

## **COMPETE EGYPT**

# D2.1: COMPARATIVE STUDY OF VET SYSTEMS IN EGYPT AND FINLAND

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## **Table of Contents**

Introduction	3
Background and Introduction to VET in Egypt and Finland	3
Egypt	3
Finland	5
VET Systems and Qualifications	6
Egypt's VET system	6
VET qualifications	6
Work-based learning models	8
Lifelong long learning and RPL	9
Finland's VET system	9
VET qualifications	10
Emphasis on work-based learning	12
Lifelong learning is a key principle in Finnish VET	13
VET Governance and Financing	13
Institutional actors and their roles in Egyptian VET	13
Financing mechanisms in Egypt	14
Administration structure and key stakeholders in Finnish VET	14
Finland's financing system rewards VET providers for outcomes and effectiveness	15
VET Teachers and Trainers	16
Competence of VET teachers is a challenge in Egypt	16
Teaching in VET is an attractive career option in Finland	16
Curriculum Development	17
Anticipation of skills needs in Egypt	17
Towards competence-based VET in Egypt	17
High stakeholder involvement in Finland's skills anticipation	18
Finnish VET curricula are updated based on changes in the world of work	19
Quality Assurance	20

## Compete Egypt D2.1 Comparative Study of VET Systems in Egypt and Finland



A new quality assurance body for VET in Egypt	20
Comprehensive quality assurance in Finnish VET	20
Summary and Conclusion	21
References	25



#### Introduction

The Compete Egypt project aims to increase the capacities of Egyptian VET institutions to develop competence-based VET in dialogue with the labour market, focusing on the following issues:

- identifying development needs at the school and curriculum level by benchmarking the Finnish VET system.
- developing a framework for quality management at the school level.
- upskilling and reskilling teachers & managers to be able to provide high-quality VET and to develop a competence-based curriculum.
- improving the employability of students by integrating entrepreneurship into the curriculum and developing an entrepreneurship training model.
- improving the career guidance system with anticipation of labour market needs.

#### **Project partners**

- Omnia Education Partnerships Ltd (OEP), Finland (Project coordinator)
- Ta'heal for VET Skills Excellence (Ta'heal), Egypt
- Ministry of Education and Technical Education, Department of Applied Technology Schools Unit (MoETE), Egypt

This comparative study aims to examine the vocational education and training (VET) systems in Egypt and Finland and map the differences between the two systems. The study seeks to explore various aspects, including the structure and governance of the VET systems, curriculum development, quality assurance, work-based learning, and the overall perceptions of VET. Conducted as part of the Compete Egypt project, the comparative study aims to provide insights that can inform the setting of development goals in the schools involved in the project.

## Background and Introduction to VET in Egypt and Finland

#### **Egypt**

With a population that exceeded 102 million in 2021, Egypt is the most populous country in the Arab Region and the 14<sup>th</sup> most populous globally. The country's population is estimated to exceed 180 million by 2052, making it one of the nine largest populations in the world<sup>1</sup>. With almost 60% of its population being below the age of 30 and the country's population growth outpacing job

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<sup>&</sup>lt;sup>1</sup> (ETF, 2021a)



creation, Egypt faces a significant challenge in providing access to necessary skills and employment opportunities for its sizable youth population<sup>1</sup>.

A considerable number of young people (32.9%) in the country are neither in education, employment or training<sup>2</sup>. Transitioning from school to work is challenging, and the issue of 'educated unemployment' is persistent in the labour market: lower-educated workers (illiterate individuals and those with basic literacy) experience low unemployment rates (3.4% and 2.4%), while the higher levels of education, such as university and intermediate secondary education, are associated with much higher unemployment rates (34% and 48.2%), indicating a significant skills mismatch between the education system and labour market demands<sup>3</sup>.

In Egypt's Vision 2030, vocational education and training (VET) is seen as a key element in tackling the unemployment and skills mismatch challenge. Although Egypt has been working actively with international partners, including the European Union (e.g. the TVET Egypt programme), to improve the quality, relevance and attractiveness of its VET, challenges still exist. There are negative attitudes towards blue-collar work and technical education, often seen as a last resort option for students and parents in Egypt. Despite the growing demand for technical and vocational skills, VET is not appealing to students due to the poor image of vocational professions, the wages and working conditions and the expectations that young and unemployed people have regarding wage levels and careers.<sup>4</sup>

Since mid-2018, the Ministry of Education and Technical Education (MoETE) has embarked on an ambitious journey to transform technical education in all its elements through the Technical Education 2.0 strategy (TE 2.0), focusing on five key areas of reform to make vocational education and training (VET) more appealing and relevant:

- 1) Transformed Quality of Technical Education
- 2) Transformed Relevance of Technical Education by Transferring to Competency-based Curricula
- 3) Transformed Teachers through Training & Qualification
- 4) Transformed Schools through Employer Engagement & Work-based Learning
- 5) Transformed Image of Technical Education through Changing Social Perception

International partners (such as the EU, Germany and the USA) have cooperated closely with Egypt to implement the strategy.

