlocking of PR 1 with the other LeadVET PRs, expected impact and transferability potential

PR 1 will support all other LeadVET results, including the development of a model for developing sustainable curriculum and learning practices in Vocational Teacher Education (VTE). This will support the collaborative development of in-service training in PR2 and make use of the learning videos of PR4. The mapping exercise will also facilitate the identification and development of mentoring relationships and mentoring competences of key staff members in PR3.

PR1 will provide a scientific basis for working with partnerships, networks, leaders and other actors to span boundaries between the multiple sectors involved in VET. As a result of this PR and the other PRs based on it, LeadVET as a whole will lead to:

1. Increased recruitment of VET teacher students into VTE.
2. Increased quality of vocational teachers entering the profession.
3. Increased ability of professionals to combine teaching with working in industrial or other employment sectors.
4. Increased quality of supervision of apprentices, interns, and trainees due to part-time VET teachers having learning and teaching competences.
5. More practice-oriented teaching and learning in VTE.

The work of LeadVET and especially of PR1 is potentially transferable to VET teacher recruitment, education and employment outside the partner institutions and their respective countries.

1.1.3 Course of work

Leaders in Higher Education, Vocational Education and especially Vocational Teacher Education (VTE) circulate in networks within these ecosystems. Amongst other things, this strengthens links between theory and practice and assists with recruitment. A literature review has determined which networks and stakeholders in VTE and VET can be distinguished across countries. In addition, the literature review clarifies which techniques can best be used to empirically map such networks. In the empirical part of PR1, relevant VET networks were identified through interviews and other survey techniques. The LeadVET partners initiated contacts with relevant stakeholders, but also provided data themselves. The literature review also identified techniques for determining the roles of VTE and VET leaders. This report presents the literature review, the techniques used and the results of the empirical work.

1.2 The conceptual model

The starting point for the conceptual model is the Human Resources (HR) process or, more precisely, the HR challenge. The HR process consists of five phases: *Attraction, Recruitment, Induction or Onboarding, In-Service-Training and Retention*. Each of these phases presents its own challenges for VET and VTE. For example, VET leaders need to know how to attract VET teachers to their school or how to choose potential VET leaders from a pool of applicants. In LeadVET, it is assumed that networks and professional partnerships represent an approach to overcoming problems in the different phases of the HR process. It is necessary to ask which partners or networks help to solve the problems of attraction or recruitment. Within these

networks, leaders carry out various tasks in order to manage their networks. LeadVET PR1 explores the nature of these tasks below.

1.2.1 Leaders in LeadVET

The term “leader” requires a definition at this point. The understanding can be illustrated by the following graphic:

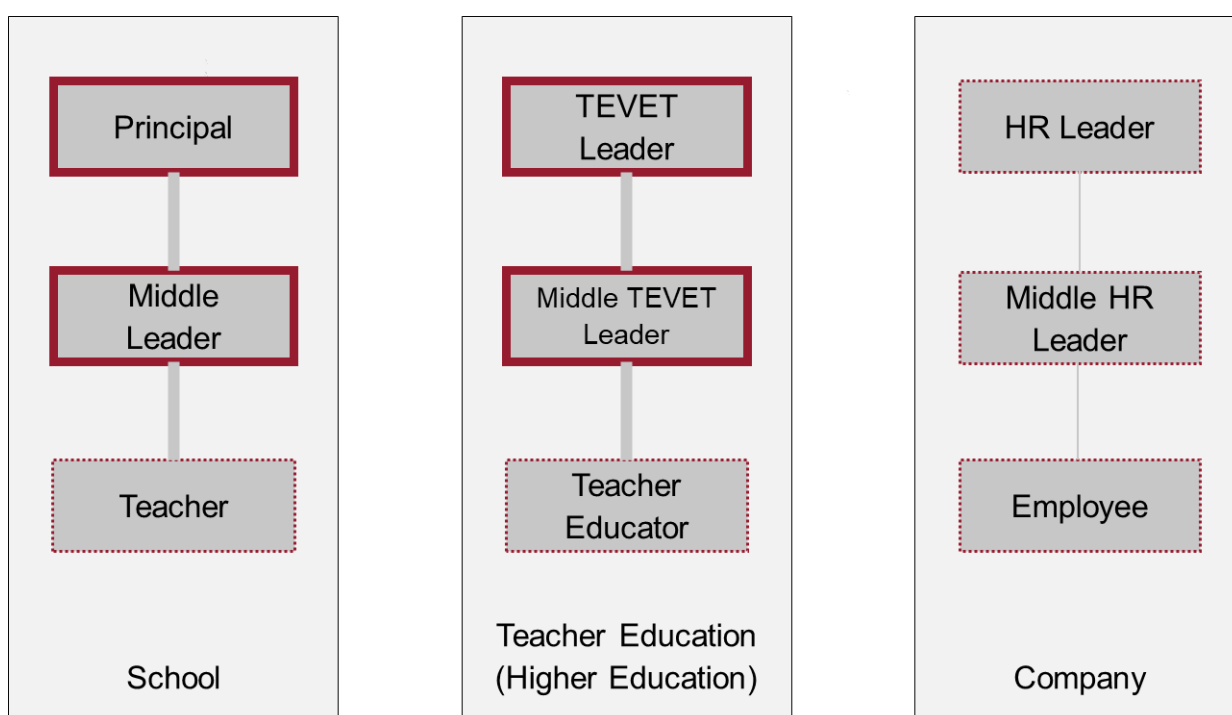


Figure 1: Leaders in the Vocational Education and Training ecosystem

Three sets of institutions are involved in this ecosystem: schools, universities and companies. Within these institutions, there are usually hierarchies. In schools, the head[master] is the leader. This is followed by a middle management level, called middle leaders, and finally there are teachers. In Higher Education, at universities which provide teacher education, there is usually a high-level leader who is responsible for teacher education for vocational education and training (TEVET¹). Below that, there is a middle management level and finally there are the teacher educators. In companies, education and training are organised somewhat differently. Personnel development is usually the responsibility of the HR department. The HR department itself has its own manager/leader and a middle management level, together with

¹ TEVET should not be confused with TVET, as TVET is for Technical Vocational Education and Training and thus refers especially to the technical part of VET

the regular workers of the HR department. Employee in HR mostly work on individual phases of the employment process, such as Attraction and Recruiting, or staff development.

In the above graphic, all positions outlined in red are regarded as VET leaders as defined in by LeadVET. Vocational schools need teachers, want to have them further developed and want to retain them in the job, whilst Higher Education should supply schools with optimally educated teachers. Companies are currently peripheral to this process. They do not provide leaders within the VET ecosystem, but they are indispensable as network partners to attract and recruit new teachers. It is important, however, that not only high-level leaders, but also middle managers, are involved in strengthening and enhancing networks and partnerships.

Networks in the context of LeadVET

The next step for LeadVET is to define networks and partnerships. Networks in general consist of elements, in this case institutions, between which relations exist.

Looking at the word fields that are the basis for our literature review, which will be explained in more detail later, it becomes clear that each of the nations involved in LeadVET has different terms and concepts for networks and partnerships. This is largely because some of the language families are different, although German and Norwegian, both Germanic languages, have similar understandings.

- Norwegian: Nettverk, Allianse
- German: Netzwerk, Partnerschaft, Allianz
- Turkish: Bağ, ilişki, iş birliği
- Finnish: Verkosto, Allianssi, partneri

Differences in underlying meanings become particularly clear when the terms of the respective mother tongue are translated into English or into the other three languages. For example, the Turkish term “Bağ” translates roughly to the English term’s “band” or “bunch”, which for non-Turkish speakers can be understood as disparaging. Nevertheless, a common understanding is possible.

Networks in VET that consist of elements, between which relations exist, can be depicted as follows:

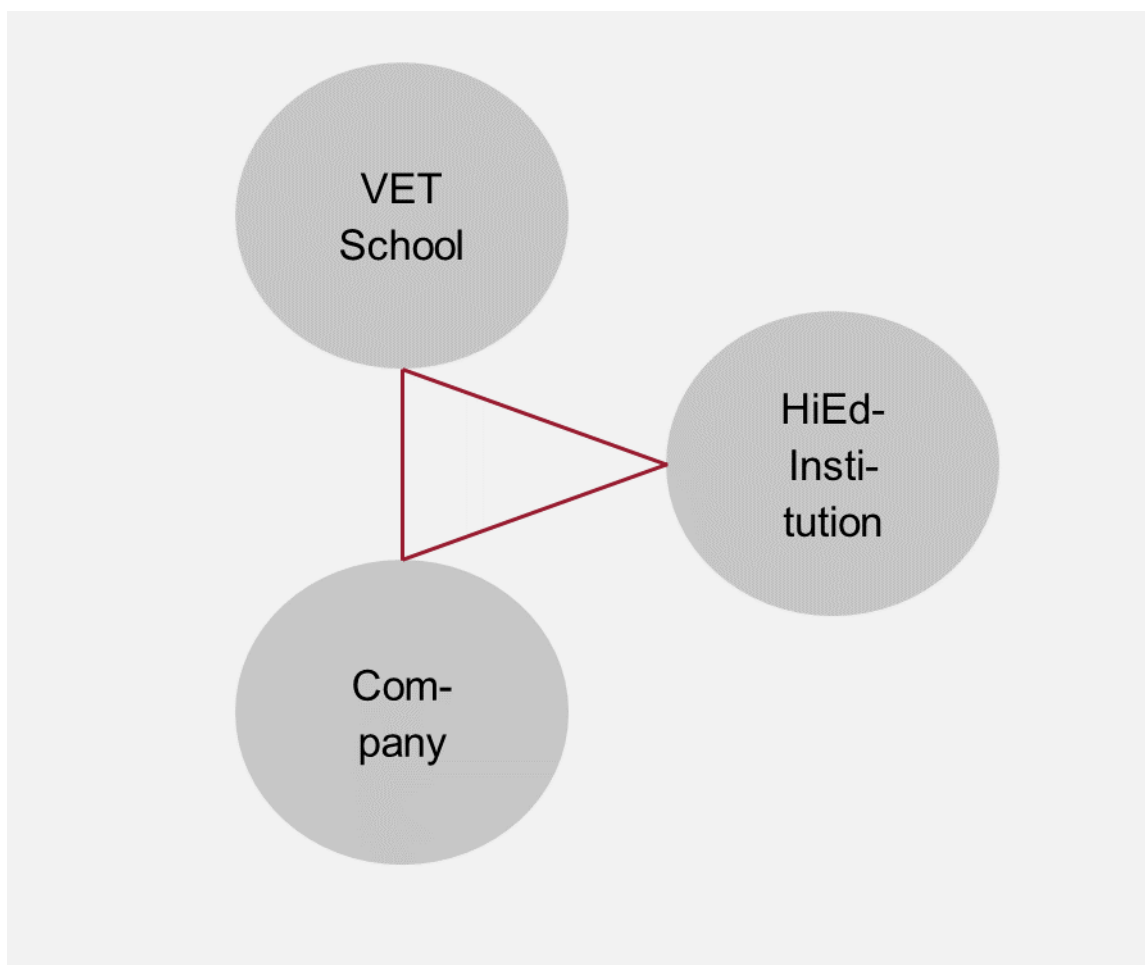


Figure 2: Network components in LeadVET

For LeadVET, the general notion of a network is defined with regard to the objectives of the project. Taking the German partner as an example, Higher Education would be represented by the university, i.e. Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU). In terms of teacher training, the school component is a university school as offered at the Nuremberg location, e. g. the “Commercial Vocational School 4 (B4) Nuremberg” for business professions. Finally, companies are also part of this network. At FAU, there is close cooperation with DATEV, a software house and IT service provider for tax consultants, auditors and lawyers, and their clients, such as medium-sized companies, municipalities, associations and institutions. DATEV supports teacher education at FAU.

Not only the constituent elements or institutions, but also the nature of their relationships are of great importance in networks. A distinction can be made between three different types of relationships in networks: *Market relationships*, *hierarchical relationships* and *relationships based on reciprocity*. Regarding various parameters, namely flexibility, obligation, decisions

and climate, the relationships within networks can be assigned to one or the other type. For example, in hierarchical relations, flexibility is low in relation to obligation, which is middle to high: there is more dependence on decisions and more of a bureaucratic climate. However, relationships of reciprocity are fundamental for the networks that are central to LeadVET. Although flexibility is likely to be low, and obligation moderate to high, just as in hierarchical networks, reciprocal relationships are characterised by independence in decision-making and a climate of trust.

In summary, networks in LeadVET can be characterised as follows:

- They represent a middle ground between hierarchical and market relationships.
- Networks are not given; they develop in a certain time and context.
- Partners or institutions in networks are legally independent and work to a logic of their own.
- Cooperation must offer long-term benefits for all parties involved
- Networks equate to social capital, which is as productive as financial or human capital.

Partnerships have similar characteristics to networks, although partnerships are based on formal agreements or contracts, whereas networks are informally organised.

2 Research design and methodological approach

2.1 Division into qualitative and quantitative elements and presentation of tasks

There are several tasks within PR 1, mainly led by FAU. NTNU (Norway), HHU (Finland) and AU (Türkiye) support each of the tasks from their own national contexts. Literature review parameters were set and stakeholders were identified for all partners, in preparation for the survey and interview protocols. The results are summarised in this report.

PR 1 consists of a literature review, network analysis and survey, each with a different methodological approach. While the literature review and the network analysis are part of qualitative research, the survey is part of quantitative social research. In this chapter, the respective methodological approaches are described, before the results are presented in chapter three.

For brevity, references to the literature are summarised in Chapter 6.

2.2 Literature review to identify techniques for determining the roles of VTE/VET leaders

The needs analysis and the conceptual model have already been presented above. The idea is that strategic networks and partnerships around VET schools can help to overcome challenges in the five step HR process: attraction, recruitment, induction, in-service-training and retention of VET teachers. This results in tasks for VET leaders, such as principals and middle leaders in VET schools, as well as VTE leaders and middle management

Based on this idea, the following research question was set:

What tasks do VET leaders need to take on in managing networks so that these networks help address challenges in HR processes relating to VET teachers?

This main research question can be broken down into further sub-research questions along the steps of the HR process.

1. How is the concept of network defined (in the literature in the respective language)?
2. Which partners are helpful in meeting challenges in the HR process for VET leaders?
 - a) Which partners are helpful in meeting the challenge of attracting VET teachers?
 - b) Which partners are helpful in meeting the challenge of recruiting VET teachers?
 - c) Which partners are helpful in meeting the challenge of induction VET teachers?
 - d) Which partners are helpful in meeting the challenge of in-service training for VET teachers?
 - e) Which partners are helpful in meeting the challenge of retention for VET teachers?
3. What are the tasks for VET leaders in helping these networks address challenges in the HR process for VET leaders?

Since the literature review is a joint effort of the four partners, an overarching search strategy was put in place. First, key search words were defined. The English terms “Network”, “Induct*”, “Attract*”, “Recruit*”, “In-Service-Training”, “Retent*”, “Middle lead*” and “Principal” were defined by the project team. Each country translated them and their synonyms into their own language. The respective search terms were linked to specific epistemological connections via the database search function (AND), while the AND NOT function was used to exclude certain terms, such as “technical” networks or “social media”. Each country partner chose appropriate databases in their national language and searched with the translated key terms. Mendeley was chosen as the literature management database because it is English-language and can

be used without a licence. Frank Seith, a student assistant, supported the team by managing the literature in Mendeley.

The following technical criteria applied to all partners:

1. The selected contributions had to be of appropriate methodological quality, which was ensured by their publication in specialist journals. Monographs and contributions in collective works were also acceptable after critical review. Where possible, only peer-reviewed contributions were selected.
2. The contributions had to contain results that were related to the search terms used and could help to answer the research question.
3. Since this report aims to cover the entire body of literature related to the research question, the year of publication was ignored.

These premises were defined as exclusion criteria:

1. Obviously not relevant to the topic
2. Weak research
3. Document not available e.g. behind a paywall

Each partner kept a record of the literature search. The protocol contains five products.

- Product 1:
 - o List of search terms used, including individual terms and their combinations, in plain language and in the correct notation for the database, for example after truncation.
 - o Number of documents returned in all databases
 - o Number of excluded documents
 - o Informally indexed documents
 - o Total number of documents or references to be evaluated with regard to the research question.
- Product 2: List of databases used with their URLs
- Product 3: [list of] weak or thematically irrelevant research, possibly for reasons not mentioned in the exclusion criteria.
- Product 4: Transfer of the resulting documents or references to Mendeley
- Product 5: Short answers to the research questions in English with reference to the literature sources. The content of the articles should not be described, there should only be answers related to the research questions.

Each partner used a three-step screening process when reading articles resulting from the search. First, the titles and abstracts of all articles found were considered. If the articles met the inclusion criteria mentioned above, the full texts of the articles were to be read. If these articles still met the inclusion criteria, they were included in the final selection. To avoid missing further potentially relevant literature not found with the original search strategy, the snowball technique was used. This meant that the bibliographies of the articles were searched for other potentially relevant articles or references. In total, 278 references from German, English, Norwegian, Finnish and Turkish literature were included.

2.3 Network analysis via snowball technique to identify the networks for each partner

To fulfil the task “Identification of stakeholders for each partner”, a network analysis was carried out. Four partners from four countries each have different school and higher education systems. In addition, companies in all four countries are organised very differently. Accordingly, the networks are not only very extensive, but also very complex. In order to capture the networks that exist around the three main institutions, schools, higher education and companies, the partners were instructed, via written open questions, to trace their networks over three iterations. The aim of this task was to capture the networks developed by the LeadVET team, which could be described as ego-centred institutional networks developed using the snowball technique. Due to the specific concerns of LeadVET, the three focal points were a) VET Schools, b) Higher Education institutions that train teachers and c) companies.

In the first iteration, the partners named a specific example of each institution. Since the project partners are all responsible for teacher education, they named their own universities. They also named LeadVET partner schools, such as Charlottenlund upper secondary school in Norway, which often function as university schools². Finally, a company was chosen that cooperates closely with the named Higher Education institution and schools, and is also involved in teacher training.

In the second iteration, the most important partners for the school, from higher education and industry/public sector were named. excluding institutions named in the first iteration. Here, the partners can consider partnerships as well as relations via the market or hierarchical relations.

² A university school is one that is in a formal partnership with an associated university to promote research and/or teacher education.

The basis of the relationship with the partner may or may not be a formal contract. The following figure illustrates the process.

Iteration 1: Fill in the first iteration

| | | |
|------------|-------------------------------|---|
| 1.1 | Short name in English | Stadin AO |
| | If available: Abbreviation | Stadin AO |
| | Short name in own language | Stadin AO |
| | Official name in English | Helsinki Vocational College and Adult Institute |
| | Official name in own language | Stadin ammatti- ja aikuisopisto |

| | | |
|------------|-------------------------------|--|
| 1.2 | Short name in English | Haaga-Helia |
| | If available: Abbreviation | Haaga-Helia |
| | Short name in own language | Haaga-Helia |
| | Official name in English | Haaga-Helia University of Applied Sciences |
| | Official name in own language | Haaga-Helia ammattikorkeakoulu |

* Teacher education for VET

| | | |
|------------|-------------------------------|---|
| 1.3 | Short name in English | Social Services, Health Care and Rescue Services Division |
| | If available: Abbreviation | |
| | Short name in own language | Sosiaali-, terveystyö- ja pelastustoimiala |
| | Official name in English | Social Services, Health Care and Rescue Services Division. City of Helsinki |
| | Official name in own language | Sosiaali-, terveystyö- ja pelastustoimiala. Helsingin kaupunki |

* Teacher education for VET

Figure 3: Excerpt from the open survey for the first iteration (School, Higher Education, company)

The process of finding a further partner in each category took place over three iterations. Finally, the results were transferred into a mind map, created with the software tool Mindmanager (see 3.2).

2.4 Quantitative element of the research: Empirical survey

2.4.1 Objectives and construction of the survey instrument

Based on the results of the literature review and the network analysis, the research was made quantifiable by means of an empirical survey. Having answered the (sub)research questions posed in the literature review and visualising the networks for each nation, the main objective of this survey was an assessment of the relevance of specific network activities and the

development of further network activities, for overcoming HR challenges. The survey aimed to identify areas where recruiting teachers to vocational education is particularly difficult and to assess alternative teacher recruitment options from the schools' perspective.

Firstly, participants are asked to indicate on a Likert scale from 'very easy' to 'very difficult' how easy or difficult it is to find teachers in specific sectors, including agriculture, forestry and fishing; mining and quarrying; manufacturing; construction; education; administrative and support service activities. If the participants are not active in any of the sectors, there is the option of ticking "does not apply to me".

Next, participants indicated the channel in which recruitment bottlenecks were most pronounced, on a scale from "not at all important" to "very important". These may either be existing channels or ones to be developed and explored. The specified channels include traditional teacher training routes (recruiting ready-trained teachers); dual training, i. e. students study and work (paid and coordinated) at the school; combined training, i. e. students take over tasks at the school at times (e. g. regular classes, tutoring courses); awarding scholarships or grants to students (with or without teaching responsibilities at the school) etc. (all recruitment channels are shown in the results section below). In a free text entry, the participants can indicate further possibilities for teacher recruitment.

Participants also stated on a scale from "not complex" to "very complex", how they experienced using these channels. In terms of potential alternative channels, for example, 'not complex' means that the school could implement these with comparatively little effort.

Finally, participants indicated which of the partner countries they come from and their role (principal; other leadership role at a school; active in teacher education; active in government, ministry, municipality or similar; others).

Sampling and collection method

Convenience sampling was used, not a strict statistical sampling, and there is no social profile survey and no predefined sample sizes. Subgroups of the sample will be VET schools, especially school principals and middle leaders, and Higher Education institutions, especially persons responsible for teacher education and training but who are not necessarily managers.

As mentioned above, the questionnaire mainly consisted of closed questions in the form of a Likert scale. There is only one open question. It was prepared by student assistant Frank Seith from FAU in English and then sent to the partners, who translated it into their mother tongue.

Unipark was chosen as the software. A short disclaimer on data protection was included at the beginning of the survey. The data was collected by FAU and managed and processed within Germany in accordance with the German Data Protection Regulation (DSGVO), which is subject to EU regulations. The data was processed in accordance with principles that guarantee the highest level of anonymity for the participants and do not allow any identification of individual persons.

After the survey was developed, the partners sent the link to the questionnaires to the target group of their country. The questionnaire was online between 06.04. and 31.08.2023.

3 Results of the research of PR 1

3.1 Results of the literature review

The aim of this chapter is to summarize all the results. In order to provide as brief an overview as possible, explicit literature references have been omitted here. The exact literature references can be found in the document "Literature Review Documentation".

3.1.1 Attraction of teachers

Regarding the first sub-question of the literature review, *which partners are helpful in meeting the challenge of attracting VET teachers*, the primary goal is to present schools as attractive employers for potential teachers. The task of the universities in the network is to give students the opportunity to participate in teaching and school life, for example via the university school concept. They also should realistically present work opportunities and conditions in schools, if possible involving partners from the relevant schools. The task of companies is to participate in related activities, for example external evaluation of schools. Other ways in which companies can help to attract teachers include providing resources for in-service education of teachers at vocational schools, improving working conditions and enabling opportunities for understanding the needs of other institutions. In this network, schools can help to attract new staff by

promoting the teaching profession to students, who are in school during internships or in connection with research.

3.1.2 Recruitment of teachers

The main goal is to bring interested individuals into employment as teachers, quickly and appropriately for the job assignment. To achieve this goal, universities can increase the number of study places in programs that train teachers generally. They can also support by enabling prospective teachers through, for example, bridging or accelerated courses. Another helpful factor could be aligning the end dates of university processes with the typical hiring dates of schools, so that there is no idle period between graduation and the start of a new job. The literature review did not identify any opportunities for companies to support at this stage of the HR process. Schools, however, can participate in special programs for employment in the absence of formal qualifications and can support subsequent study to fulfil these requirements.

3.1.3 Induction of teachers

Induction means to effectively introduce newly hired teachers to their responsibilities, the work environment and the values and norms of the school. In other words, they need to be 'onboarded'. Since this is a process that happens mainly in schools, universities are not usually involved in the induction of new teachers, unlike companies which can provide dialogue spaces and mentoring for new teachers to strengthen the practical relevance of VET teaching. Schools are definitely the most important partners in this network. They can develop, implement and evaluate standardised induction programs for teachers, which can also include professional development courses. Mentoring or group learning can help to overcome the so-called 'practice shock' experienced by new teachers after learning mainly theory at university. It is for the schools to set up such programs and to support networking in professional practice.

3.1.4 Education of pre-service teachers

The original intention was only to research in-service training possibilities for teachers in line with the HR process. However, the literature also provided many suggestions for pre-service training, which is often the task of universities. They have to ensure that teacher education is aligned with the needs and areas of responsibility of schools and can deal with current or future

challenges. Vocational schools especially have to ensure that the training of teachers is oriented towards their fields of activity as well as current and future tasks in companies. Companies themselves can help in this network by facilitating practical training, for example in the context of internships. There could also be joint projects or cooperation with institutions of teacher training in vocational education. From the point of view of the schools, these cooperations with universities can take place through university schools.

3.1.5 Education of teachers in service

Once teachers have been trained and are working in school, it is important to provide them with continuous professional development. They should be supported to adapt the competences they have acquired, whether in university or through other courses. Universities have a special role to play here. Even if their former student are now teachers in school, they can extend teacher education with special programs. University schools, as already mentioned, can also provide support here. Mentors who supervise students benefit just as much from this concept as the students. By carrying out research and development projects with schools, universities can help to further develop the competencies of participating teachers.

Companies are also important for in-service-training of teachers. They can provide instructors for internal professional development at the school or let teaching staff participate in internal company training programs, for example, to support the introduction of new machines or techniques. Likewise, they can support teachers and students in the development of learning materials. It seems that schools are the most important partner in the network when it comes to in-service training of teachers, but nothing was found in the literature on this subject. Although in-service-trainings, for example with the term CPD (Continuous Professional Development), are widely discussed in international literature, no relevant studies in German, Finnish, Norwegian and Turkish were found in our review specifically addressing the question which partners are helpful in meeting the challenge of in-service training for VET teachers.

3.1.6 Retention of teachers

The goal here is to retain and support satisfied staff who enjoy teaching and developing their schools. Once again, all three partners of the network are in demand. Universities are in dialogue with schools, adapting training to teachers who are already working. New working

methods in companies might also be transferred to teaching work. Companies can provide advice on how these can be implemented in schools. Schools should work with universities to identify and adapt training programmes to meet the needs of individuals and schools. Under the motto "Value and promote dual identity", teachers should be valued both as teachers and as professionals in their respective fields.

Additional findings of the literature review

The five phases of the HR process model - attraction, recruitment, onboarding, development and retention - are closely interlinked and influence each other. A strong employer brand in the attraction phase leads to better qualified applicants in the recruitment process. Structured onboarding facilitates integration and paves the way for continuous development, which in turn strengthens employee loyalty. Conversely, a high retention rate helps to attract new talent and improve the recruitment process. By looking at this cycle holistically and establishing a clear link between the phases, schools can develop a sustainable HR strategy that promotes both recruitment and long-term employee retention.

In addition to the research questions previously identified, the literature review brought up other interesting results, especially regarding the attraction of teachers to the profession, the initial point in the HR process for recruiting new staff. The network is very important for improving the attraction of teachers. It should be a task for all partners acting together. In addition to schools, universities and companies, ministries and related institutions are particularly important. It is not only the top management level that should take responsibility for attracting new teachers. The importance of the middle management level is not to be underestimated.

When it comes to meeting potential recruits to teaching, physical meeting spaces are still strongly emphasized. In contrast, virtual spaces are hardly mentioned in the literature. The trend for applicants and companies to be brought together through social media has not so far reached schools. The future role of social media in VET teacher recruitment is unclear.

The literature review also revealed some limitations of the LeadVET approach, which attributes a significant role to networks. While networks are crucial for professional exchange and collaboration, they are not sufficient on their own. The status of VET teachers is a key factor in ensuring the attractiveness and effectiveness of the profession. Accordingly, status-enhancing measures must be taken and anything that reduces the status of VET teachers must be avoided.

3.2 Network maps as a result of the network analysis

The networks within the individual countries that were identified with the help of the snowball technique or the open survey are difficult to depict on individual slides due to the size of the networks and the number of branches. For this reason, the graphics must be accessed externally via our website.

Finland: <https://webis.akdeniz.edu.tr/uploads/1122/content/Network-analysis-version-FI.jpeg>

Germany: <https://webis.akdeniz.edu.tr/uploads/1122/content/Network-analysis-Germany.jpeg>

Norway: <https://webis.akdeniz.edu.tr/uploads/1122/content/Network-analysis-Norway.jpeg>

Türkiye: <https://webis.akdeniz.edu.tr/uploads/1122/content/Network-analysis-Turkey final.jpeg>

3.3 Results of the survey

3.3.1 Overall survey data

A total of 73 people took part in the survey, which was conducted in the four partner countries. Norway had the most participants with 31, followed by Germany with 17, Türkiye with 16 and Finland with 9. In terms of the positions of the participants, the majority were school principals (29 persons or 43 %), followed by other leadership roles (27 persons or 40 %). Teacher educators accounted for 11 % (or 7 persons) of the total. The least likely to take part in the survey were people from the ministry, government etc. and teachers (2 persons or 3 %).

The following pie chart graphically illustrates the positions of the participants:

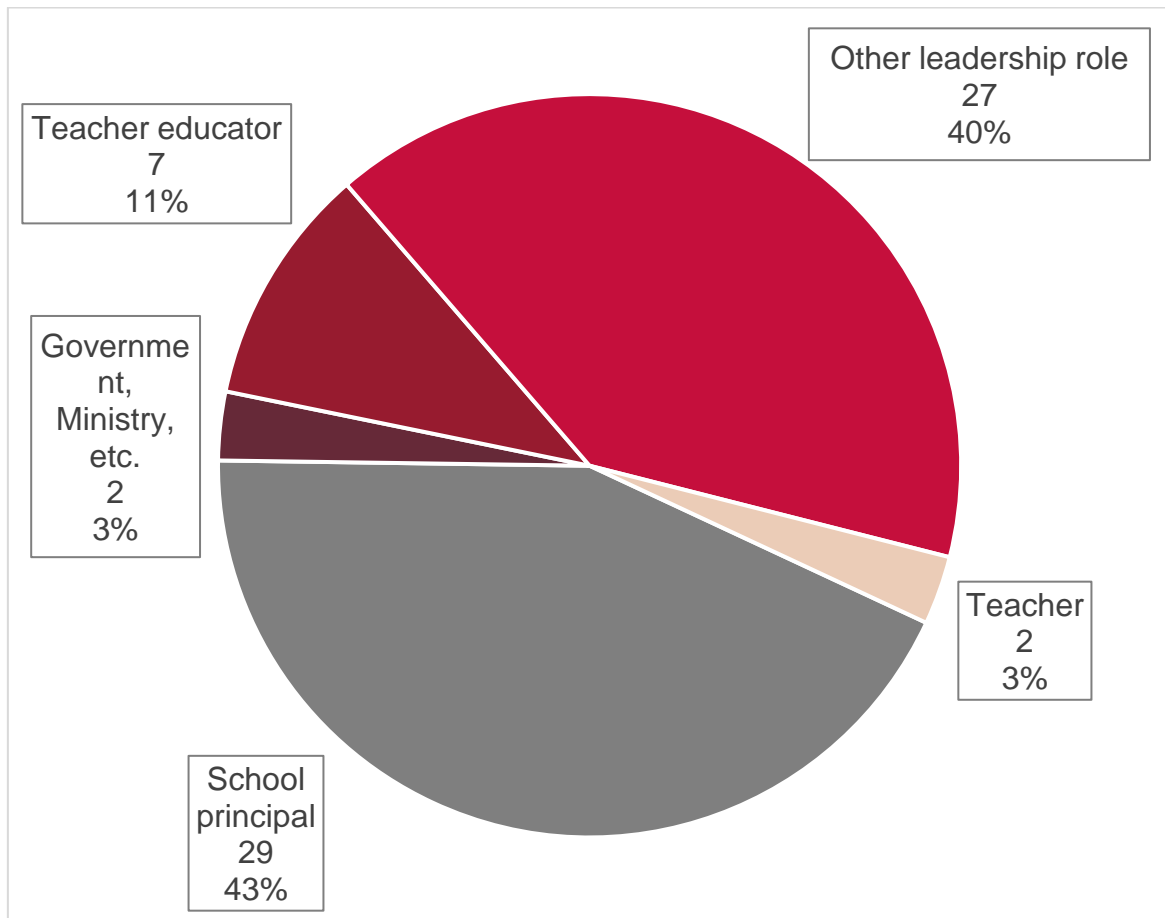


Figure 4: Postions of the participants of the survey

3.3.2 Results for each country

3.3.2.1 Results from Germany

In the first question, participants were asked to answer how difficult it is to find teachers for the sectors mentioned. If the respondents could not give any information because they are not active in these sectors, there was a possibility to select the answer “does not apply”. This is also the reason why the total number of participants does not correspond to the data per sector.