<sup>3</sup> (ETF, 2020b)

<sup>&</sup>lt;sup>2</sup> (ETF, 2022)

<sup>&</sup>lt;sup>4</sup> (El-Ashmawi, 2018)



One of the main outcomes of the TE 2.0 strategy includes the Applied Technology Schools (ATS), established in 2018 in collaboration with private sector companies. The guiding principles of ATS include quality assurance through international partnerships, a balanced approach to work-based and classroom learning, demand-driven education, learner-centred approaches, culture change promoting work ethics and productivity, and industry partnerships through a competency-based model. The ATS model aims to align vocational education with industry needs and foster productive and competitive workers.<sup>3</sup>

#### **Finland**

Finland has a population of approximately 5.5 million. The country consists of 21 regions and 311 municipalities, most of which have fewer than 6,000 residents. Despite an ageing population, Finland has a slightly higher proportion of young people than the EU average, mainly due to immigration. However, the proportion of people over 65 is increasing faster than the EU average due to the baby-boomer generations reaching pensionable age.<sup>5</sup>

Because of the demographic challenges, the demand for labour in social and welfare services will grow in the future. The demand is estimated to be nearly 120,000 in the period from 2008 to 2025. This also impacts VET because it directly relates to professions like practical nurses who acquire VET qualifications.<sup>6</sup>

Finland's educational policy strives to ensure equal educational opportunities for everyone. The objective of VET is to enhance and maintain vocational skills, develop commerce and industry, and meet the changing skills needs in the labour market. VET has been integrated into the education system to provide paths for employment as well as higher education or additional vocational qualifications.

VET in Finland is highly regarded, and approximately 50% of young people continue to study in a vocational institution after completing basic education (after 9<sup>th</sup> grade)<sup>7</sup>. According to Eurobarometer, nine out of ten Finns believe VET offers high-quality learning. This positive perception stems not only from the employment prospects and eligibility for further studies it provides but also from the high status and competence of VET teachers<sup>8</sup>. The percentage of Finnish VET students who enter the job market or continue with further studies directly after graduating is nearly 80%<sup>9</sup>.

<sup>6</sup> (Cedefop, 2019)

<sup>&</sup>lt;sup>5</sup> (Cedefop, 2019)

<sup>&</sup>lt;sup>7</sup> (Ministry of Education and Culture, Finnish National Agency for Education, 2019)

<sup>&</sup>lt;sup>8</sup> (Cedefop, 2019)

<sup>&</sup>lt;sup>9</sup> (Vipunen - Education Statistics Finland, 2021)



Finnish VET is competence-based, aligning closely with the skill demands of employers while also emphasising entrepreneurial skills in all qualifications. In addition to general entrepreneurial skills (e.g., critical thinking, problem-solving, collaboration), the VET system offers a VET programme (further vocational qualification) specifically designed to support launching a business or developing existing business operations. In addition, all students can complete a business planning module as part of their VET programme.

#### **VET Systems and Qualifications**

#### Egypt's VET system

The VET system in Egypt is one of the largest in the MENA region, consisting of two main components: initial vocational education and training (I-VET) and continuing vocational and training (C-VET) programmes, with I-VET programmes being more common. VET programmes are mainly offered by public institutions operating under several ministries at various levels of education, from pre-university to post-secondary, and more recently at the university level through new technological universities<sup>10</sup>.

The VET system comprises over 2,900 institutions with approximately 2 million students. 89% of these VET institutions are government-owned, and 11% are privately owned. The Ministry of Education and Technical Education (MoETE) manages 2,266 schools that provide technical secondary education, offering an alternative to general secondary education for those who have completed preparatory education. There is also a small percentage of schools that implement the Dual Scheme DS. In addition, in 2018, the MoETE established the Applied Technology Schools (ATS), introducing a new competency-based certification system that is implemented, regulated and monitored, adopting international quality standards and in close partnership with employers. 11

In 2019, almost half of the upper secondary students in Egypt (46.9%) were enrolled in VET<sup>12</sup>. Approximately 57% of all VET students are male, and 43.0% are female 13. Most VET graduates do not go on to university, but some opt for mid-level technical colleges affiliated with the Ministry of Higher Education and Scientific Research<sup>14</sup>.

#### VET qualifications

The main VET qualification offered by the Egyptian VET system<sup>15</sup>:

<sup>10 (</sup>ETF, 2020a) 11 (ETF, 2020b) 12 (ETF, 2021a) 13 (ILO, 2021) 14 (ETF, 2021a) 15 (ETF, 2020a)