The following replies were submitted for Germany:

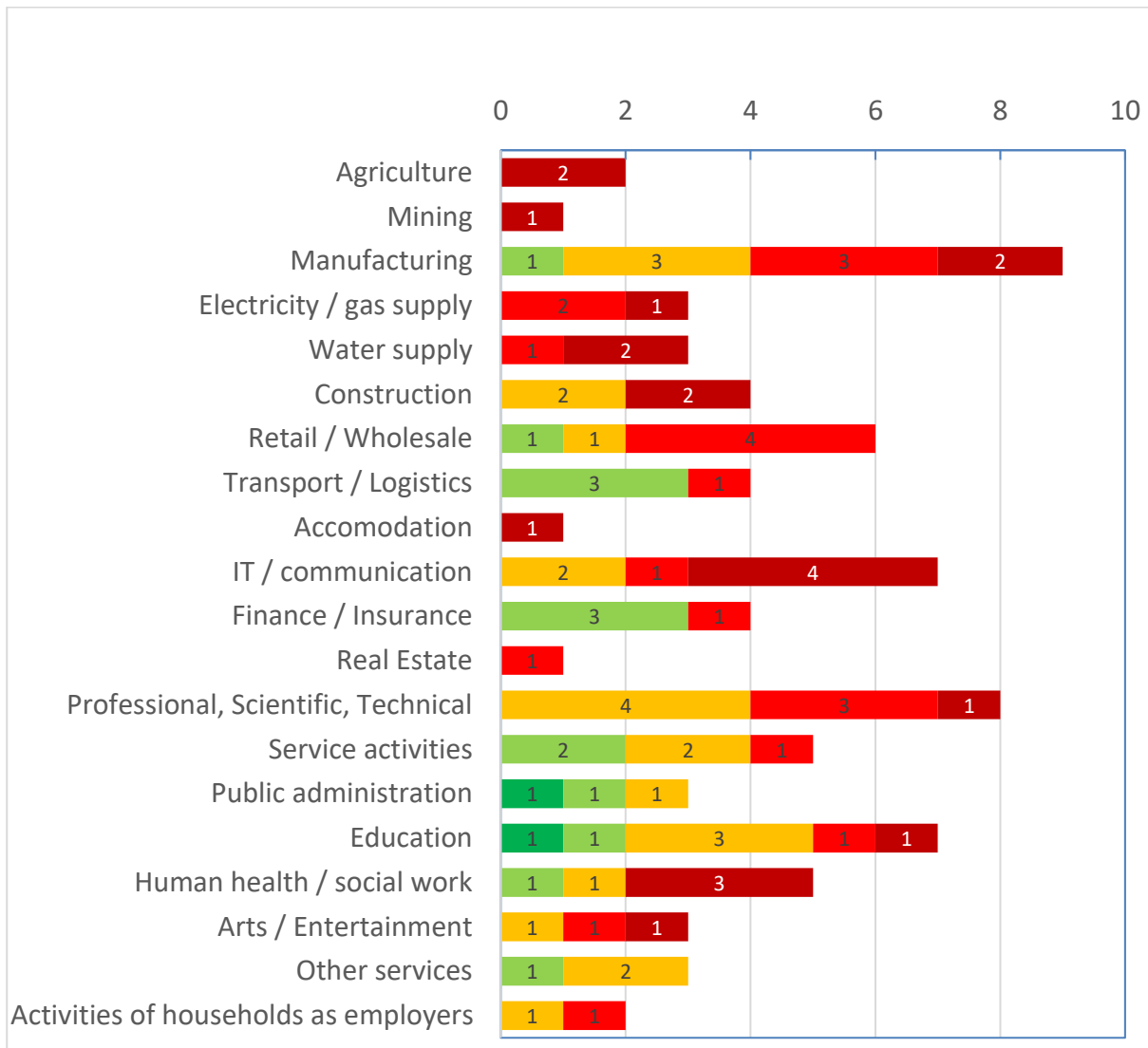


Figure 5: Results to question 1 from Germany

Thin green means very easy, light green easy, yellow neither, red difficult and dark red very difficult. It was particularly difficult to find teachers for the sectors of manufacturing, electricity and gas supply, water supply, retail and wholesale, IT and communication, professional, scientific and technical as well as human health and social work. It is comparatively easier to find teachers for the sectors of transport and logistics, finance and insurance, public administration as well as education. In Germany, compared to other countries, more responses were missing. There are far fewer green-marked, i. e. only a few sectors where it is easy to find teachers. This could be due to the fact, among other things, that teacher training or vocational schools in Germany are often oriented towards [academic] subjects, especially in urban areas. In this respect, it is difficult for respondents to make statements about sectors in which they are not involved. The principal of a commercial-technical school can only speak for

his school and accordingly cannot say what the situation is like for his colleague at a commercial-business school.

Responses to the second question indicated how important the given recruitment channels are. Dark red stands for not important, red for less important, yellow for neither, light green for important and dark green for very important.

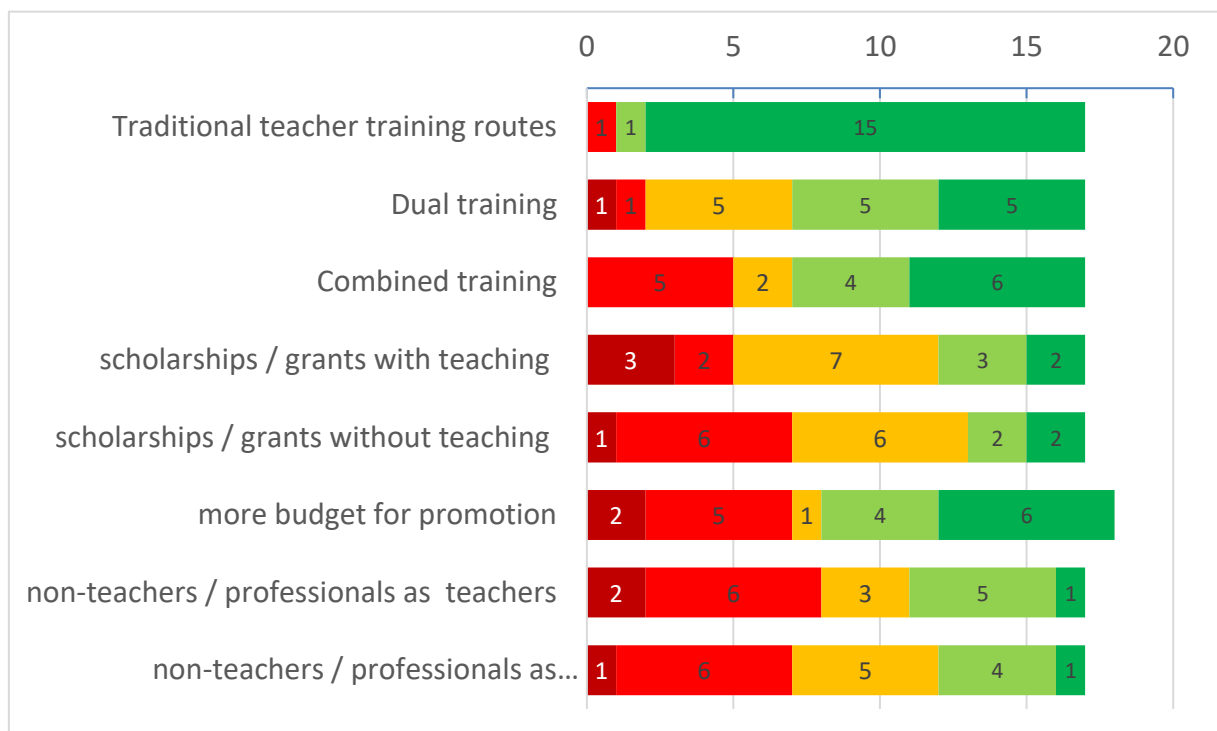


Figure 6: Results to question 2 from Germany

At this point, it can already be said that the first item, traditional teacher training routes, is considered important or very important in all countries. This is also the case in Germany. Only one person thinks it would be less important. Apart from that, the opinions on the other items are very evenly distributed. This is particularly evident in the case of scholarships or grants with teaching. Five people who believe it is (less) important are compared with five people who believe it is (very) important. Seven people feel neither. While neither was frequently ticked for all items, opinions are obviously divided when it comes to more budget for advertising. Seven think that more budget is less important, ten think it is (very) important. Only one person thinks neither. Dual training does not correspond to the balanced pattern. This is considered important or very important by ten people. Only two people find it not or less important.

In the second question, respondents also had the opportunity to give open-ended answers to the question of what other possibilities they see for recruitment. The German participants felt that the State Ministry of Education should take some responsibility for recruitment. Other suggestions were additional responsibilities for teacher education, advertising at specialist colleges regarding A-Levels, and advertising directed towards talented students and master students, who work as substitute teachers.

The participants should not only answer how important this recruitment channel is, but also how complex it is. In this context, “complex” refers to the degree of difficulty or challenge in implementing a particular recruitment channel for teachers. “Very complex” (dark red) and ‘complex’ (red) mean that a recruitment channel is considered particularly difficult or challenging - be it due to bureaucratic hurdles, long training periods, lack of financial resources or organizational obstacles. “Less complex” (light green) and ‘not complex’ (dark green) mean that a recruitment channel is considered comparatively easy to implement, possibly because the structures already exist or the effort involved is relatively low..

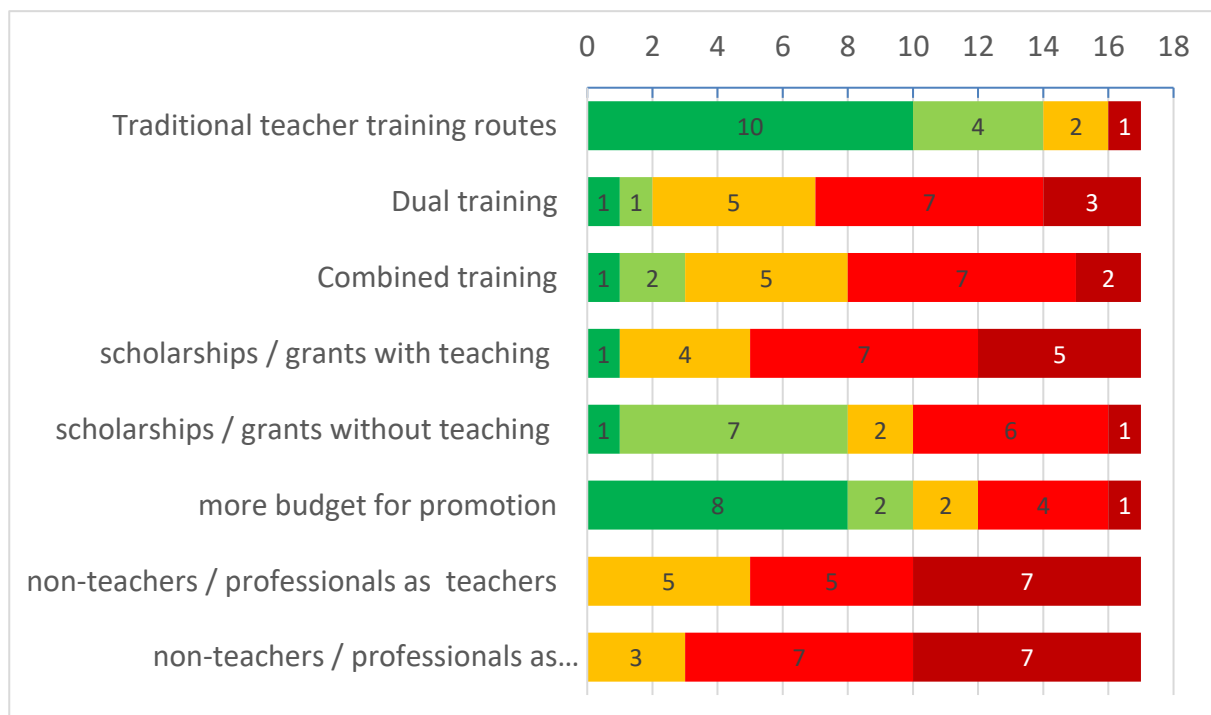


Figure 7: Results to question 3 from Germany

In the same way as their importance, traditional teacher training routes are also seen as ‘less’ or ‘not’ complex. On the other hand, the recruitment of non-teachers or professionals to work as teachers or substitute teachers is considered to be ‘very’ or ‘rather’ complex. While scholarships without teaching and more budget for promotion are comparatively seen as less

complex, dual training, combined training and scholarships with apprenticeship are considered more complex here.

3.3.2.2 Results from Finland

The following answers were given for Finland.

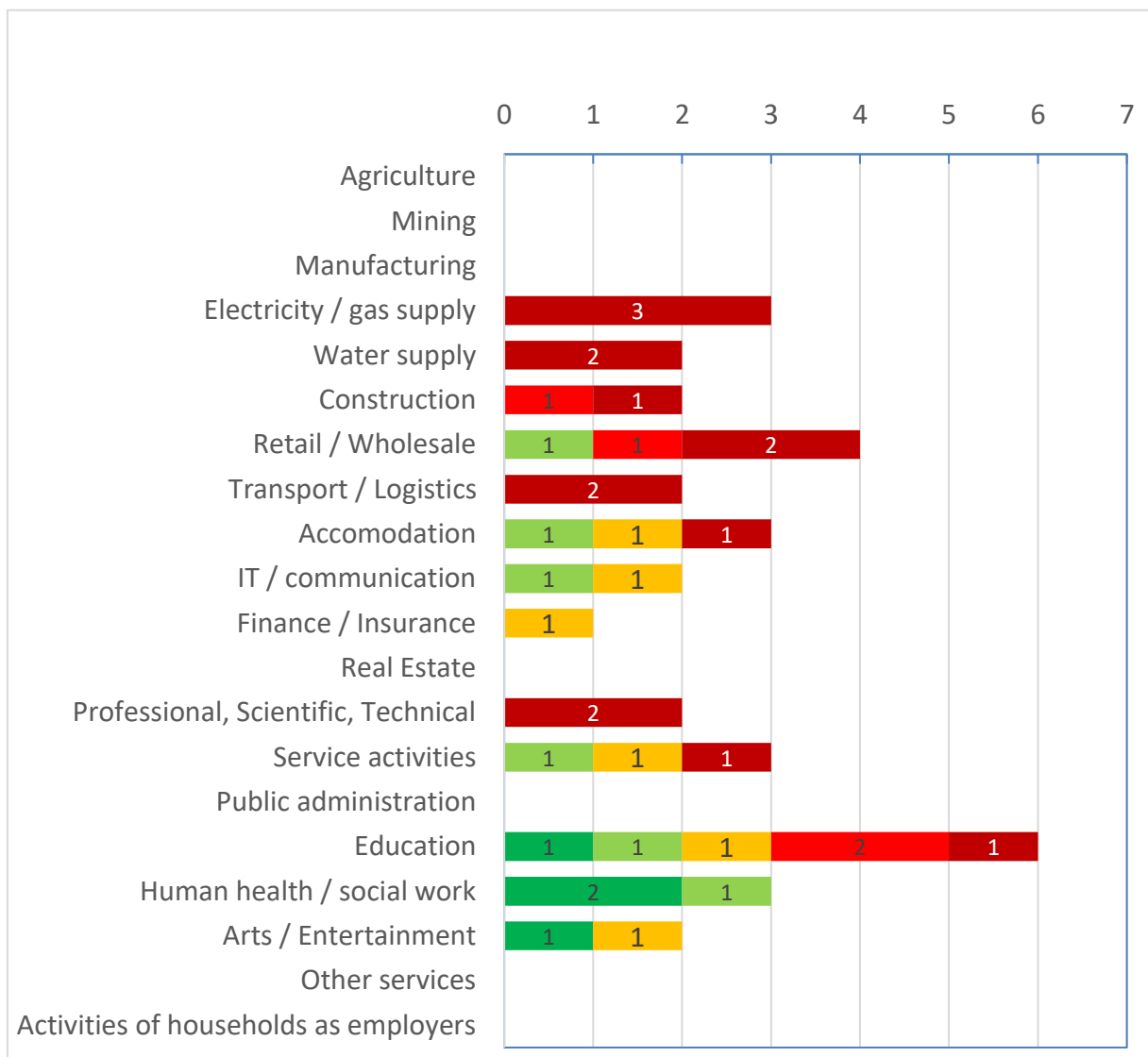


Figure 8: Results to question 1 from Finland

In Finland, even more participants abstained from answering. For the sectors agriculture, mining, manufacturing, real estate, public administration, other services and activities of households as employers very often “does not apply to me” was ticked, which is probably due to the fact that this country had the fewest participants anyway. The most difficult sectors to

find teachers for are electricity and gas supply, water supply, retail and wholesale, transport and logistics professional, scientific, technical and education as can be seen above.

With regard to the importance of recruiting channels, the picture is similar to that in Germany.

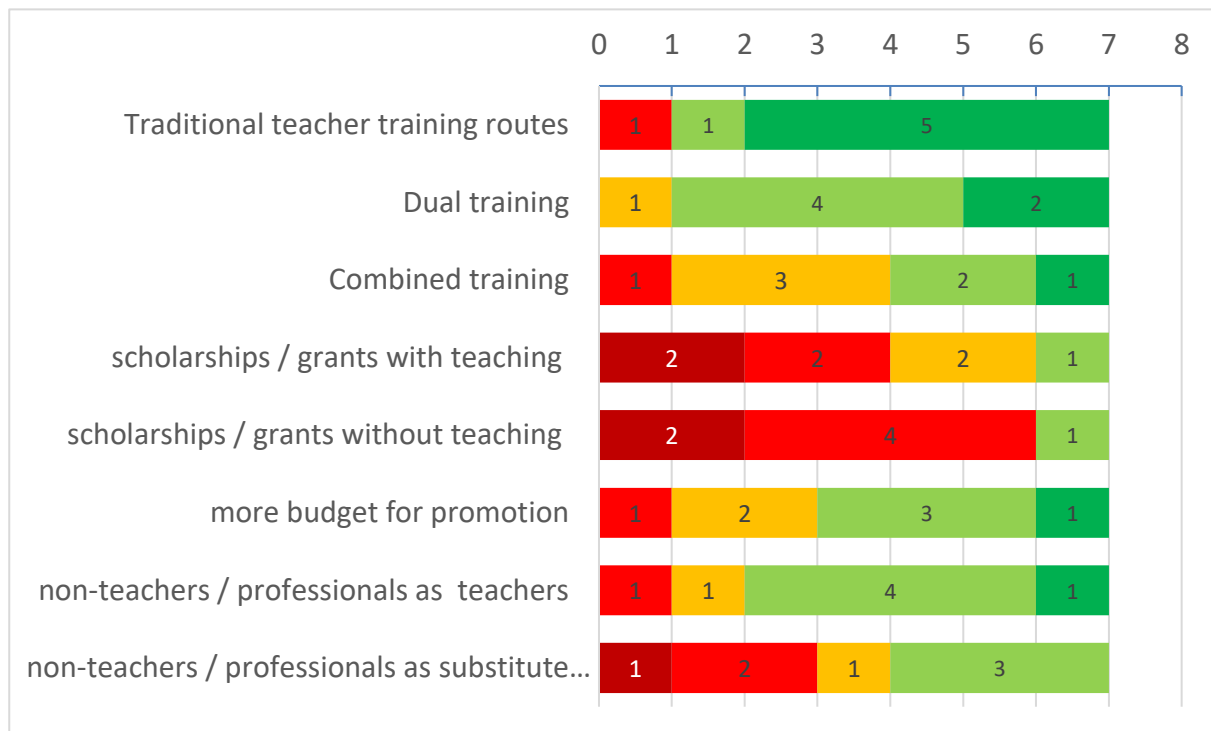


Figure 9: Results to question 2 from Finland

Traditional teacher training routes are also important in Finland. Comparatively few people ticked 'neither' generally. Scholarships with or without teaching are 'less' or 'not at all' important there. Non-teachers or professionals working as substitute teachers or as "real" teachers are considered rather more important.

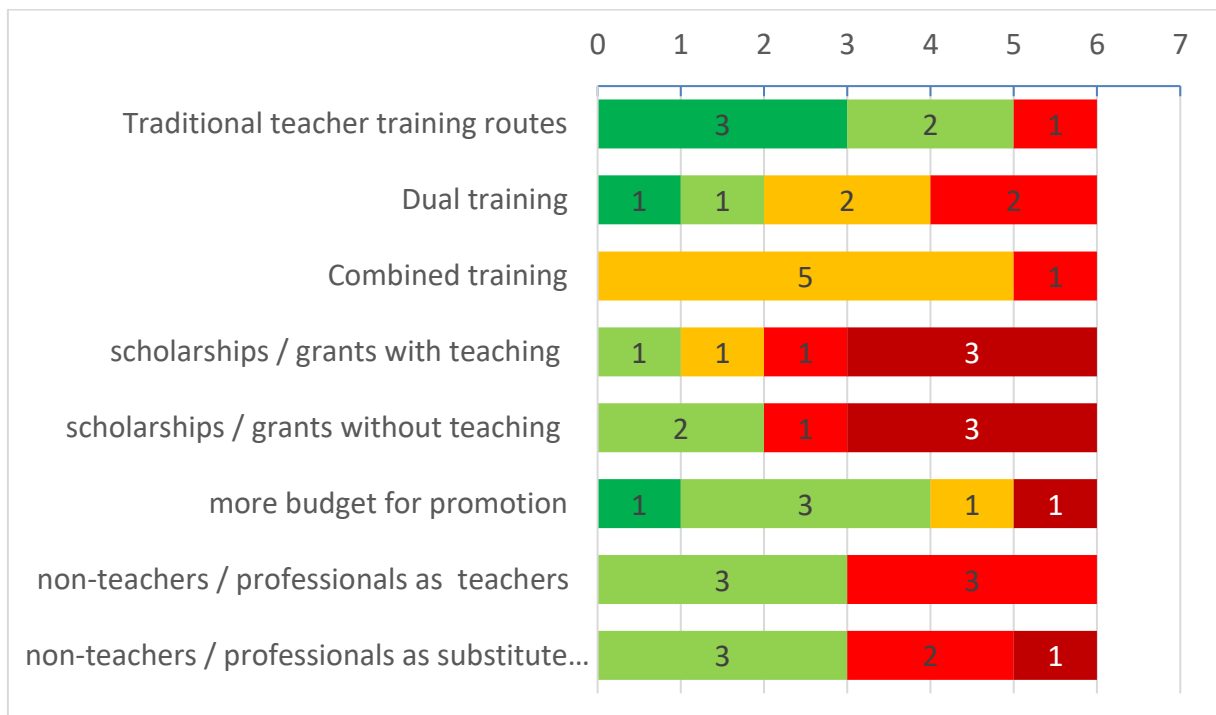


Figure 10: Results to question 3 from Finland

If the results for complexity are placed next to those for importance, it can be seen that those items that are considered less important are also more likely to be considered complex, and vice versa.

3.3.2.3 Results from Norway

Norway had the highest number of participants. Here, when asked about the difficulty in the individual sectors, an indication was given for all points.

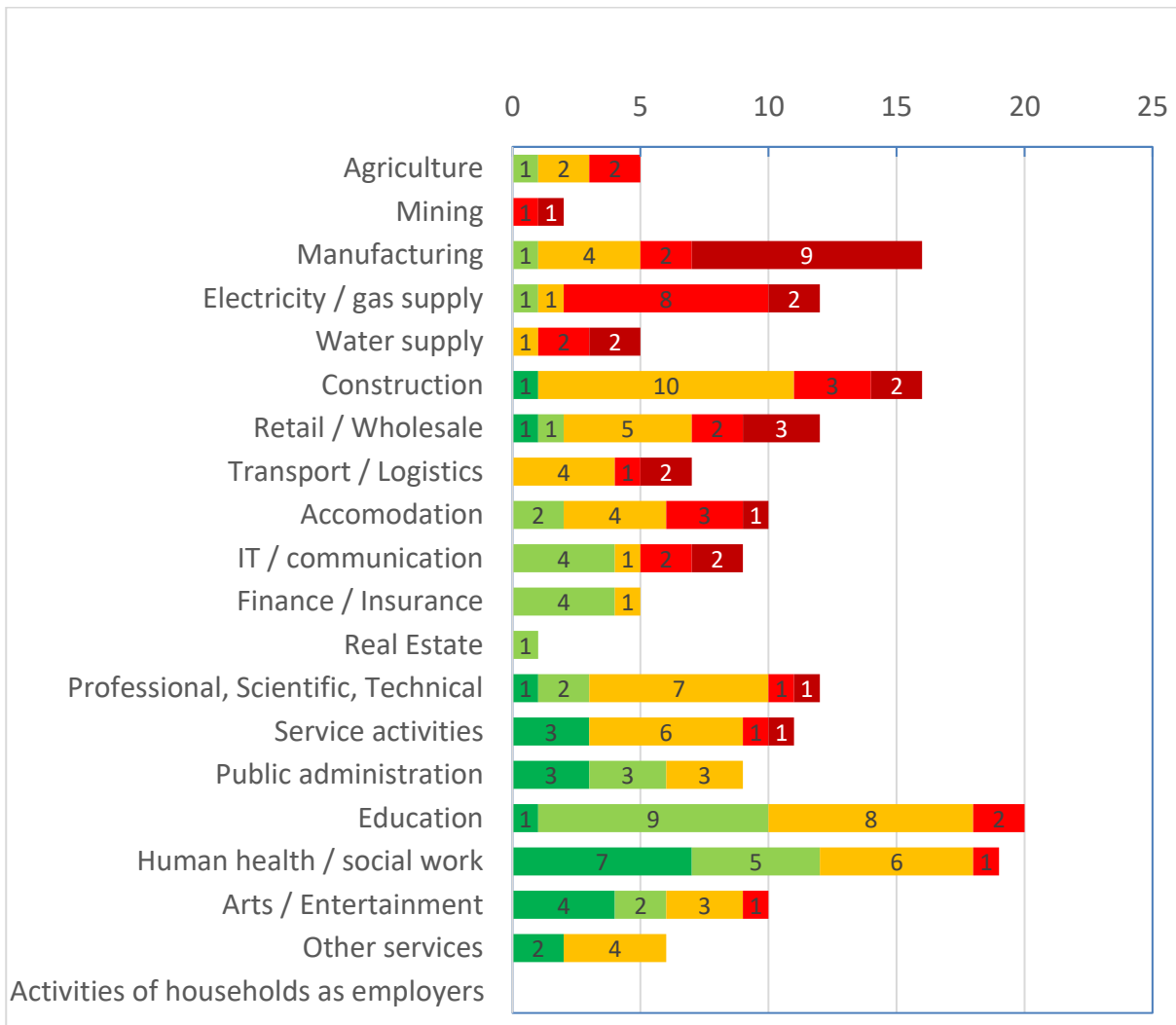


Figure 11: Results to question 1 from Norway

It is easiest to find teachers in the sectors public administration, education, human health and social work as well as arts and entertainment. As in Germany and Finland, it is also difficult in Norway to find teachers for the sectors 'manufacturing' and 'electricity and gas supply'. In addition, the sectors 'water supply, construction, retail and wholesale, accommodation' as well as 'IT and communication' are also considered rather difficult.

In Norway, the recruitment channels mentioned are almost all considered important.

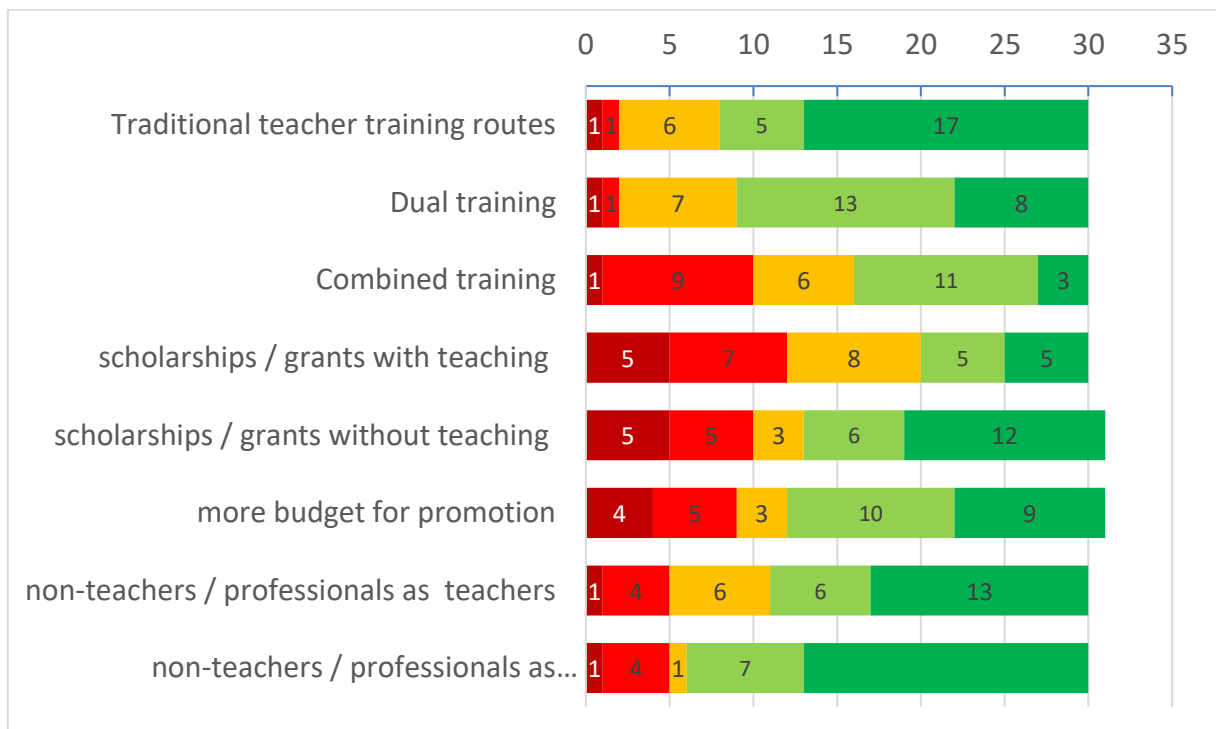


Figure 12: Results to question 2 from Norway

As in all other three countries, the traditional teacher training routes are very important in Norway. Almost on a par with these are non-teachers or professionals working as (substitute) teachers. Despite the fact that many routes are considered important, the scholarships or grants with or without teaching, the combined training and more budget for promotion stand out. These were relatively often considered less important.

While Finland did not provide any answers to the open questions, a few suggestions came from Norway on what other ways there are to recruit teachers. Among other things, the Norwegians suggested “recruitment from local businesses”, “trainee arrangements”, “ensuring that the teaching arenas meet the same requirements as the business world regarding safety, health and size”, “get in contact with students enrolled in education, for example career fairs or visit-us-days” and “use training offices and trade associations as a channel into labour in the business world. Workplaces that will have greater challenges in recruiting and hiring new employees can take a greater role in helping the schools with recruitment”.

The complexity of the respective recruitment channels is very balanced in Norway as can see below.

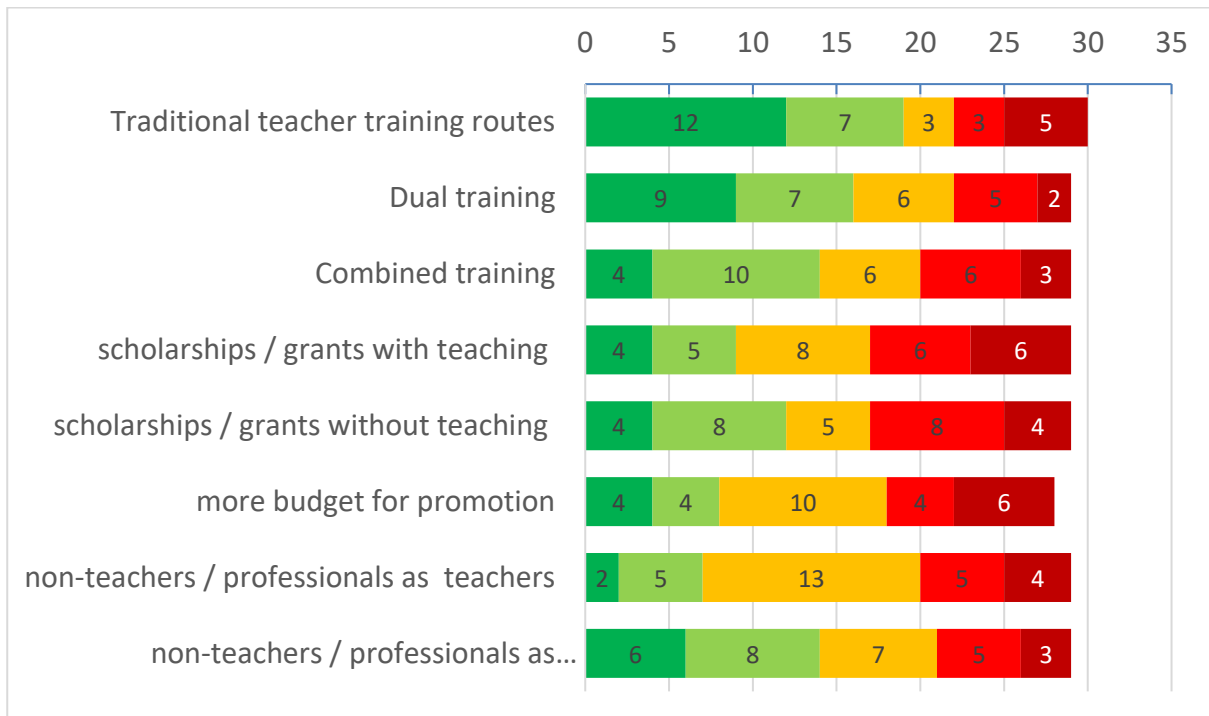


Figure 13: Results to question 3 from Norway

Noticeable are dual training and non-teachers or professionals working as substitute teachers. These two channels are almost on par with the traditional teacher training routes in terms of ease of recruitment. Otherwise, the picture is balanced in that, apart from the traditional teacher training routes, non-complex and very complex are almost equally often mentioned for the same channel beside a not insignificant number for “neither”.

3.3.2.4 Results from Türkiye

Finally, the results from Türkiye are presented. With regard to the first two questions, the picture from Türkiye is very positive compared to the other three countries, i. e. it is easy to find teachers for the sectors mentioned and each recruitment channel is given a certain importance. Of the respondents in Türkiye, fewer people also ticked ‘does not apply’.

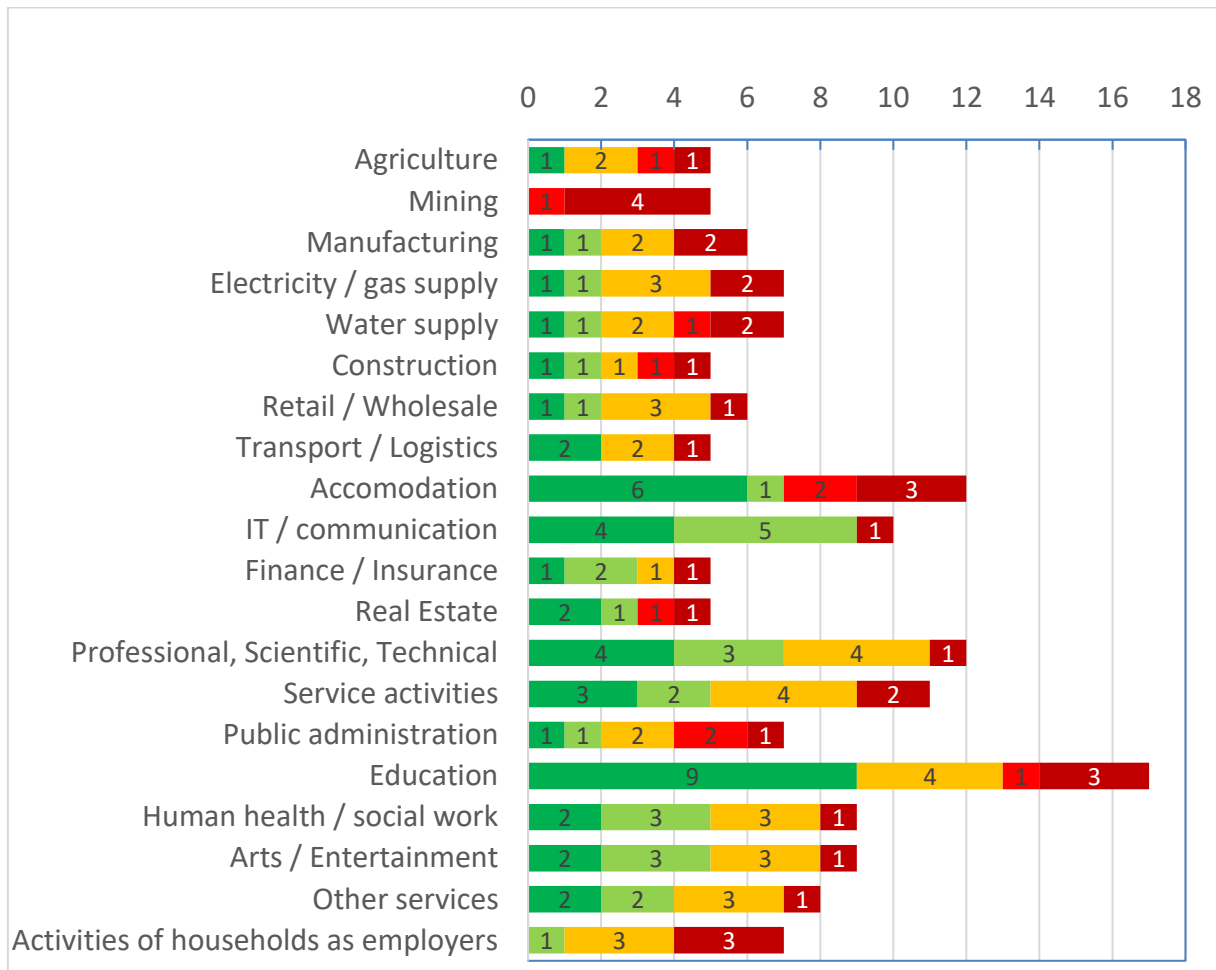


Figure 14: Results to question 1 from Türkiye

The easiest sectors to find teachers for in Türkiye are education, IT and Communication, professional, scientific, technical, service activities, human health, arts and entertainment as well as accommodation. One sectors in which it is difficult to find teachers, on the other hand, is mining. Six people ticked 'very easily' for accommodation as opposed to five people who find it very difficult to find teachers.