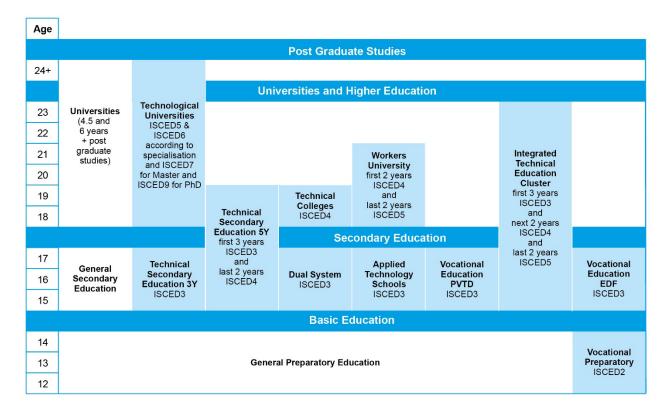


- Vocational preparatory programme: lasts three years and leads to an ISCED level 2 qualification.
- Vocational secondary programme: lasts three years and leads to an ISCED level 3 qualification.
- Technical secondary three-year programme: leads to an ISCED level 3 qualification.
- Advanced technical secondary five-year programme: leads to an ISCED level 5
  qualification. If a student chooses to stop after three years, they receive an ISCED level 3
  qualification.
- Middle institutions/technical colleges/technological universities: two-year post-secondary non-tertiary education resulting in an ISCED level 4 qualification.
- Private higher institutions: four-year programmes leading to an ISCED level 5 qualification.
- Vocational preparatory programme: lasts three years and leads to an ISCED level 2 qualification.
- Vocational secondary programme: lasts three years and leads to an ISCED level 3
  qualification.
- Technical secondary three-year programme: leads to an ISCED level 3 qualification.
- Advanced technical secondary five-year programme: leads to an ISCED level 5
  qualification. If a student chooses to stop after three years, they receive an ISCED level 3
  qualification.
- Middle institutions/technical colleges/technological universities: two-year post-secondary non-tertiary education resulting in an ISCED level 4 qualification.
- Private higher institutions: four-year programmes leading to an ISCED level 5 qualification.

The below figure shows how VET qualifications are placed in Egypt's education system.



Figure 1: Egypt's education system. Source: adapted from ETF (2020b).



#### Work-based learning models

Teaching and learning in Egypt rely heavily on textbooks, and the practical application of knowledge is limited due to insufficient funds for materials needed in practical training. VET providers have focused on work-based learning to improve the learning process, and the government has been implementing work-based learning programmes for a long time. Some programmes have been discontinued after funding has ended, while others have become integrated into the VET system<sup>16</sup>. Despite implementing various WBL initiatives with positive results, participation in WBL has been much lower than the government's aim. The current goal is to increase the share of students in WBL from 2% (2016) to 50% by 2025<sup>17</sup>.

The ETF (2020b) lists the following work-based learning methods that are currently used in Egypt's vocational education and training:

- The PVTD's Industrial Apprenticeship scheme, known as Talmaza Sina'eyah.
- The Dual Education System implemented in select technical secondary schools.
- The School in Factory model implemented in technical secondary schools, which is also part of the Egyptian Dual system.

<sup>&</sup>lt;sup>16</sup> (ETF, 2020b)

<sup>&</sup>lt;sup>17</sup> (ETF, 2020a)



- Training Stations (the Productivity and Vocational Training Department's model).
- Work-based learning in the Applied Technology Schools, a new initiative piloted by the Ministry of Education and Technical Education (MoETE) in partnership with the private sector.

Additionally, the Ministry of Manpower (MoM) implements work-based learning methods for apprentices aged 12 to 18 through its 37 vocational training centres.

#### Lifelong long learning and RPL

Egypt's VET system is yet to establish an effective lifelong learning system. According to the ETF's Torino Process 2018-2020: Egypt National Report (2020), recent challenges are related to the lack of flexibility that would allow learners to leave and re-enter formal education as well as the absence of a fully operational National Qualifications Framework (NQF), outlining lifelong learning and skills acquisition paths. Additionally, no credible system is in place for recognising prior learning (RPL) and transferring credits between institutions.

However, the National Qualifications Framework, currently under development, aims to replace the old formal education system, focusing more on lifelong learning, flexibility, and resolving the issue of dead ends in learning pathways<sup>18</sup>.

#### Finland's VET system

Finnish VET is strongly based on the idea of flexible individual learning paths. Students can enrol in VET throughout the year, and a personal competence development plan is drawn up for each student<sup>19</sup>. The plan maps and recognises the skills previously acquired by the student and outlines what kind of competences the learner needs and how they can be acquired in different learning environments.

In the Finnish system, as long as the individual's competences meet the national qualification requirements, they can be acquired in different learning environments (both formal and informal) and at different times. There are no final or high-stakes examinations in the Finnish VET system. Students' competences are assessed throughout the VET programme through competence demonstrations by performing practical work tasks in the workplace.<sup>20</sup>

Vocational qualifications consist of modules based on activities and processes found in the world of work and the competences required to perform them. In Finland, the modular qualification structure is seen as a way of keeping students motivated and reducing dropout rates. It allows

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<sup>&</sup>lt;sup>18</sup> (ETF, 2020b)

<sup>&</sup>lt;sup>19</sup> (Ministry of Education and Culture, Finnish National Agency for Education, 2019)



individuals to have their learning outcomes recognised, regardless of how or where they acquired the skills. Completed modules can be accumulated towards a qualification, enabling individuals to return later to continue their studies, complete their qualification, or update their skills.

#### VET qualifications

There are three types of vocational qualifications in Finland:

- 1. vocational upper secondary qualifications (initial VET)
- 2. further vocational qualifications (continuing VET)
- 3. specialist vocational qualifications (continuing VET)

Currently, there are 160 vocational qualifications, of which 42 are vocational upper secondary qualifications, 64 are further vocational qualifications, and 56 are specialist vocational qualifications<sup>21</sup>. Within the Finnish national qualifications framework (FiNQF), which is based on the European Parliament's and Council's Recommendation on the European Qualifications Framework for Lifelong Learning (EQF), upper secondary vocational qualifications and further vocational qualifications are placed at level 4 and the specialist vocational qualification at level 5<sup>22</sup>.