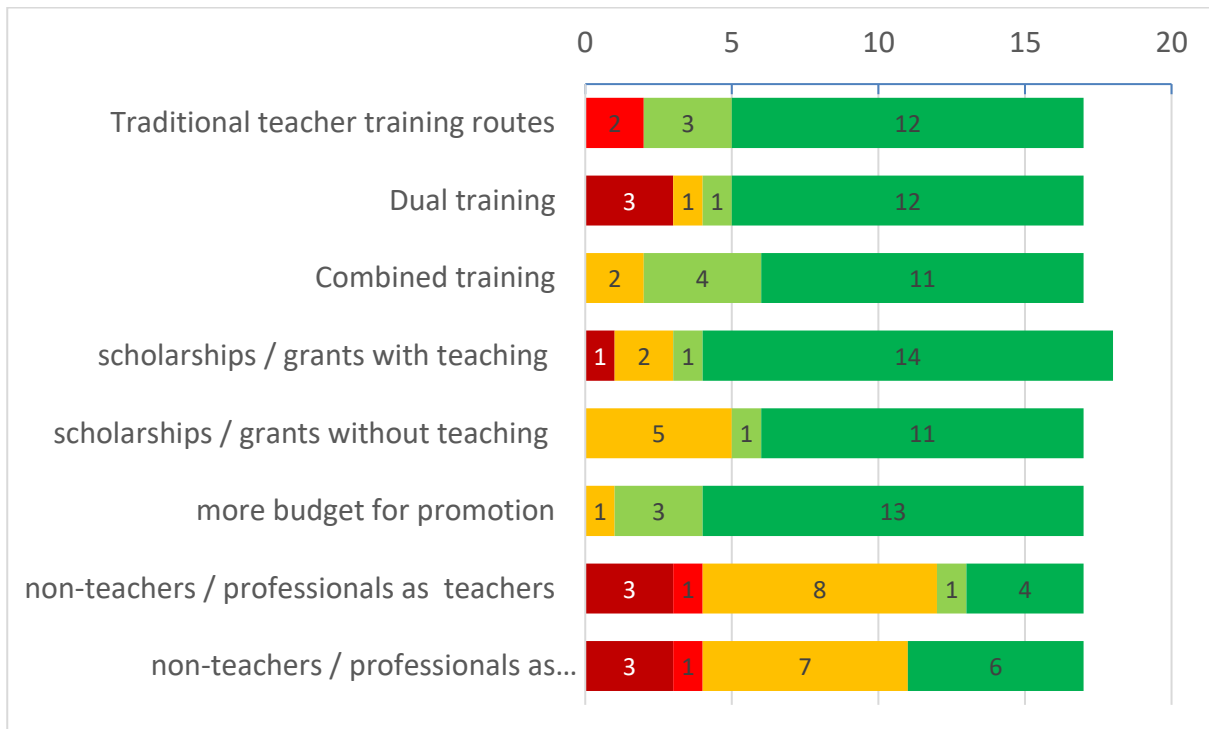


Figure 15: Results to question 2 from Türkiye

The general positive picture for Türkiye continues when the second question is asked about the importance of the channels cited. While in the other countries the traditional teacher training routes are seen as the most important, in Türkiye it is the scholarships or grants with teaching, closely followed by more budget for promotion, traditional teacher training routes and dual training. For non-teachers or professionals working as teachers or substitute teachers, the pattern is very neutral. More people have ticked neither, rather than choosing not important or important. When asked what other possibilities there are for recruiting teachers, two Turkish participants answered: “Recruitment must be [on] merit and the ones who are experts in their field should be recruited” and “Postgraduate / Bachelor’s degree”.

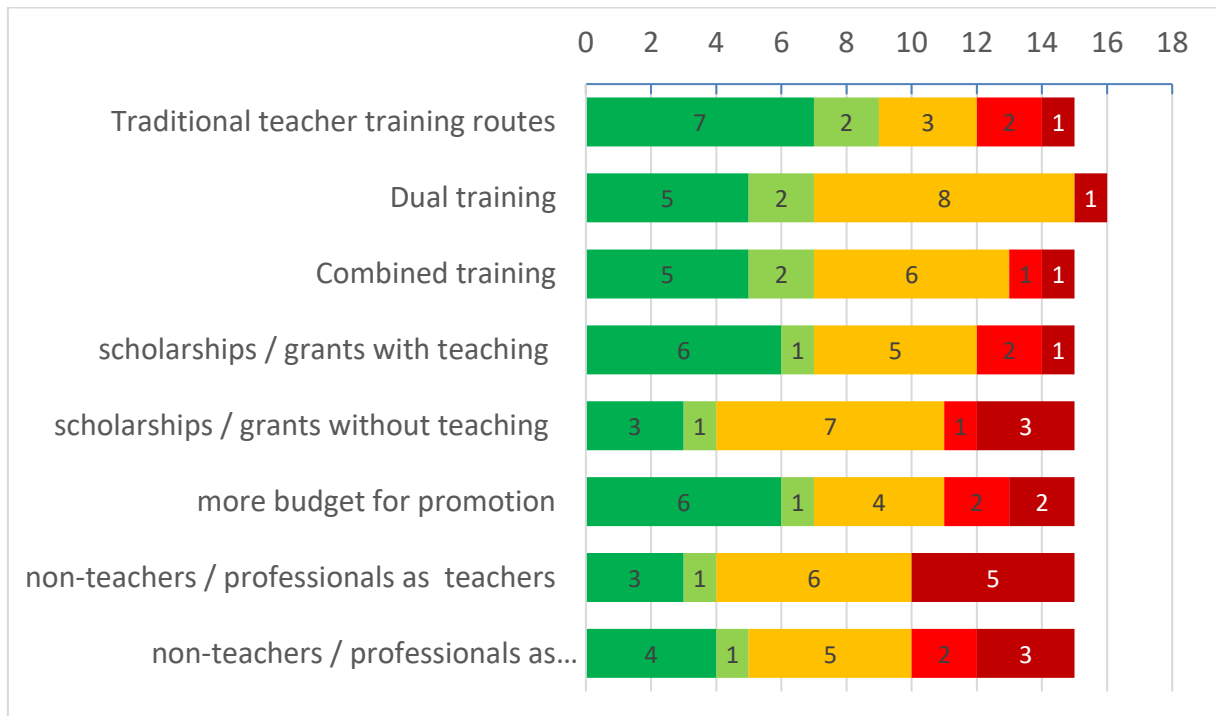


Figure 16: Results to question 3 from Türkiye

The answers to the question about the complexity of the channels are also very consistent for Türkiye. Apart from the channels traditional teacher training routes, dual training, combined training and scholarships or grants with teaching, complexity meets non-complexity with a comparatively large number of ticks for neither for the other cited recruitment channels.

3.3.2.5 Total results

In the following, the overall results of all four countries are presented again. The overall results are weight-adjusted, which means that every country has equal share.

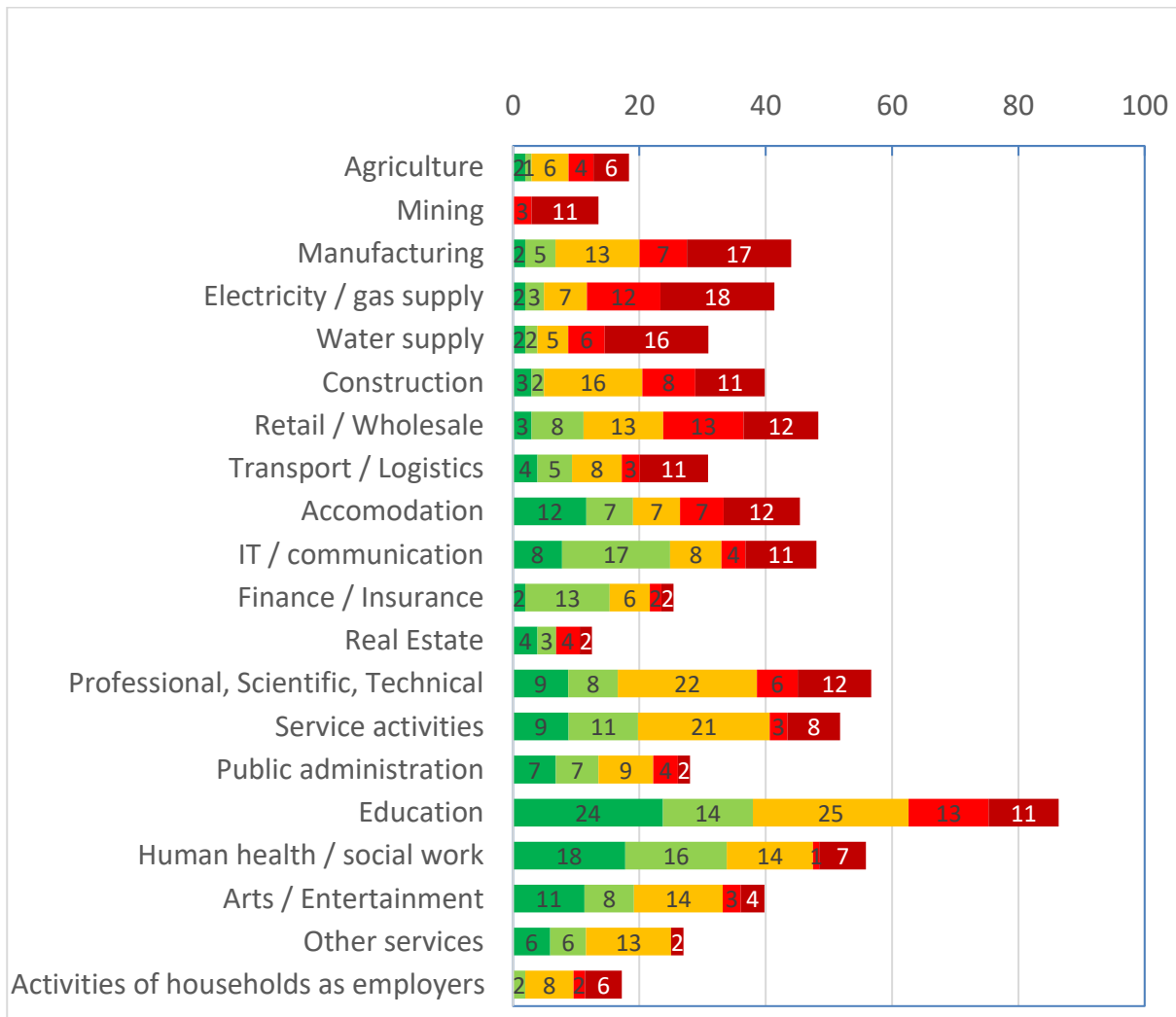


Figure 17: Total results of question 1

Overall, the results are clearer. It is very difficult to recruit teachers for the sectors: Electricity and gas supply, manufacturing, water supply, retail and wholesale, accommodation, professional, scientific, technical, construction, transport and logistics, education, IT and communication and mining (in descending order). Although it is difficult for education and accommodation to find teachers, actually more participants there ticked that it is (very) easy. In addition, the sectors human health and social work as well as arts and entertainment are also seen as (very) easy.

Considering the overall results for the importance of the recruitment channels listed, the following picture emerges. Here too, it applies that the total results are weight adjusted, which means every team has equal share.

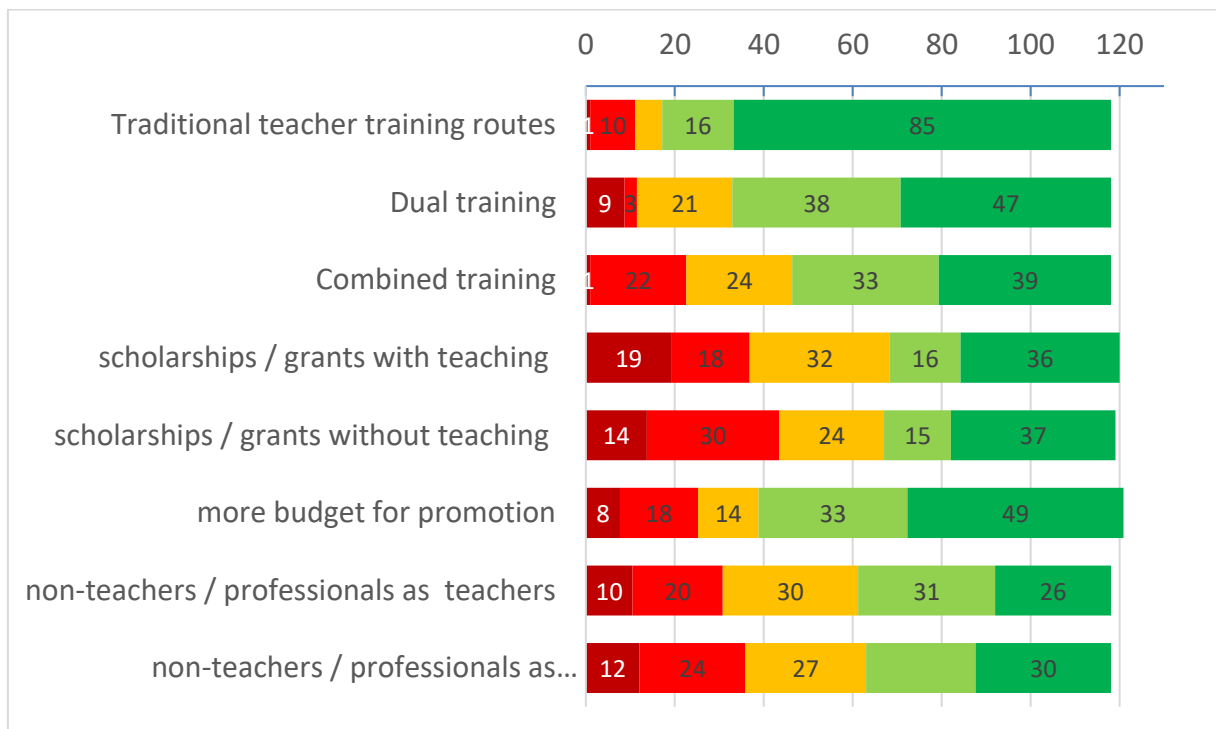


Figure 18: Total results of question 2

No other channel comes close to the traditional teacher training routes. Second most important is more budget for promotion. Those two channels are followed by (in descending order) dual training, combined training and finally the two forms of scholarships. The two forms of scholarships are at the same time the two recruitment channels that are considered least important. Then follow the two ways in which non-teachers or professionals work as teachers or substitute teachers.

The complexity of the recruitment channels proposed is even more balanced than the diagram for the importance.