<sup>&</sup>lt;sup>21</sup> (Finnish National Agency for Education, 2023b)

<sup>&</sup>lt;sup>22</sup> (Finnish National Agency for Education, 2023c)



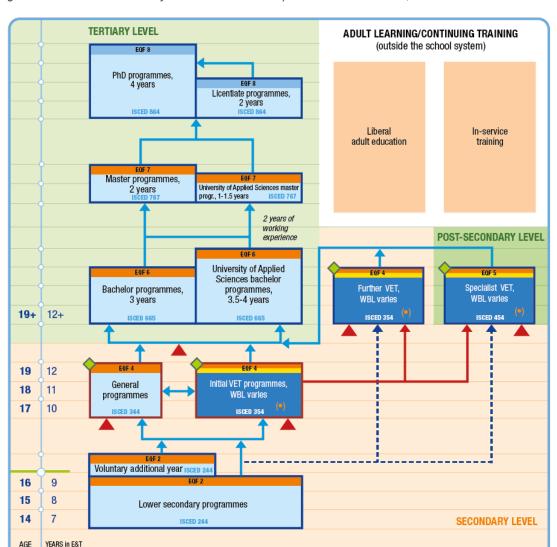


Figure 2: Finland's education system. Source: Cedefop and ReferNet Finland, 2022.

NB: ISCED-P 2011.

Source: Cedefop and ReferNet Finland, 2022.

General education programmes

Programmes combining VET and general education

Officially recognised vocational qualifications

Also available to adults (full-, part-time or distance education)

Qualifications allowing access to the next education level

VET programmes

The scope of the qualification varies from 120 (ECVET equivalent) study credits to 210 credits, which are called 'competence points' in the Finnish system. A vocational qualification's scope is 180 competence points, a further qualification's 120/150/180 competence points, and a specialist qualification's 160/180/210 competence points<sup>23</sup>. The standard length of an initial VET programme is three years, but the actual length is adjusted according to the student's prior knowledge and

WBL

Possible progression routes

End of compulsory education

Giving access to tertiary education (\*) Also available as an apprenticeship

Prior VET knowledge may be recognised affecting programme duration

Work-based learning, either at the workplace or a VET institution

Related vocational skills are usually needed to enrol

Entry through validation of adults' prior learning (formal/informal/non-formal)

<sup>&</sup>lt;sup>23</sup> (Ministry of Education and Culture, 2023c)



skills. At the beginning of their studies, recognition of prior learning (RPL) is performed, and students are credited for previously acquired competence to ensure they only have to acquire the missing competence during their studies.

Vocational qualifications are designed to provide a solid foundation of basic vocational skills applicable to different tasks in the field. Additionally, the qualifications focus on developing specialised competence and vocational skills specific to a particular sector or area of work.

All qualification programmes include vocational modules specific to the occupation or field, which are either compulsory or optional, with some optional modules determined by the VET provider. In addition, initial vocational qualification programmes also include general modules that aim to strengthen the basic skills needed in the world of work and life, as well as readiness for further studies and lifelong learning. These modules include 1) communication and interaction, 2) mathematics and science, and 3) citizenship and 'working life'<sup>24</sup>.

In addition, all vocational qualifications have been designed to develop key competences for lifelong learning. These key competences are integrated into the qualification programmes and requirements and assessment criteria<sup>25</sup>. They include:

- multiliteracy
- multilingual competence
- competence in mathematics, science and technology
- · digital competence
- self-development
- · citizenship competence
- entrepreneurship
- cultural awareness

#### Emphasis on work-based learning

The 2018 VET reform increased the share of work-based learning (WBL) in Finnish VET. All students participate in WBL, which takes place in the workplace. There is no minimum or maximum amount of WBL in VET programmes; it can cover the whole qualification, a module/unit or a smaller part of the programme. The suitable amount is planned individually for each student in their personal competence development plan.<sup>26</sup>

<sup>26</sup> (Cedefop, 2019)

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<sup>&</sup>lt;sup>24</sup> (Finnish National Agency for Education, 2023d)

<sup>&</sup>lt;sup>25</sup> (Finnish National Agency for Education, 2023a)



Two forms of work-based learning exist in Finland: training agreements (unpaid) and apprenticeships (paid). VET providers typically have framework agreements with local companies for work-based learning to ensure a competent workforce for the future. Work-based learning is based on a contract that includes learning goals and duration. The student, the teacher and the workplace mentor sign it. The unpaid training agreement can be changed into a paid apprenticeship agreement at any time if all parties agree, and each student must have an appointed workplace mentor who supports the student at the workplace and takes part in the assessment.<sup>27</sup>

#### Lifelong learning is a key principle in Finnish VET

The continuous changes in the world of work and the transformation of work require that competences are constantly updated. Therefore, one key principle in Finnish VET is continuous competence development. The VET system caters to young people, adults, employees with upskilling or reskilling needs and the unemployed. In fact, more than half of VET students are 20–60 years old.<sup>28</sup>

Initial VET (IVET) equips learners with the necessary vocational skills for entry-level jobs. It also helps learners become well-rounded individuals, prepares them for further studies and supports personal development. Continuing VET (CVET) offers more advanced skills and specialisation and is intended for adults with work experience.

## **VET Governance and Financing**

#### Institutional actors and their roles in Egyptian VET

Several changes in Egypt's VET governance have impacted its institutional framework in recent years. However, the fragmented governance structure, with a large number of stakeholders and institutions working on separate reforms, still poses a challenge for VET in Egypt. The system consists of various levels of administration: multiple ministries at the central level oversee VET provision, and at the intermediate level, directorates in governorates or regions administer decisions made centrally.<sup>29</sup>

Nationally, the main actors are the Ministry of Education and Technical Education (MoETE), the Ministry of Manpower and Migration (MoMM) and the Ministry of Trade and Industry (MoTI). MoETE is involved in all functions of VET governance: formulating the national policy framework; provision of legislation; management of VET provider networks; mobilising financial resources;

<sup>29</sup> (ETF, 2020a)

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<sup>&</sup>lt;sup>27</sup> (Omnia Education Partnerships, 2021)

<sup>&</sup>lt;sup>28</sup> (Ministry of Education and Culture, Finnish National Agency for Education, 2019)



managing public-private partnerships for VET; evaluating and reviewing VET policies; research and development (R&D); and data and statistical provision.<sup>30</sup>

In 2014, changes were made at the policy level in the Egyptian VET system by establishing three councils: the National Human Resources Development Council (NHRDC), the Executive TVET Council (ETVETC), and the Executive Workforce Skills Development Council (ETF, Torino Process, 2020). These councils aimed to address fragmentation and promote coordination among stakeholders. Additionally, a Regional TVET council was introduced at the governorates' level. However, these councils are not yet active according to the ETF's Torino Process 2018-2020: Egypt National Report (2020).

#### Financing mechanisms in Egypt

VET financing in Egypt includes four types of mechanisms: public funding (the most important funding mechanism), funds from core activities, enterprise financing, and financing from international donors<sup>31</sup>.

The expenditure planning is based on the previous year's expenditure and does not include performance incentives or reflect enrolment or successful completion rates. The funding is not aligned with national goals or sector competitiveness. A significant portion of VET funding is allocated to salaries, limiting investment in other areas.<sup>32</sup>

#### Administration structure and key stakeholders in Finnish VET

The Ministry of Education and Culture of Finland sets the overall goals and qualification structure for VET nationally. The Finnish National Agency for Education, operating under the Ministry of Education and Culture, determines the national qualification requirements in close cooperation with the world of work and other stakeholders. The national qualification requirements (i.e., high-level learning outcomes-based curricula) define the required vocational competence, principles of assessment and how the competence is demonstrated.

The ministry grants licenses to education providers to provide VET programmes. The licence determines the educational task of the education provider and ensures that education providers meet the preconditions for providing high-quality qualifications and education. Currently, there are 136 VET providers in Finland<sup>33</sup>. They are owned by municipalities, joint municipal authorities or foundations, or VET institutions can be privately owned non-profit organisations.

<sup>30 (</sup>ETF, 2017)

<sup>31 (</sup>ETF, 2020a) 32 (ETF, 2020a)

<sup>33 (</sup>Ministry of Education and Culture, 2023b)



Figure 3: Key stakeholders in Finnish VET governance. Source: adapted from Cedefop (2019).

#### **Parliament**

- VET legislation
- · Structure of VET qualifications
- · Annual budget allocations to VET
- · Maximum number of student years
- · Amount of strategy funding

#### Government

- Development of VET in the Government Programme
- · Structure of common units/modules, including the number of competence points

#### **Ministry of Education and Culture**

- · Preparation of VET legislation
- Qualificiations structure
- Licence to provide VET
- · Steering, regulating, financing and monitoring

#### **Finnish National Agency for Education**

- · Preparation of the national qualifications requirements
- · Developing VET through funding projects

#### **Finnish Education Evaluation Centre**

• Evaluating the outcomes of the education and training system (thematic and systematic)

#### **VET** providers

 Within the limits of the licence, they decide independently on the allocation of their education offer, how and in which educational institutions and learning environments the education is organised

#### Finland's financing system rewards VET providers for outcomes and effectiveness

VET in Finland is publicly funded from the state and municipal budgets. Public funding is provided on the same grounds, regardless of whether the VET institution is public or privately owned<sup>34</sup>. The funding is given directly to the VET providers, who have the authority to decide how to use it. In accordance with their license, education providers have the autonomy to decide on the allocation of the education they offer and how and in which learning environments the education is organised<sup>35</sup>.

The VET funding system rewards education providers based on their outcomes, efficiency and effectiveness. The focus has shifted to completed modules and qualifications (i.e. performance-based funding), employment or placement in further studies (i.e. effectiveness-based funding) and the feedback collected from students and employers. The amount of time spent on education is not relevant from the point of view of the funding structure.<sup>36</sup>

<sup>34 (</sup>Omnia Education Partnerships, 2021)

<sup>&</sup>lt;sup>35</sup> (Ministry of Education and Culture, 2023a)

<sup>&</sup>lt;sup>36</sup> (Ministry of Education and Culture, 2023a)



Altogether, the funding consists of strategic, core, performance-based, and effectiveness-based funding. Strategic funding accounts for at least 4% of the VET appropriation. The remaining part of the appropriation is allocated with 70% as basic funding, 20% as performance-based funding, and 10% as effectiveness-based funding.37

#### VET Teachers and Trainers

#### Competence of VET teachers is a challenge in Egypt

Despite approximately 68% of teachers holding bachelor's degrees, the competence of teachers and trainers is still a significant issue in Egypt. This is often attributed to three interconnected challenges: weak pre-service training, limited in-service training and limited industry experience.<sup>38</sup>

Attracting and retaining qualified teachers is difficult due to the low social status and low salaries of VET teachers, as well as the non-permanent contracts offered to teachers. However, efforts have been made to improve professional development, including the establishment of the Teachers' Cadre (in 2006), the development of a career path and promotional system for teachers, along with a 50% increase in basic pay (in 2007) and bonuses for each promotional level (from 2008); and the establishment of the Professional Academy for Teachers (PAT) in 2008. The recent establishment of the Technical Vocational Education for Teachers' Academy (TVETA) aims to further enhance the training and development of technical and vocational teachers.<sup>39</sup>