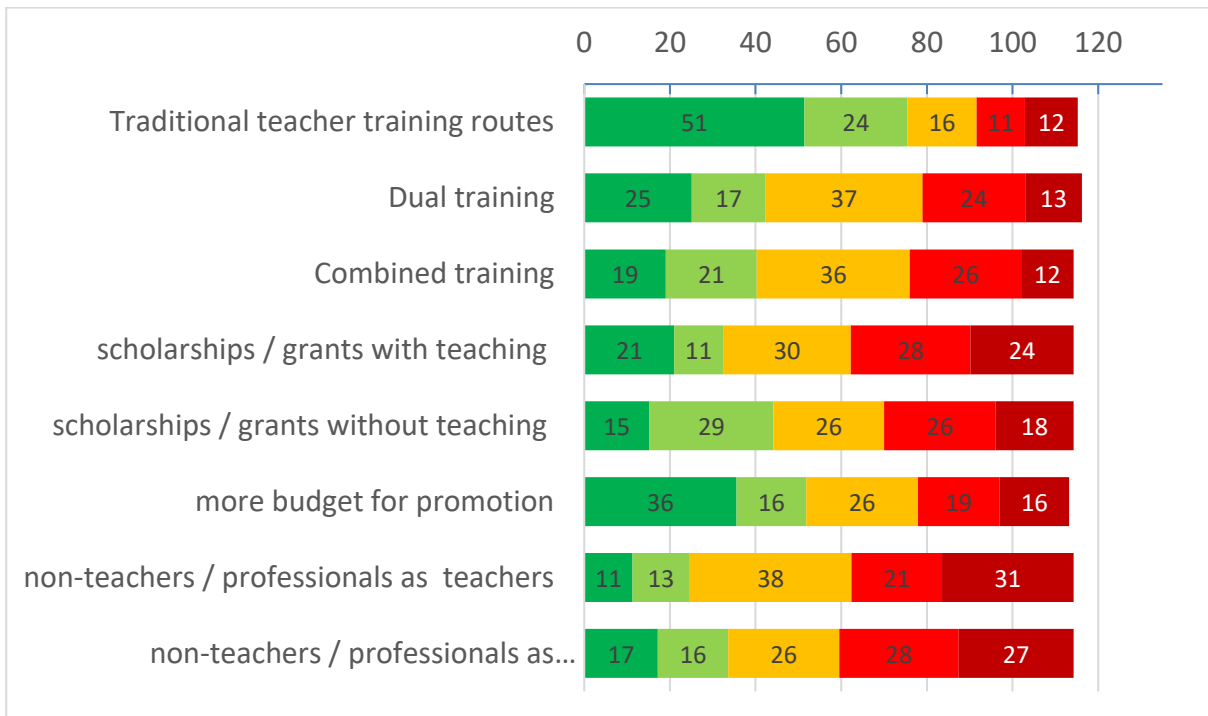


Figure 19: Total results of question 3

The two most important recruitment channels – traditional teacher training routes and more budget for promotion - are also the ones that are experienced as least complex. On the other hand, non-teachers or professionals working as (substitute) teachers are considered most complex. Those two recruitment channels are regarded as less important compared to the other channels, as can be seen above. In general, neither was ticked very often

Transfer possibilities

The application states that the work of LeadVET and especially the work of PR 1 is potentially transferable to VET teacher recruitment, education and employment outside the LeadVET institutions and their respective partners. PR1 has demonstrated how obstacles within the individual phases of the HR process can be overcome through networks or through the tasks carried out within them by leaders. In addition, the survey has shown in which sectors it is perceived to be most difficult to attract new teachers, which recruitment channels are most important and at the same time most complex. Building on this work, a model for in-service-training for vocational teacher education has been outlined (PR2) and we show how the theory-practice gap can be closed by using mentors in VTE (PR3). Finally, the findings also help to develop learning resources for leadership and networking in vocational teacher education (PR 4).

4 Conclusion

With a total of 73 participants from four countries, a solid data set was generated, albeit with relatively low participation. Nevertheless, the survey, the literature review and the network analysis provided important insights. The sectors identified by the survey as having difficulty in recruiting new teachers are in line with the known findings from literature. It is well known that traditional teacher training routes are not only important but are also less complex to deal with. The most interesting recruitment channels are those that are supplementary to traditional teacher training routes. To be able to recruit competent teachers as a school, these channels need to be further used and promoted.

However, the connection between leadership and networks remains complex. While the analysis provided insights into the structure of networks, it does not yet fully explain how they function in practice. A theoretical perspective such as Actor-Network Theory (ANT) could have been useful to explore how different actors interact around a shared artefact, such as Vocational Teacher Education. Although this approach was not applied in the present study, future research could benefit from incorporating such theoretical frameworks to deepen the understanding of network dynamics in teacher recruitment and professional development.

References

A Key to Children's Success in School and Life Background on Social and Emotional Learning (SEL). www.CASEL.org

Albon, N., Allen, B., Arnold, J., Barnes, A., Blackley, J., et al. (2009). *ATEA 2009 Conference provisional program.*

Å bygge broer: samarbeid på tvers i yrkesfag (2022).

Aamodt, P. O., Carlsten, T. C., Caspersen, J., Grøgaard, J. B., & Røsdal, T. (2016). *Kompetanseutvikling blant yrkesfaglærere.*

Abay, A. R. (2002). Çırak Öğrencilerin Sorunları (Bostancı Çıraklık Eğitim Merkezi Öğrencileri Örneği) (4).

Adhikary, R. W., & Lingard, B. (2019). *Global–local imbrications in education policy: Methodological reflections on researching the sociology of Teach for Bangladesh.* London Review of Education, 17(3), 252–267.

Akademie für Lehrerfortbildung und Personalführung. (2022). *Qualifizierung schulischer Führungskräfte in Bayern: Akademie für Lehrerfortbildung und Personalführung.*

Akkuş-Aydemir, A. (2015). *OSTİM Mesleki Eğitim Merkezi'ne Devam Eden Öğrencilerin Mesleki Eğitim Uygulamalarına İlişkin Görüşleri.*

Akseer, S., & Játiva, X. (2021). *Time to Teach Teacher attendance and time on task Ghana.* www.unicef-irc.org.

Albayrak, O. (2020). *Eğitim ve Mesleki Eğitim, Sorunları ve Çözüm Önerileri, Mesleği Eğitimin Cazip Hale Gelmesi için Bir Öneri.*

Alparslan, E. (2004). *Sayıllı Mesleki Eğitim Kanunu Uyarınca Kız Meslek Lisesi Öğrencilerine Yaptırılan İşletmelerde Meslek Eğitimi Uygulamasının Değerlendirilmesi.* In: Yöktez, S., 1–104.

-
- Altmeier, P., Heil, H., Karliczek, A., Widmann-Mauz, A., Hoffmann, R., Ewer, W., et al. (2020). *Allianz für Aus- und Weiterbildung 2019-2021. Gemeinsame Erklärung der Allianz für Aus- und Weiterbildung: Gemeinsam den aktuellen Herausforderungen durch die Corona-Krise auf dem Ausbildungsmarkt begegnen - gemeinsam den Ausbildungsmarkt stabilisieren!*
- Altun-Könez, N. (2015). *Özel Eğitim ve İş Uygulama Merkezlerinde Görev Yapan Branş Öğretmenlerinin Hizmet İçi Eğitim İhtiyaçlarının Belirlenmesi.*
- American Federation of Teachers. (2009). *Importing Educators causes and consequences of international teacher recruitment.*
- Amrhein, B., & Badstieber, B. (2013). *Lehrerfortbildungen zu Inklusion - eine Trendanalyse.*
- Andersson, P., Hellgren, M., & Köpsén, S. (2018). *Factors influencing the value of CPD activities among VET teachers.* International Journal for Research in Vocational Education and Training, 5(2), 140–164.
- Anetjärvi, A. (2017). *Opettajapankki rekrytoinnin työkaluksi.*
- Arslan, A. K. (2019). *Genç İşsizlerin Mesleki Eğitimlerine İşkur Destekleri: Mersin İl Müdürlüğü Örneği.*
- Arslanoğlu, Ş. (2012). *Meslek Lisesi Öğrencilerinin Okullarının Mesleğe Hazırlama ve İşe Yerleştirme Performans Algıları.* In: Yöktez, S., 1–134.
- Aslantürk, M. (2014). *Türkiye'de Mesleki Teknik Eğitimin Yaşadığı Sorunlar ve Çözümleri Konusunda Mesleki Eğitim Yöneticileri, Meslek Dersleri Öğretmenleri ve Eğiticilerin, Görüşlerinin İncelenmesi.* In: Yöktez, S., 1–99.
- Aspøy, T. M., Skinnarland, S., & Tønder, A. H. (2017). *Yrkesfaglaerernes kompetanse.*
- Ateş, L. (2015). *Oryantasyon Eğitiminin Çalışan Performansına Etkileri Hakkında Bir Uygulama.*
- Attwell, G., Bekiaridis, G., Deitmer, L., Perini, M., Roppertz, S., & Tutlys, V. (2020). *Artificial Intelligence in Policies, Processes and Practices of Vocational Education and Training.* www.itb.uni-bremen.de.

-
- Aydın, H. (2009). *Yönetici ve Öğretmen Görüşlerine Göre MEGEP (Mesleki Eğitimi Güçlendirme Projesi)' in Uygulanmasında Yaşanan Sorunların İncelenmesi*.
- Aydoslu, D. (2014). *Mesleki Eğitim Merkezlerinde Yürütülen Çıraklık Eğitiminin Değerlendirilmesi*.
- Bach, A., & Mackel, S. (2021). *Medienpaketentwicklung zur Didaktik technischer Berufsbildung und Fachdidaktik Bautechnik im Teil-Projekt TWIND an der Leibniz Universität Hannover*. In: Farbe, 23, 48–55.
- Bader, C. (2020). *Didaktische Jahresplanung-Curriculum durch Kooperation Kooperative Tätigkeiten von Lehrkräften in der schulischen Curriculum-entwicklung an Berufsschule und Wirtschaftsschule in Bayern*. www.wirtschaftspaedagogik.de.
- Bailey, J. P., & Hess, F. M. (2020). *A Blueprint for Back to School*.
- Ballangrud, B. O. B. (2022). *Lokalt læreplanarbeid i LK20 sett i lys av læreplanarbeidet i LK06*. In: Norsk pedagogisk tidsskrift, 106(1), 15–29.
- Barron, K. E., Hulleman, C. S., Bryce, J. R., Inouye, T., & Hartka, A. (2015). *Using a Networked Improvement Community Approach to Design and Scale up Social Psychological Interventions in Schools*.
- Behm Cross, S., Thomas, C., & Behm, S. (2017). *Mitigating First Year Burnout: How Reimagined Partnerships Could Support Urban Middle Level Teachers*. In: Middle Grades Review, 3(1).
<http://scholarworks.uvm.edu/mgreview><http://scholarworks.uvm.edu/mgreview/vol3/iss1/3>.
- Bell, C. A., White, R. S., & White WestEd, M. E. (2018). *A System's View of California's Teacher Education Pipeline Technical Report*.
- Benbow, R. J., Lee, C., & Hora, M. T. (2018). *Social Networks and Skills Instruction: A Pilot Study of STEM College Educators and Employers in Wisconsin and New York*. Madison. <http://www.wcer.wisc.edu/publications/working-papers>.
- Benedicta, A. A. (2021). *Challenges in organisation of college-based departmentalised continuous professional development in colleges of education for academic staff: A*

case study in selected colleges of education in the Volta Region. In: International Journal of Educational Administration and Policy Studies, 13(2), 109–118.

Bergman, P., Kolunen, P., & Pylvänäinen, K. (2011). *Millainen on ihanteellinen aikuiskoulutuksen opettaja.* Tampere.

Beziat, T. L., Bynum, Y., & Klash, E. F. (n. d.). *Metacognitive Awareness and Mindset in Current and Future Principals (School Leadership Review, 2).*

Bjorklund, P., Daly, A. J., Ambrose, R., & van Es, E. A. (2020). *Connections and Capacity: An Exploration of Preservice Teachers' Sense of Belonging, Social Networks, and Self-Efficacy in Three Teacher Education Programs.* In: AERA Open, 6(1).

Bobeth-Neumann, W. (2015). *Angebote zur Qualifizierung für den Schulleitungsberuf. Deutungsmuster von Lehrkräften auf dem Weg ins Schulleitungsamt.*

Booth, K., Cooper, D., Karandjeff, K., Schiorring, E., & Willett, T. (n. d.). *Student Support (Re)defined What students say they need to succeed Key themes from a study of student support.* <http://www.rpgroup.org/content/research-framework>.

Boser, U., & Hanna, R. (2014). *In the Quest to Improve Schools, Have Teachers Been Stripped of Their Autonomy?*

Bozgeyikli, H. (2020). *"Mesleki Eğitimde Paradigma Değişimi: Türkiye'nin Mesleki Eğitimle İmtihani" Üzerine.*

Bozkurt, D. Ü. (2016). *Okul Yöneticilerinin Mentorluk Yeterliliklerine İlişkin Yönetici ve Öğretmen Görüşlerinin İncelenmesi.*

Bozkurt, S., Yük, İ., & Uçkun, G. (2015). *İş Sağlığı ve Güvenliği Bilincinin Oluşturulmasında Oryantasyon Eğitiminin Rolü.*

Bradshaw, L. K., Lee, P., & Hawk, P. (1996). *Beginning Teacher Portfolios Portfolios for the Continuing Licensure of Beginning Teachers: Their Development and Assessment.*

Brandt, S. S., & Hatlevik, I. K. R. (2003). *Skreddersydd yrkesfaglærerutdanning?*

Breivik, B., Egeland, F., Skutlaberg, B., Snoen, E., Stokke, K. E., & Utvær, B. K. (2016). *Nasjonalt råd for lærerutdannings ressursgruppe for lærerutdanning for yrkesfag.*

-
- Buğday, F. (2020). *Özel Eğitim Meslek Okullarının Mevzuatına İlişkin Okul Yöneticilerinin Görüşlerinin İncelenmesi*.
- Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung. (2004). *Aktuelle Handlungsfelder zur Optimierung des Systems der beruflichen Bildung. Bericht der BLK*.
- Campbell, R. (2022). *Multi-classroom leaders find unique niche*. Odessa, TX.
- Carl, B., & Sim, G. (n. d.). *Selected Characteristics of Teachers in Wisconsin Public Schools*.
- Carman, B. R. (n. d.). *Accepting the Utopian Challenge: A Student Perspective*.
- CASEL briefs Collaborative for Academic, Social, and Emotional Learning. (n. d.). *Social and Emotional Learning (SEL): A Key to Children's Success in School and Life Background on Social and Emotional Learning (SEL)*. www.CASEL.org.
- Casper, M., Fischer, H. V. M., Tramm, T., & Wittmann, E. (2016). *Schulübergreifende kooperative Curriculumentwicklung aus der Perspektive von organisationalem Lernen, Change Management und Educational Governance am Beispiel des Netzwerks KaBueNet für den Beruf "Kaufmann/-frau für Büromanagement" Entwicklungsperspektiven des beruflichen Schulwesens. Institutionen, Steuerung und Innovationen in der beruflichen Bildung*.
http://www.bwpat.de/ausgabe31/casper_bwpat31.pdf.
- Çetin, Ö. (2016). *Mesleki Eğitim Merkezlerinin Yerel Sanayilerin Gelişmesindeki Fonksiyonu: Problem ve Çözüm Önerileri Konya Örneği*.
- Ceylan, M. (2015). *Öğretmenlere Yönelik Sürekli Mesleki Gelişim Etkinliklerinin Öğretmen ve Okul Yöneticilerinin Görüşlerine Göre İncelenmesi: Türkiye ve İngiltere Örneği*.
- Chen, C. W. y. (2020). *Learning through participation: A case study on the affordances of making YouTube tutorial videos*. In: JALT CALL Journal, 16(1), 51–67.
- Ciociola, F., Roos, S., & Oliveira Käppler, C. d. (2021). *Netzwerk B2: Betrieb und Berufsschule in der inklusiven Ausbildungsvorbereitung. Eine Fragebogenstudie zu zentralen Bedingungs- und Wirkfaktoren*.

-
- Dahlback, J. G., Haaland, G., & Vagle, I. (2016). *Arbeidsplassbasert treårig yrkesfaglaerer-utdanning (ABY)*. Oslo. <http://www.hioa.no/Om-HiOA/Nettbokhandel>.
- Dahlback, J., Olstad, H. B., Sylte, A. L., & Wolden, A.-C. (2019). *Yrkesfaglig lærerkompetanse i brede utdanningsprogram*. In: Skandinavisk tidsskrift for yrker og profesjoner i utvikling, 4(1), 1–29.
- Darius, S., Seiboth, F., Bunzel, K., Seibt, R., & Böckelmann, I. (2016). *Belastungsfaktoren und Burnout-Risiko bei Lehrkräften unterschiedlichen Alters*.
- Demirer, M., & Dal, S. (2020). *Mesleki Eğitimde Program Güncellemeleri, Sektörle İşbirliği ve Yükseköğretime Devam Oranları Üzerine Eğitim Yöneticileri ve Meslek Dersi Öğretmenlerinin Görüşleri*.
- Doğan, İ. (2008). *İşletmelerdeki Mesleki Eğitimi Gerçekleştirmede İşletmelerin Koordinatör Öğretmenler Tarafından Değerlendirilmesi*. In: Yöktez, S., 1–126.
- Dündar, B., Yılmaz, H., & Kara, Y. (2014). *Mesleki ve Teknik Eğitimde Üniversite-Sanayi İşbirliği Protokolü Yerel Uygulama Örneği*.
- Dursun, B. (2008). *Yönetici ve Öğretmen Görüşleri ile Mesleki Eğitim ve Öğretim Sisteminin Güçlendirilmesi Projesinin (MEGEP) Etkililiğinin Değerlendirilmesi*.
- Eckardt, T. (2018). *Das Bildungswesen in der Bundesrepublik Deutschland 2016/2017. Darstellung der Kompetenzen, Strukturen und bildungspolitischen Entwicklungen für den Informationsaustausch in Europa*.
- Erdaş, E. (2015). *Bilimin Doğasının Öğretiminde Öğretmenlerin Mesleki Gelişimlerinin Süreç Boyunca Desteklenmesi: Bir Mesleki Gelişim Programı Modeli*.
- Ertuğrul, B., Sarugan, M., & Özcan, C. (2021). *Paramedik Eğitiminde Mesleki Becerilerin Kazanımında Aşılması Gereken Süreçler (Hastane Öncesi Dergisi JPH, 3)*.
- Ertürk-Kayman, E. A. (2008). *Türkiye'deki Mesleki Eğitim ve Öğretimin Güçlendirilmesi Projesi (MEGEP) İçindeki Yaygınlaştırıcı Okul Yöneticilerinin, Kuantum Liderlik Davranışlarını Gerçekleştirme Düzeyleri*.
- Esen, G. (2022). *Yönetici ve Öğretmenlerin Bakış Açısıyla Meslek Liselerinin Yönetsel Sorunları Üzerine Bir Olgubilim Çalışması*. In: Yöktez, S., 1–128.