#### Teaching in VET is an attractive career option in Finland

In Finland, VET teachers are highly valued and respected. The admission process for VET teacher training is competitive; less than half of the applicants are accepted into training. VET teachers are required to have a master's or bachelor's degree in their vocational sector or the highest possible qualification in the field. Additionally, they undergo pedagogical teacher training consisting of 60 ECTS credits. VET teachers must also have relevant work experience in their field, and they need good contacts with local companies and public organisations to enable and support students' workbased learning.40

In most fields, teachers are required to participate in in-service training to ensure their skills and competences remain up to date. VET teachers are also encouraged to enhance their expertise through professional development placements in companies and other workplaces. During these

<sup>37 (</sup>Ministry of Education and Culture, 2023a)

<sup>&</sup>lt;sup>38</sup> (ETF, 2020b) <sup>39</sup> (ETF, 2020b)

<sup>&</sup>lt;sup>40</sup> (Ministry of Education and Culture, Finnish National Agency for Education, 2019)



placements, they collaborate with the organisation to improve cooperation between the workplace and the VET institution and develop WBL opportunities for students.<sup>41</sup>

## **Curriculum Development**

#### Anticipation of skills needs in Egypt

In the past, Egypt has initiated various policies to support the anticipation of skills demands to develop relevant curricula, including the Egyptian Education, Training and Employment Observatory (EETEO) and Training Councils for specific sectors. However, these initiatives are not currently operational due to legislative and funding challenges. As a solution to this issue, some TVET authorities have utilised social dialogue in which workers and employers are the sources of informed opinion and expertise.<sup>42</sup>

According to the ETF<sup>43</sup>, various stakeholders have recently been working towards developing strategies to engage employers more effectively in identifying sector-specific skills needs in a more structured and sustainable manner.

#### Towards competence-based VET in Egypt

The MoETE, with its relevant bodies and centres, is responsible for curriculum content. With the launch of the Technical Education 2.0 strategy in 2018, educational reforms were started, aiming to enhance the quality and relevance of VET by implementing competency-based curricula.

Since 2015, the MoETE has been working with various international donor organisations to coordinate curriculum development. These joint efforts have led to creating of a unified approach called 'Competency Based Curriculum Design'. As a result, by the second half of 2019, several new programmes have been implemented in Technical Secondary Schools: 13 in industrial fields, 9 in agriculture, 5 in commerce, and 6 in tourism.<sup>44</sup>

The Competence Based Curriculum Design Methodology, as presented in the ETF's Torino Process 2018-2020: Egypt National Report (2020), includes the following 12 steps:

- Designing the first draft for occupation programme framework
- Validation of the framework with industry representatives
- Modifying the framework according to industry representative consultation
- Building the programme plan/skeleton

<sup>&</sup>lt;sup>41</sup> (Ministry of Education and Culture, Finnish National Agency for Education, 2019)

<sup>&</sup>lt;sup>42</sup> (ETF, 2020b) <sup>43</sup> (ETF, 2020b) <sup>44</sup> (ETF, 2020b)



- Designing the key lifelong learning competences
- Accreditation of the programme
- Designing the programme units
- Validation of the programme units with the industry representatives and pedagogical professors
- Design the student guide
- Design teacher guide
- Validation of the student and teacher guides
- Training on the programme implementation

Furthermore, the MoETE is also collaborating with employers and their organisations to develop occupational standards, desired occupational outcomes and assessment criteria<sup>45</sup>.

#### High stakeholder involvement in Finland's skills anticipation

Finland anticipates skills and training needs at the national and regional levels. The anticipation data is utilised to design educational content and tailor education offerings to meet the demand of the labour market<sup>46</sup>.

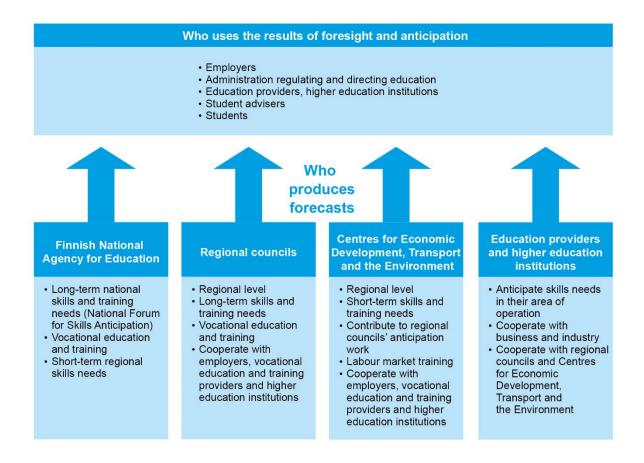
The key national organisations involved in anticipation activities include the Ministry of Education and Culture, the Ministry of Economic Affairs and Employment and the Finnish National Agency for Education. Regional anticipation is carried out in regional councils and centres for economic development, transport and the environment (ELY Centres). Education providers, higher education institutions, chambers of commerce, labour market organisations, research institutes and companies also produce forecasts.

<sup>&</sup>lt;sup>45</sup> (ETF, 2020b)

<sup>&</sup>lt;sup>46</sup> (Finnish National Agency for Education, 2019)



Figure 4: Anticipation roles. Source: adapted from Ministry of Education and Culture (2019)



#### Finnish VET curricula are updated based on changes in the world of work

In Finland, the qualification requirements (i.e., high-level learning outcomes-based curricula) are updated continuously based on changes in the world of work and the results of skill needs anticipation. Changes in the world of work can lead to changes both in the qualification requirements and the structure of vocational qualifications. When the qualification structure is altered, the corresponding qualification requirements also need to be updated. Typically, creating new qualification requirement documents takes around one to two years.<sup>47</sup>

The Finnish National Agency for Education, in strong collaboration with employers, employees, and the education sector, develops the qualification requirements. Self-employed individuals are also involved in preparing these requirements in fields where self-employment is common.

Each qualification is assigned to a sector-specific committee, called 'working life committees', operating under the Finnish National Agency for Education. The committees consist of representatives from employers, employees, teachers, and self-employed individuals. These

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<sup>&</sup>lt;sup>47</sup> (Cedefop, 2019)



committees are involved in developing qualification requirements and the qualification structure, as well as the quality assurance of VET and in overseeing the quality of competence demonstrations and assessment.48

#### **Quality Assurance**

#### A new quality assurance body for VET in Egypt

The quality assurance system of VET in Egypt is based on the accreditation of VET providers. Established in 2006, the National Agency for Quality Assurance and Accreditation of Education (NAQAAE) was the authority for quality assurance and accreditation for all levels of education until 2021. Its role encompassed overseeing both general education and VET and supporting educational institutions in developing quality and quality assurance quality by preparing them for and granting them accreditation<sup>49</sup>. The NAQAAE also manages Egypt's National Qualification Framework (NQF), which is still in the process of becoming fully operational<sup>50</sup>.

A shift in the governance landscape occurred in 2022 when the president signed a law to create a separate quality assurance body for VET. This new entity, which is called the Egyptian TVET Quality Assurance and Accreditation National Authority (ETQAAN), is assigned to oversee Egypt's technical and vocational education and training system. ETQAAN's primary mandate is to ensure that VET institutions adhere to international accreditation norms and align their offerings to meet labour market needs<sup>51</sup>.

#### Comprehensive quality assurance in Finnish VET

Close cooperation with the world of work at national, regional and education provider levels is a significant part of the quality assurance of VET. The development of quality assurance is strategic. ongoing and comprehensive, including three main components: the quality management systems implemented by education providers, national steering and regulation, and external evaluation.

VET legislation requires education providers to self-evaluate their qualifications, education programmes, and other activities they offer, as well as their overall quality and effectiveness. Additionally, they must regularly participate in external evaluations conducted by Finland's National Education Evaluation Centre (FINEEC). External evaluation can involve assessing learning outcomes, auditing education providers' activities, or evaluating their quality management systems.

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<sup>&</sup>lt;sup>48</sup> (Finnish National Agency for Education, 2023e)

<sup>&</sup>lt;sup>49</sup> (ETF, 2020a) <sup>50</sup> (ETF, 2021b)

<sup>&</sup>lt;sup>51</sup> (Ali, 2022)



It is important to note that Finland does not have an inspector system or a ranking system for education providers.<sup>52</sup>

The Finnish National Agency for Education supports VET providers in the development of quality assurance and contributes to the development of quality assurance in VET in cooperation with the EQAVET (European Quality Assurance in Vocational Education and Training) network and other NRPs. The National Agency for Education also disseminates good practices and information. Working life committees contribute to the quality assurance of the organisation of skills demonstrations and to the evaluation of skills and competences.<sup>53</sup>

### **Summary and Conclusion**

This comparative study aimed to examine the VET systems in Egypt and Finland and map the differences between the two systems. The themes discussed include the attractiveness of VET; governance and financing; VET providers, students and teachers; qualifications, collaboration with employers; work-based learning; and quality assurance. The findings of this comparative investigation are summarised in the table below.

Table 1: Comparison of key elements of VET in Egypt and Finland

	EGYPT	FINLAND
Attractiveness of VET	There are negative attitudes towards VET, which is often seen as a last option. This is due to, e.g., the poor image of vocational professions, wages and working conditions and the expectations of young people. One of the goals of the TE 2.0 strategy is to increase attractiveness.	VET in Finland is highly regarded, and 50% of young people continue to study in a vocational institution after completing basic education. Nine out of ten Finns believe VET offers high-quality learning.
Governance	The VET governance structure is fragmented, with numerous stakeholders and institutions implementing separate reforms. VET governance involves multiple ministries at the central level, and directorates at the intermediate level in various governorates or regions administer centrally made decisions.	The Ministry of Education and Culture sets the general goals for VET and the structure of qualifications, as well as grants licenses to VET providers, while the Finnish National Agency for Education (operating under the Ministry) establishes the national requirements of each vocational qualification, including core content.