-
- EUs publikasjonskontor (2022). *eTwinning i barnehage og innledende yrkesfagopplæring*.
- Faßhauer, U. (2012). *Zwischen Standardmodell und Sondermaßnahmen
Rekrutierungsstrategien in der Lehrerbildung aus Sicht von Schulleitungen*.
- Fernandes, L. (2019). *Is Initial Teacher Education (ITE) based on the Capabilities Approach likely to foster inclusion for autistic learners in the Further Education sector?* (Cumbria, 1).
- Finch, C. R. (1992). *Vocational Education Leadership Development. Resources: Selection and Application*. Berkeley, California.
- Flotzinger, C. W., & Rechberger, J. (2019). *Kooperative Lernanlässe zur Verbesserung der Konnektivität im dualen System*.
- Fuchs-Rechlin, K., & Mende, S. (2021). *Pluralisierung und Diversifizierung der Ausbildung zur Erzieherin und zum Erzieher Vorschlag zu einer Systematisierung*.
www.weiterbildungsinitiative.de.
- Gallas, K. (2010). *The Variable of the Self in Classroom Research: A Brief and Incomplete History of My Work as a Teacher Researcher*.
<http://digitalcommons.nl.edu/ie> Retrieved from: <http://digitalcommons.nl.edu/ie/vol1/iss1/2>.
- Garrison, J. D., & Jaeger, A. J. (2014). *From Serendipity to Resolve: Graduate Student Motivations to Teach Using Service-Learning*. Michigan Journal of Community Service Learning.
- Geldens, J. J. M.: *Teacher Education in a Workplace Learning Environment: Distinctive Characteristics of Powerful Workplace Learning Environments within Primary Teacher Education 1 (School-University Partnerships, 2)*.
- Gogolin, I., Köller, O., & Hastedt, D. (2021). *Kontinuität und Wandel der Schule in Krisenzeiten*.
- Gökçül, D. (2019). *İnsan Kaynaklarına Verilen Hizmet İçerisinde Eğitimin Kişisel Performans Algısına Etkisi: Bir İlaç Firmasında Uygulama*. In: Yöktez, S., 1–120.

-
- Goldhaber, D., & Loeb, S. (2013). *What Do We Know About the Tradeoffs Associated with Teacher Misclassification in High Stakes Personnel Decisions?*
<http://www.carnegieknowledge.org/briefs/value-added/teacher-misclassifications/>
- González-Patiño, J. (2018). *Learn, Teach and Share, Participation in Expanded Educational Communities: Madrid Pikler Seminar as a Practice of Continuing Education between Childhood Professionals.* <http://greav.ub.edu/der/203>.
- Grande, S. Ø., Lyckander, R. H., Rokones, K., & Landro, J. (2014). *Fram i lyset!*
- Greenberg, J., Putman, H., & Walsh, K. (2014). *Training our future teachers: Classroom Management.*
- Gülegül, H. İ., & Uygur, F. (2011). *İşletmelerde Mesleki Eğitim ile Staj Uygulamalarının Değerlendirilmesi.* In: Meb, 1–164.
- Gümüş, C. (2006). *Milli Eğitim Bakanlığına Bağlı İlköğretim Okullarında Çalışan Öğretmenlerin Zorunlu Olarak Katıldıkları Mesleki Eğitim Çalışmalarının Değerlendirilmesine İlişkin Uygulamalı Bir Araştırma.*
- Gündüz, M. (2009). *İnternet Teknolojilerini Kullanarak Öğrenci Başarısı ve Öğrenmenin Kalıcılığını Arttırma.*
- Güneş, H. (2012). *Mesleki Eğitim Kurumlarında Yöneticilerin Kurumsal Bütünlüğü Sağlamadaki Yeterliği.*
- Halmrast, H. H., Gulbrandsen, I. P., Sjøvold, J. M., Stampe, P. L., Ulvik, M., & Kvam, E. K. (2021). *Evaluering av veiledning av nyutdannede nytilsatte lærer. Sluttrapport 2021.* Oslo. <https://no.ramboll.com>.
- Hämäläinen, K. (2010). *Kohti vetovoimaista ja hyvinvoivaa työyhteisöä : toimintamalli opettajien organisaatioon sitoutumisen vahvistamiseksi ja työn imun edistämiseksi Koulutuskeskus Salpauksessa.*
- Hansen, K., Leonardsen, J. K., & Utgaard, S. (2022). *Ny som yrkesfaglærer: i spenningsfeltet mellom to verdener.* In: Å bygge broer: samarbeid på tvers i yrkesfag, 191–207.

-
- Harazd, B., & Gieske, M. (2009). *Gesundheitsförderung in der Schule. Ein gesundes Lehrerkollegium durch Salutogenes Leistungshandeln.*
- Hatlevik, I. K. R., Engeliien, K. L., & Jorde, D. (2020). *The contribution of university schools to the development of Teacher Education at the University of Oslo.* In: Acta Didactica Norden 14 (2).
- Hausen, J., Schmid, C., Wurster, S., Dohrmann, J., Feldhoff, T., Steinert, B., et al. (2019). *Skalenhandbuch Schule im Wandel (SchiWa) - Vorstudie. Dokumentation der Erhebungsinstrumente für Schulleitungen, Schülerinnen und Schüler sowie für Lehrkräfte.*
- Hautamäki, J. (2015). *Alueellisen kehittäjäverkoston johtaminen – näkökulmana äkilliseen rakennemuutokseen varautuminen.*
- Heibler, M., Bartel, K., Hackmann, K., & Weyand, B. (2016). *Leadership in der Lehrerbildung. Entwicklung von Kompetenzen für pädagogische Führung.*
- Helakorpi, S. (2005). *Kohti verkostoituvaa ja verkottuvaa koulutusta: HAMK Ammatillisen opettajakorkeakoulun julkaisuja.*
- Hernandez, A. (2022). *Closing the Achievement Gap in the Classroom Through Culturally Relevant Pedagogy.* In: Journal of Education and Learning 11 (2), 1.
- High, M. (2019). *How Opportunity Culture Principals Lead Change and Develop Leaders (Opportunity Culture® by Public Impact, LLC).*
<https://www.opportunityculture.org/2019/11/04/how-opportunity-culture-principals/>
- High-Quality Curriculum Implementation. (n. d.). *The Potential of a High-Quality Curriculum.*
https://www.tn.gov/content/dam/tn/education/data/2019-survey/Lessons_District_Leaders_Infographic.pdf
- Holappa, A.-V., Hyyryläinen, A., Kola-Torvinen, P., Korva, S., & Smeds-Nylund. (2021). *Kasvatus- ja koulutusalan johtaminen.*
- Horuz, O. R. (2017). *Mesleki Eğitim Merkezi Öğrencilerinin Yaşam Boyu Öğrenme Eğilimlerinin İncelenmesi.* In: Yöktez, 1–113.

-
- Høst, H. (2006). *Kunnskapsstatus vedrørende rekruttering og utdanning til pleie-og omsorgstjenestene i nordiske land*. Bergen.
- Houston Independent School District. (2018). *Teach for America Program evaluation 2017*. www.HoustonISD.org
- Hughes, W., & Pickeral, T. (2013). *SCHOOL CLIMATE AND SHARED LEADERSHIP*. www.schoolclimate.org
- Janatuinen, T. (2010). *Verkostot ammattikorkeakoulutuksen voimavarana: Ammatillisen erityisopettajankoulutuksen, kone- ja tuotantotekniikan koulutusohjelman ja kuntoutusohjauksen ja -suunnittelun koulutusohjelman ristiinarvointiraportit*.
- Kahya, Ö. (2015). *Mesleki Eğitim Merkezi Güzellik ve Saç Bakım Hizmetleri Alanında Öğrenim Gören Öğrencilere, İşletmelerde Uygulanan Mesleki Eğitim (Pratik Eğitim) Çalışmalarının Değerlendirilmesi*.
- Karaarslan, F. (2018). *Halk Eğitim Merkezleri Meslek Edindirme Kurslarının Kadınların İşgücüne ve İstihdama Katılmalarına Etkileri*. In: Yöktez, 1–148.
- Karacaköylü, Ç. (2012). *Nöroşirürji Ameliyathane Hemşirelerinin Eğitim Gereksinimleri*. In: Yöktez, 1–79.
- Karakoç, Z. (2015). *İşkur'un Eğitim Programlarının Aktif İstihdam Politikaları Açısından İncelenmesi: Kırşehir İli Örneği*.
- Kastensen, S., & Aakernes, N. (2021). *Vg1 i utdanningsprogrammet Informasjonsteknologi og medieproduksjon*.
- Kaya, Ö. (2008). *Mesleki Eğitim ve Öğretim Sisteminin Güçlendirilmesi Projesi (MEGEP) Pilot Meslek Lisesi Yöneticilerinin Öğretim Liderliği Davranışları*.
- Kaya, İ. (2017). *MEB'in Hizmet İçi Eğitim Faaliyetlerinin ve Türkçe Öğretmenlerinin Bu faaliyetlere İlişkin Görüşlerinin Değerlendirilmesi*. In: Yöktez, 1–143.
- Kaya, M. (2020). *MEB Öğretmen Yetiştirme Genel Müdürlüğü'nün Hizmet İçi Eğitim Faaliyetleri: Katılımcılar, Eğitim Durumları, Eğitim Konuları*. In: Trakya Eğitim Dergisi, 205–215.

-
- Keil, A., Kuckuck, M., & Faßbender, M. (2020). *BNE-Strukturen gemeinsam gestalten*.
- Kemp, L., & Owens-Sabir, M. (1994). *Preparing Education Practitioners for Educating Children and Youth Facing Harsh Social Realities: A Shared Responsibility*.
- Kilitci, Z. (2018). *Mesleki ve Teknik Eğitim Kurumlarında İş Sağlığı ve Güvenliği Uygulamalarına İlişkin Yönetici Görüşleri*.
- Kıranlı, S., & Yıldırım, Y. (2014). *Okul Yöneticileri ile Öğretmenlerin Hizmet İçi Eğitim Etkinliklerine İlişkin Görüşlerinin Karşılaştırılması*.
- Kısa, S. (2012). *İşkur ve Yerel Yönetimlerde Mesleki Eğitim Faaliyetlerinin Eğitim-İstihdam İlişkisi Yönünden Analizi: Ankara İli İşkur İl Müdürlüğü ve Ankara Büyükşehir Belediyesi Mesleki Eğitim Faaliyetlerinin Karşılaştırmalı Analizi*.
- Klein, H. E. (2007). *Was Schulleiter als Führungskräfte brauchen*. Köln.
- Köhler, T., Schoop, E., & Kahnwald, N. (2019). *Gemeinschaften in neuen Medien. Erforschung der digitalen Transformation in Wissenschaft, Wirtschaft, Bildung und öffentlicher Verwaltung*. <https://www.thelem.de/tudpress/>
- Korkmaz, M. (2005). *Okul Yöneticilerinin Yetiştirilmesi: Sorunlar-Çözümler ve Öneriler (Cilt)*.
- Korkmaz, N. (2022). *Yaşam Boyu Öğrenme Politikaları Bağlamında Türkiye'de Yetişkinlerin Mesleki Eğitimi*.
- Koşan, A. (2003). *Eğitimde Okul-Endüstri İşbirliği*.
- Köse, F. (2004). *Hazır Giyim İşletmelerinde Gelişen Teknolojiye Uygun Verilen Eğitimin Yöneticiler ve Eğitici Personel Açısından Değerlendirilmesi*. In: Yöktez, 1–173.
- Köse, U. (2014). *Türk Eğitim Sisteminde Bilişim Teknolojileri Eğitiminin Yeri*.
- Kotilainen, A., Mikkonen, K., & Sjögren, T. (n. d.). *Sosiaali-, terveys- ja kuntoutusalan opettajien itsearvioitu osaaminen*.
- Küçükaslan, F. (2022). *Mesleki Eğitim Merkezlerinde İstihdamın Öğretmen ve Eğitim Yöneticisi Görüşlerine Göre Değerlendirilmesi*.

-
- Küçükaslan, F. (2022). *Mesleki Eğitim Merkezlerinde İstihdamın Öğretmen ve Eğitim Yöneticisi Görüşlerine Göre Değerlendirilmesi*.
- Kulin, S. (2016). *Kooperation, Beziehungsstrukturen und Sozialkapital von Lehrkräften*. Hamburg.
- Kumpulainen, K., Vierimaa, S., & Koskinen-Koivisto, E. (2019). *Developing connective pedagogy in cultural research—a case study from the teachers’ perspective in adopting a problem-based approach in higher education*. *Education Sciences*, 9(4).
- Kunnskapsdepartementet. (2015). *Yrkesfaglærertilbudet for fremtidens fagarbeidere*.
- Kuoppala, E., Aalto, S., Eklöf, N., Ihalainen, N., Ikonen, P.-E., Jääskeläinen, P., et al. (2019). *Kohti tulevaisuuden osaamista. Koulutuksen ja työelämän välinen yhteistyö tulevaisuuden osaamisen kehittäjänä*.
- Lahn, L. C., Johannesen, H. S., & Fossetøl, K. (2021). *Evaluering av ny kompetansemodell Temanotat 2: Desentralisert kompetanseutvikling for yrkesfag-utfordringer og muligheter*.
- Laier, B., Demski, D., Ackeren, I. V., Clausen, M., & Preisendörfer, P. (2016). *Die Bedeutung sozialer Netzwerke von Lehrkräften für evidenzbasiertes Handeln im schulischen Kontext*. *Journal*, 8, 100–121.
- Larsen, A. K. (2017). *Samarbeid mellom masterstudenter i yrkespedagogikk og deres kolleger på egen arbeidsplass*. *Skandinavisk tidsskrift for yrker og profesjoner i utvikling*, 2.
- Lee, L.-S. (2021). *Trends and Issues in the Technical and Vocational Education in 10 Indo-Pacific Countries*.
- Levitt, R., Kramer-Vida, L., & Post, E. D. C. W. (2011). *Teaching Artists: Serving Special Education Students in Local Schools*.
- Levy, B., Hall, B., & Sanders, J. R. (2001). *The Help! Kit A Resource Guide for Secondary Teachers of Migrant English Language Learners*. www.escort.orgwww.serve.org.
- Lyng, S. T., Borg, E., Fossetøl, K., Hermansen, H., Johannesen, H. S., Lahn, L. C., et al. (2021). *Evaluering av ny kompetansemodell-desentraliserte ordninger for skole og*

yrkesfag samt oppfølgingsordningen Temanotat 1: Programteori, foreløpige funn og videre forskningsspørsmål ARBEIDSFORSKNINGSINSTITUTTET AFI.

MacGlaughlin, H. M., & Mertens, D. M. (2014). *HIGH EXPECTATIONS REQUIRE SUPPORTING NEW TEACHERS*. Educating the School Community.

Macha, H., Lödermann, A.-M., & Bauhofer, W. (2010). *Kollegiale Beratung in der Schule theoretische, empirische und didaktische Impulse für die Lehrerfortbildung*.

Mächtle, T., & Eden, M. (2004). *Bremer Landesprogramm Lernortverbünde und Ausbildungspartnerschaften. Zwischenbilanz*. Bremen.

Mahlberg-Wilson, E., Mehlis, P., & Quante-Brandt, E. (2009). *Dran bleiben... Sicherung des Ausbildungserfolgs durch Beratung und Vermittlung bei Konflikten in der dualen Berufsausbildung. Eine empirische Studie*.

Majer, V. (2019). *Learning to teach: a focus on the personal rather than the technical aspects of teacher education*. *Teacher Education Advancement Network Journal*. Cumbria, 2.

Maranto, R., & Shuls, J. V. (2012). *How Do We Get Them on the Farm? Efforts to Improve Rural Teacher Recruitment and Retention in Arkansas*.

Matti Kallioniemi. (2019). *Työelämäkumppanuuden mallintaminen ammatillisessa koulutuksessa*.

McLaughlin, M. W. (1984). *How the Board Can Promote Faculty Effectiveness*.

Miles, K. H., Pennington, K., Bloom, D., & February, D. B. (2015). *Do More, Add More, Earn More: Teacher Salary Redesign Lessons from 10 First-Mover Districts*.

Miller, M. T., Evans, J. P., & Newman, R. E. (1997). *In Pursuit of Seamless Education: Collaboration Between Educational Sectors*.

Miller, M. T., & Newman, R. E. (2011). *Pushing, Pulling, and Prying: Renewing Senior Faculty Performance Through College Dean Efforts*.

Montandon, C., & Brégeon, M. (2021). *Rekrutierung, Qualifizierung, Status und Karriereoptionen von Schulleiter*innen staatlicher Sekundarschulen in Frankreich*. *DDS – Die Deutsche Schule*, 2021(2), 161–173.

-
- Monte-Sano, C., De, S., La Paz, Felton, M., Piantedosi, K. W., Yee, L. S., & Carey, R. L. (2017). *Learning to Teach Disciplinary Literacy across Diverse Eighth-Grade History Classrooms within a District-University Partnership*. *Teacher Education Quarterly*.
- Morud, E. B., & Rokkones, K. L. (2020). *Deling av kunnskap og kompetanse er ingen selvfølge for deltakere i Yrkesfaglærerløftet*. *Skandinavisk tidsskrift for yrker og profesjoner i utvikling*, 5(1).
- Muehlhausen, J., & Sandmeier, A. (2020). *Was hält Lehrpersonen in der Schule? (WahLiS-Studie) Belastungen und Ressourcen auf Schulebene*.
- Mushome, A. M., & Monobe, R. J. (2013). *The Attitude of Lecturers Towards Visually Impaired Students: A Case Study of One of the Universities in the Limpopo Province in South Africa* (2).
- Pfister, N. (2013). *Führung als Teilaspekt von beruflichen Schulen*.
- Nye, T., & Tønder, A. H. (2014). *Yrkesfagene under press: Universitetsforlaget*.
- OECD. (2021). *Teachers and Leaders in Vocational Education and Training: OECD*.
- Olaycan, S. (2018). *Mesleki Eğitim Merkezleri Yiyecek İçecek Hizmetleri Alanında Verilen Eğitimin Yeterliliği ve Öğrencilere Yararlılığına İlişkin Öğrenci Görüşleri*.
- Olsen, O. J. (2008). *Fornyelse eller gradvis omdannelse?* www.rokkansenteret.uib.no.
- Olsen, O. J. (2012). *Yrkesfagernes status – et spørsmål om innbyrdes forhold mellom arbeid og utdanning*. *SØKELYS PÅ ARBEIDSLIVET*, 4(29), 369–381. www.idunn.no/spa.
- Center on Great Teachers and Leaders at American Institutes for Research (2019). *10 Mentoring and Induction Challenges in Rural Schools and How to Address Them*.
- Opetus -ja kulttuuriministeriö. (2009). *Aineiston käyttöoikeudet This publication is copyrighted. You may download, display and print it for Your own personal use. Commercial use is prohibited. Mitä merkintä tarkoittaa? Opetustoimen henkilöstön ammatillisen osaamisen varmistaminen. Osaava*.

Opetus- ja kulttuuriministeriön työryhmämuistioita ja selvityksiä (2012). *Ammatillisen lisäkoulutuksen työelämän kehittämis- ja palvelutoiminnan kehittämishankkeen loppuraportti.*

Opetusministeriön työryhmämuistioita ja selvityksiä (2009). *Opetustoimen henkilöstön ammatillisen osaamisen varmistaminen. Osaava.*

Osaamisen kehittämisen suuntia. (2019).

Østern, A.-L., Engvik, G., & Hansen, K. H. (2020). *Teori om praksisarkitektur i skolebasert videreutdanning av praksislærere ved en universitetsskole.* Norsk pedagogisk tidsskrift, 104(4), 330–346.

Özdemir, G. (2015). *Mesleki ve Teknik Ortaöğretim Okulları Yöneticilerinin Teknik Liderlik Becerilerinin Belirlenmesi ve Geliştirilmesi.*

Ozer, M. (2018). *The 2023 education vision and new goals in vocational and technical education.* Journal of Higher Education and Science, 8(3), 425.

Özer, Ö. (2019). *Kurumlarda Kişisel Gelişim Eğitimlerinin Etkinliğine Yönelik Bir Araştırma.* In: Yöktez, S. 1–165.

Özer, M. (2020). *Türkiye'de Mesleki Eğitimde Paradigma Değişimi * The Paradigm Shift in Vocational Education and Training in Türkiye (2).*

Özkasap, Ş. (2013). *Bankalarda Uygulanan İşe Alıştırma Eğitim Programlarının İşgören Performansı Üzerine Etkisi.* In: Yöktez, S. 1–97.

Öztürk, M., & Sancak, S. (2007). *Hizmet İçi Eğitim Uygulamalarının Çalışma Hayatına Etkileri.*

Pacific, R. (n. d.). *How to grow Teacher Wellbeing in Your Schools.*

Pekonen, E. (2009). *Oppilaitosyhteistyö kanavana tulevaisuuden rekrytointiin: case: Inex Partners Oy.*

Pfister, N. (2013). *Führung als Teilaspekt von beruflichen Schulen.*

-
- Phusee-orn, S. (2021). *Comparing Practice Between Working Standard and Personal Working Standard of Teachers Who Are Certified by Attending Professional Teacher Knowledge Standard Workshop*. *International Education Studies*, 14(9), 69.
- Postholm, M. B., & Rokkones, K. (2013). *Videreutdanning i yrkesfaglige programfag: Læreres opplevelser av studiets betydning for egen læring og yrkesutøvelsen i skolen*. *Tidsskriftet FoU i praksis*, 7(2), 93–111.
- Promising Practices in Professional Growth & Support: Case Study of Agile Mind. *Transforming Teaching* (2013).
- Promising Practices in Professional Growth & Support: Case Study of Achievement First. *Transforming Teaching* (2013).
- Pryor, B. J. (n. d.). *WHO WILL MAKE A DIFFERENCE IN THE 21st CENTURY ...from one principal's viewpoint*.
- Public Impact. (2012). *Multi-Classroom-Leadership School Model*. Chapel Hill, NC. <https://opportunityculture.org/multi-classroom-leadership/>.
- Public Impact. (2013). *Financial Planning for Secondary-Level Time-Technology Swap + Multi-Classroom Leadership*. Chapel Hill, NC. <http://opportunityculture.org>.
- Public Impact. (2019). *Addressing Indiana's Quiet Teaching Crisis: A Sensible Blueprint for Progress*.
- Raija Meriläinen Mari Rökköläinen. (2016). *Ammatillinen koulutus kohti vuotta 2025 Sidosryhmien näkemyksiä reformista ja tulevaisuudesta*. In: *Ammattikasvatuksen aikakauskirja*, 18(2016).
- Ralston, N., & Blakely, R. (n. d.). *Student Teaching During the COVID-19 Pandemic: Navigating Being Both Student and Teacher*
- Regional Educational Laboratory Pacific. (2020). *How to grow: Teacher Wellbeing in Your Schools*.
- Reilly, E. (2011). *Participatory Learning Environments and Collective Meaning Making Practice*. *Journal of Media Literacy Education*. www.jmle.org.

-
- Reinhardt, M. J., Moses, T., Arkansas, K., Ormson, B., & Ward, G. K. (2020). *Teachers and Leaders*. National Comprehensive Center at Westat. www.nationalcompcenter.org.
- Rintamaa, M., Howell, P. B., & Rintamaa, M. F. (2017). *Drawing on the Layers of a Partnership to Prepare Middle Level Teachers*. In: Middle Grades Review, 3(3). <https://scholarworks.uvm.edu/mgreview/vol3/iss3/2>.
- Risius, P., Seyda, S., & Meinhard, D. (2021). *Digitale Ausbildung für die Arbeitswelt 4.0 Zusammenfassung der Kernergebnisse der Q 4.0-Studienreihe*.
- Rødahl, S. T. S. (2017). *Å beholde/forberede nytilsatte yrkesfaglærere i videregående skole*. Oslo.
- Rogers-Ard, R., Knaus, C., Bianco, M., Brandehoff, R., & Gist, C. D. (2019). *The Grow Your Own Collective A Critical Race Movement to Transform Education*
- Rokkones, K. L., Landro, J., & Utvær, B. K. (2019). *Bachelorutdanning for yrkesfaglærere, i et historisk og utviklingsorientert perspektiv*. In: Nordic Journal of Vocational Education and Training, S. 141–159.
- Rudolph, B. (2010). *Anschlussfähige Bildungswege in der Ausbildung von Erzieherinnen und Erziehern*.
- Ruhanen, J. (2007). *Rekrytointi, perehdyttäminen ja sosiaalitudminen Aker Yards Oy:n laivanrakennusoppilaitoksessa*.
- Rychly, L., Pettit, S. K., & Buning, M. M. (2020). *Lessons Learned: Aligning Voices from the Inside with Nine Essentials of Professional Development Schools*.
- Şahin, L., & Güçlü, F. C. (2010). *Genel Olarak Hizmet İçi Eğitim: Ülkeler Şirketler Topluluğu Hizmet İçi Eğitim Süreci ve Uygulamaları (2)*. <http://yayim.meb.gov.tr/yayimlar/147/>.
- Sander, H. (2019). *Datenbasiertes Schulleitungshandeln – Forschungsbefunde und praktische Erfahrungen aus einem datenaffinen Schulsystem*. www.forschungsmonitor-schule.de.
- Sarastuen, N. K. (2021). *Overgangen fra fagarbeider til yrkesfaglærer- Yrkesfaglærerutdanning som overgangsarena fra ett yrke til et annet*.

-
- Schiff, D., Herzog, L., Farley-Ripple, E., & Iannuccilli, L. T. (2015). *Teacher Networks in Philadelphia: Landscape, Engagement, and Value*. In: Penn GSE Perspectives on Urban Education, 12(N1). <http://www.urbanedjournal.org>.
- Schlimbach, T. (2009). *Unterstützungsangebote im Übergang Schule-Beruf. Die Rolle gemeinnütziger Organisationen. Expertise im Auftrag der Bertelsmann Stiftung*. Halle. https://www.dji.de/fileadmin/user_upload/bibs/9_11093_Expertise_zweiseitig_rb2.pdf.
- Schön, M., & Glade, E. M. (2020). *Emotionale Führung als Basis inklusiver Schulentwicklung. Qualifizierung und Weiterbildung für transformationales Schulmanagement*. In: Qfl - Qualifizierung für Inklusion, 2.
- Schulz, C. A. (2017). *Führen mit Zielen - Eine Wirkungsanalyse des Instruments der Zielvereinbarung zur Steuerung von beruflichen Schulen und des beruflichen Schulsystems des Landes Baden-Württemberg*.
- Sekkingstad, D., & Syse, I. (2019). «Spør oss, vi vil bidra»; lærerar som lokomotiv for å fremje skuleutvikling- ein mogleg modell. In: Modeller: Universitetsforlaget.
- Şen, M. (2016). *İşkur Mesleki Eğitim Kurslarının İstihdama Katkısı: Trabzon İlinde Bir Araştırma*.
- Şener Yaldiz, B., & Tanrisever, C. (2020). *Konaklama Öğretmenlerinin Özel Eğitim Meslek Okullarına Uyum Süreçlerinde Yaşadıkları Sorunlar ve Çözüm Önerileri*.
- Seppälä, M., Tapani, A., Kukkonen, H., & Raudasoja, A. (2018). *Uusi uljas pedagoginen johtajuus – tulevaan luotsaamista yhdessä tekemällä: Tampereen ammattikorkeakoulu*.
- Smith, C. A., Vellenga, H. E., Parker, M., & Butler, N. L. (n. d.). *Forum on Public Policy Meeting the Demand for TESL/TEFL Teachers: An Interdisciplinary Approach to Increasing Program Accessibility and Effectiveness*. <http://aof20>.
- Snoen, E., & Paulsen, T. M. (2021). *Å åpne døra mot verda og framtida. Studenters tanker omkring sin framtidige yrkesfaglærerrolle*. In: Psykologi i kommunen.
- Solano, G. L. (n. d.). *The End of LIFE: Thoughts on the Marginalization of Powerful Service-Learning in Higher Education*.

-
- Sommer, J., & Del Estal, M. (2015). *Kooperation und regionale Einbettung des Berufsorientierungsprogramms (BOP)*.
- Speicher, S. (2021). *Building community using experiential education with elementary preservice teachers in a social studies methodology course*. In: *Journal of Global Education and Research*, 5(2), S. 111–120.
- Spetalen, H. (2015). *Fra utdanning til arbeid*.
- Steadman, S. (2018). *Defining Practice: Exploring the Meaning of Practice in the Process of Learning to Teach*.
- Stender, A. (2009). *Schulentwicklungsplanung für berufliche Schulen-Konzeptionelle und empirische Rahmenbedingungen am Beispiel der Region Paderborn*.
- Straumann, M. (1994). *Abstand nehmen vom Schulalltag-Gedanken zur Langzeitfortbildung*. <http://www.bzl-online.ch>.
- Stump, M., Zlatkin-Troitschanskaia, O., & Mater, O. (2016). *The effects of transformational leadership on teachers' data use*. In: *Journal*, 8, S. 80–99.
- Swann, K., Sanzo, K. L., Paredes Scribner, J., & Cromartie, M. (2021). *Cultivating a 'Community of Practice' in an Educational Leadership Preparation Program: Experiences and Roles of Adjunct Faculty*. In: *International Journal of Educational Leadership Preparation*.
- Syeda, N., & Dresens, E. (2020). *Are School Professionals in Australian Schools Well-Prepared to Collaborate With Culturally and Linguistically Diverse Families of Their Students on the Autism Spectrum?* *School Community Journal*, 2. <http://www.schoolcommunitynetwork.org/SCJ.aspx>.
- Syysmäki, H. (2018). *Röntgenhoitajan Työnkuva Sovellusosaajanaverkostoituminen ja ammatillisen täydennyskoulutuksen edistäminen Suomen Röntgenhoitajaliitossa*.
- Tamer, B. (2020). *Okul Yöneticilerinin Eğitim Liderliği Meslek Standartlarına İlişkin Öz Değerlendirmeleri*.
- Tamer, M. A., & Özcan, M. (2014). *Örgün Mesleki ve Teknik Eğitim Sisteminin Mesleki Eğitimin Paydaşlarınınca Değerlendirilmesi*.

-
- Tan, M. (2009). *Mesleki ve Teknik Liselerde 3308 Sayılı Kanuna göre Görev Başı Eğitimin İşyerlerine Uygulanmasının Etkinliği*.
- Taşlı, V. (2019). *Koordinatör Öğretmenler: Türkiye'de Mesleki Eğitim Sisteminin Kilit Aktörleri*.
- Tek, M. (2019). *Sigortacılık Sektöründe Hizmet İçi Mesleki Eğitimler ve Sektörel İhtiyaçların Karşlanması*. In: Yöktez, S. 1–89.
- Tulowitzki, P., Hinzen, I., & Roller, M. (2019). *Die Qualifizierung von Schulleiter*innen in Deutschland. Ein bundesweiter Überblick*.
- Türkyılmaz, T. A. (2008). *Mesleki Eğitimin İyileştirme Sürecinde Uygulanan Modüler Sistemde Öğretmen Eğitimin Önemi*.
- Turunen, A. (2020). *Alueellisen verkoston kehittäminen hius- ja kauneudenhoitoalan ammatillisille opettajille*.
- Utvær, B. K., Hårberg, J. S., & Ramlo, S. (2022). *Veier, broer og barrierer. Erfaringer med ERASMUS+-prosjekt ved lærerutdanningen for yrkesfag*. In: Universitetsforlaget.
- Viviano, T. (2021). *What 21st Century Leadership in Career and Technical Education Should Look Like*. Winter. Journal of Career and Technical Education, 2.
- Warren, B. (2019). *Be the Bridge: How Multi-Classroom Leaders Smooth Teacher-Administrator Communication* <https://www.opportunityculture.org/2019/09/03/be-the-bridge-how-multi-classroom-leaders-smooth-teacher-administrator-communication/>.
- Washington, D. C. (2008). *Office of Communications and Outreach*. <http://www.ed.gov/programs/gtep/gtep.pdf>.
- Waters, S., Pellegrino, A., Hensley, M., & Kenna, J. (2021). *Forming School and University Partnerships to Learn and Teach with Primary Sources*. In: Journal of Social Studies Education Research. www.jsser.org.
- Watzek, V. (2020). *Die Rolle von Emotionen beim Teamlernen - Affektive und kognitive Komponenten in der Teamarbeit von interdisziplinären Arbeitsteams an beruflichen Schulen*.

-
- Wellington, A., Hallgren, K., Speroni, C., Herrmann, M., Glazerman, S., Constantine, J. (2010). *Evaluation of the Teacher Incentive Fund: Implementation and Impacts of Pay-for-Performance After Two Years, Executive Summary*.
- White, T. (2016). *Teach for America e sua paradoxal iniciativa sobre diversidade: Raça, política, e o deslocamento de professores negros nas escolas urbanas*. In: Education Policy Analysis Archives, 24.
- White, C. J., Bedonie, C., Groat, J. de, Lockard, L., & Honani, S. (2007). *A Bridge for Our Children: Tribal/University Partnerships to Prepare Indigenous Teachers*. In: Teacher Education Quarterly, 34(4), 71–86.
- Wilbers, K. (2019). *Digitale Transformation kaufmännischer Bildung Ausbildung in Industrie und Handel hinterfragt*. www.wirtschaftspaedagogik.de.
- Willmann, S. (2017). Rezension zu: Zehetmeier, S. (2010). *Aktionsforschung in der Lehrerfortbildung: Was bleibt?* www.forschungsmonitor-schule.de.
- Worth, J., McLean, D., & Sharp, C. (2022). *Racial Equality in the Teacher Workforce An Analysis of Representation and Progression Opportunities from Initial Teacher Training to Headship Full Report National Foundation for Educational Research (NFER)*. www.nfer.ac.uk.
- Yassıkaya, B., & Günbayı, İ. (2011). *Meslek Lisesinde Çalışan Yönetici ve Öğretmenlerin Leonarda Da Vinci Projesi Hakkında Görüşleri: Bir Durum Çalışması*.
- Yazgeç, S. (2008). *Mesleki Eğitim Merkezi Metal Teknolojisi- Makine Teknolojisi Bölümlerinde Öğrenim Gören Öğrencilere, İşletmelerde Uygulanan Mesleki Eğitim (Pratik Eğitim) Çalışmalarının Değerlendirilmesi*.
- Yıldız, L. (2008). *İstanbul İli Mesleki Eğitim Merkezlerindeki Yöneticilerin Mesleki Eğitim Geliştirme Projesi Kapsamındaki Yeni Eğitim Uygulamalarına İlişkin Algıları*.
- Zahariev, B., & Yordanov, I. (2021). *An Assessment of Teacher Performance in "Teach for Bulgaria" Based on Value-added from Test Scores*. Bulgarian Comparative Education Society.

Zimmermann, F. (2013). *Einstellung von Lehrkräften zum Qualitätsmanagement an Schulen und deren Prädiktoren.*