<sup>&</sup>lt;sup>52</sup> (Ministry of Education and Culture, Finnish National Agency for Education, 2019)

<sup>53</sup> (Finnish National Agency for Education, 2023)

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Financing	The financing comprises four key mechanisms: public funding, core activity funds, enterprise financing, and international donor contributions. Expenditure planning for skills development is based on the previous year's expenditure and does not include performance incentives or reflect enrolment or successful completion rates.	VET is publicly funded by the state and municipalities. The funding is given directly to the VET providers, who have the authority to decide how to use it. The VET funding system rewards education providers based on their outcomes, efficiency, and effectiveness.
VET providers	The VET system comprises over 2,900 institutions: 89% are government-owned, and 11% are privately owned.	There are 136 (in 2023) VET providers in Finland. VET providers are owned by municipalities, joint municipal authorities or foundations, or VET institutions can be privately owned non-profit organisations.
VET students	Gender distribution: 57% male and 46% female.	Gender distribution: 52% female and 48% male (2021).
	Only a small percentage of VET graduates enter university; some continue to mid-level technical colleges affiliated with the Ministry of Higher Education and Scientific Research.	Nearly 80% of VET graduates enter the job market or continue with further studies (one year after graduation).
VET teachers and trainers	Attracting qualified teachers is challenging due to low social status and low salaries. Although 68% of VET teachers have a bachelor's degree, there are significant issues with the competence of teachers (weak pre-service training, limited in-service training, and limited industry experience). The recently established Technical Vocational Education for Teachers' Academy aims to support teachers' professional development.	VET Teachers are respected in Finland. All VET teachers are required to have a master's or bachelor's degree in their field. They must also complete pedagogical teacher training (60 ECTS) and have relevant work experience. Teachers are required to participate in inservice training to ensure their skills remain up to date.
VET qualifications & NQF	Various qualifications exist at the different levels of the system, offered by different VET providers. A National Qualifications Framework has been under development for several years but hasn't yet been fully operationalised.	The Finnish NQF is based on the European Qualifications Framework for Lifelong Learning (EQF). The Finnish VET system offers three vocational qualifications: upper secondary vocational qualification (I-VET, EQF level 4), further vocational qualification C-



		VET, EQF level 4), and specialist vocational qualification (C-VET, EQF level 5).
Collaboration with employers and WBL	There are existing but weak links between VET providers and employers despite a long history of public-private partnership projects.  In the past, various initiatives have been implemented aimed at developing WBL models. However, participation in WLB has remained low (2% in 2016), and the government aims to increase participation to 50% by 2025.	The private sector and employers participate in anticipating skills needs and developing vocational qualifications, as well as in implementing WBL and assessing students' competences. All VET students take part in WBL. The amount of WBL varies according to the student's personal competence development plan. IT can cover an entire qualification or smaller parts. WBL is organised as apprenticeship training (students receive a salary) or as a training agreement (unpaid training).
Quality Assurance	The quality assurance system of VET in Egypt is based on the accreditation of VET providers. NAQAAE has been the authority for quality assurance and accreditation in all sectors of education until 2021. In 2022, the president signed a law to create a separate quality assurance body, EQTAAN, for VET.	Close collaboration with the world of work is essential for quality assurance in VET. The main QA components include quality management systems implemented by VET providers, national steering and regulation, as well as VET providers' participation in external evaluations. There is no inspector or ranking system for education providers.

In conclusion, the comparative analysis reveals significant differences between the VET systems in Egypt and Finland. However, despite these differences, there are notable similarities in their strategic goals. In particular, Egypt's TE 2.0 strategy focuses on developing areas such as competence-based learning, professional development opportunities for teachers, collaboration with employers, work-based learning, and improving the perception of VET. These elements are also integral parts of the Finnish VET system.

In Egypt, there are negative attitudes towards VET, and it is often seen as a last resort option. Challenges in attracting qualified VET teachers also exist, although efforts have been made to increase the profession's attractiveness and improve professional development opportunities. In contrast, Finland's VET system is highly regarded, with approximately 50% of students opting for



vocational education after basic education. Teaching in VET is also an attractive career option in Finland, as reflected in the teacher training intake: less than half of the applicants are admitted.

The VET governance structure in Egypt is fragmented, involving several ministries and institutions. In Finland, VET is based on trust and shared responsibility. The Ministry of Education and Culture sets the overall goals of VET and grants licenses to VET providers who have considerable autonomy in organising and targeting their education offerings.

VET is publicly funded both in Egypt and Finland. However, financing in Egypt is based on the previous year's expenditure, whereas the Finnish financing system includes various mechanisms that also reward VET providers for outcomes, effectiveness and efficiency.

In Egypt, the vocational education and training (VET) system offers multiple qualifications through different providers at varying levels. However, the National Qualifications Framework (NQF) in Egypt – which would facilitate the establishment of clearer and comparable qualifications, increase access to qualifications and skills development, improve alignment with the needs of employers, enterprises, and individuals, and enable benchmarking and quality assurance against national and international standards – is yet to be fully operationalised. The Finnish NQF is based on the European Qualifications Framework for Lifelong Learning (EQF) and encompasses three vocational qualifications: upper secondary vocational qualification, further vocational qualification and specialist vocational qualification.

Despite multiple efforts to establish WBL in Egypt and the successful integration of some WBL models into the VET system, overall participation in WBL in Egypt has remained low, standing at 2% in 2016. However, the government is aiming to increase participation to 50% by 2025. In Finland, the latest VET reform in 2008 increased the share of work-based learning. All VET students in Finland participate in WBL, but the amount varies according to the student's personal competence development plan.

In Egypt, the quality assurance system for VET relies on accrediting education providers. Until 2021, NAQAAE oversaw quality assurance and accreditation in all education sectors. However, a law was signed in 2022 to create a new body called EQTAAN specifically for VET quality assurance. In the Finnish context, quality assurance is comprehensive, including various stakeholders and consisting of national regulation and steering, VET providers' quality management systems and self-evaluation, and external evaluation activities. Active collaboration with employers is also crucial in ensuring the quality of Finnish VET.



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