SUMMARY
GLOBAL TRENDS IN TVET:
a framework for social justice

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Global trends in TVET: a framework for social justice

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This paper is a contribution by Education International to **discussing the role of vocational education in supporting the achievement** of Sustainable Development Goal 4 and **UNESCO's** (2015a: iii) **related Education 2030 *Agenda***, which commits the international community to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.

The paper argues that vocational education is intrinsic to:

- achieving the sustainable development goals;
- supporting equitable and sustainable economic and social development;
- contributing to the realisation of human rights; and
- developing the productive capacity of people, their societies and their economies.

Technical and Vocational Education and Training (TVET) can help engender tolerance, reduce racism and increase the development of an inclusive society and acceptance of change.

Vocational education's role is all the more important for individuals, groups and societies who suffer the most economic and social disadvantage and are most vulnerable.

However vocational education has been subject to high levels of policy borrowing, which has resulted in:

- a lack of investment in vocational education institutions and teachers;
- the privatisation and fragmentation of vocational education provision; and
- cost shifting to students who can least afford it.

At the same time, vocational education institutions and teachers have been blamed for economic underperformance and for skills gaps between vocational education qualifications and occupations.

1. What is this research about?

The project seeks to understand the various challenges confronting vocational education and to present an approach for vocational education to meet its potential in the very different contexts in which it operates.

The project started with an analysis of data from UNESCO Institute for Statistics' (2016) data centre on enrolments in vocational education by level of education, country, region and country's income level. It is also based on an extensive and intensive reading of the literature on and around vocational education.

This paper:

1. Presents a conceptual framework to understand the ways students transition from vocational education to the labour market is affected by different social, economic, labour market and educational systems. This includes explanations as to why vocational education has a relatively low status in many countries, and the way in which the structures of the labour market affect demand for vocational education graduates.

2. It shows the unequal access to vocational education in high, medium and low income countries.

3. It demonstrates the negative impact of human capital policies that seek to marketise vocational education based on narrow instrumental models of curriculum that do not support broader development of individuals, communities and nations.

4. It argues for a social justice framework for vocational education based on the capabilities approach as developed by the Nobel Laureate Amartya Sen and the philosopher Martha Nussbaum.

5. It suggests a program of research for Education International to deepen understandings about vocational education in different contexts. The aim of the research would be to support policy development and to strengthen the role that vocational education teachers and publicly funded vocational education institutions can play in supporting social justice and sustainable social and economic development.

2. The global 2030 Education *Agenda*

Education is the subject of the United Nations' (2015) Sustainable Development Goal 4 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' and arguably education is important for achieving all 17 of the United Nation's sustainable development goals. This applies to vocational education as much as to other forms of education. In addition, vocational education is the explicit subject of:

- target 4.4 to 'substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship' by 2030, and

- target goal 4.5 to 'eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations' by 2030.

- The United Nations recognises the importance of qualified teachers in achieving these goals in target 4.c.

However, this strong support in principle for vocational education becomes attenuated and qualified as more specific policies and actions are proposed in UNESCO's policy, recommendations (UNESCO, 2015b) and draft strategy (UNESCO, 2016) for technical and vocational education and training.

In addition, vocational education is confronting **several challenges**:

- growing unemployment;
- the changing structure of the labour market which is reducing the attractiveness of traditional vocational education;
- lower status;
- privatisation;
- marketisation; and
- the application of human capital policies.

The paper argues that these challenges may be met by articulating **the mission of public vocational education institutions:**

1. as anchor institutions in their local communities that serve their industries and regions;

2. to contribute to sustainable social and economic development; and

3. to support individuals to exercise choice in how they live their lives and contribute to their families and communities.
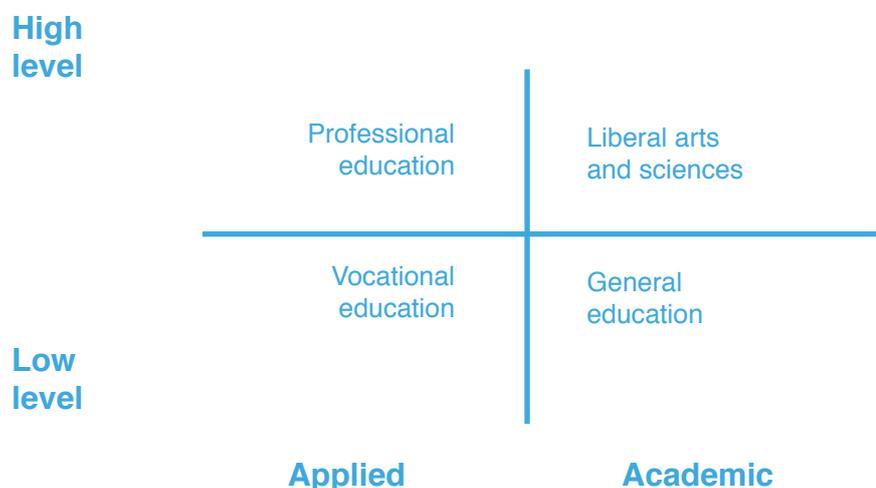
3. Defining vocational education

The paper adopts the definition of vocational education of UNESCO's Institute for Statistics (2012: 14) International Standard Classification of Education ISCED 2011:

54. Vocational education is defined as education programmes that are designed for learners to acquire the knowledge, skills and competencies specific to a particular occupation, trade, or class of occupations or trades. Such programmes may have work-based components (e.g. apprenticeships, dual-system education programmes). Successful completion of such programmes leads to labour market-relevant, vocational qualifications acknowledged as occupationally-oriented by the relevant national authorities and/or the labour market.

(UNESCO Institute for Statistics, 2012: 14)

UNESCO thus distinguishes between education that is oriented to work and education that is oriented to an academic discipline. It also distinguishes education by level. These distinctions by educational orientation and level can be constructed as dichotomies to generate four types of education, illustrated in Figure 1. Of course these distinctions are not so sharp in practice, and UNESCO's recent policy statements such as its recommendation concerning technical and vocational education and training emphasise vocational education's connections with other forms of education. These dimensions are therefore better considered continua along which programs may be differently placed at different times and in different jurisdictions.

Figure 1: types of education on 2 continua

4. Enrolments in vocational education

From data also extracted from UNESCO Institute for Statistics' (2016) data centre we find that just over half of all vocational education (50.8%) is at upper secondary level (Table 1). The next biggest level is short cycle tertiary education, which is 39% of all vocational education. Unfortunately the data and method used to estimate the number of students enrolled in short cycle tertiary vocational education are not accurate enough to estimate their enrolments by country, but if they follow the pattern for other levels of vocational education, enrolments are concentrated in high and middle income countries.

Table 1: share of vocational enrolments by level and country income group, 2013

Income group	ISCED 2: lower secondary	ISCED 3: upper secondary	ISCED 4 post secondary non tertiary	ISCED 5 short cycle tertiary	Total
High	0.9	12.0	2.7	0.0	**15.7**
Upper middle	1.8	28.5	1.7	0.0	**32.0**
Lower middle	0.5	9.2	2.3	0.0	**11.9**

Income group	ISCED 2: lower secondary	ISCED 3: upper secondary	ISCED 4 post secondary non tertiary	ISCED 5 short cycle tertiary	Total
Low	0.2	1.0	0.1	0.0	**1.4**
Unspecified	0.0	0.0	0.0	39.0	**39.0**
Total	**3.4**	**50.8**	**6.8**	**39.0**	**100.0**

Source: authors' estimate and calculations from UNESCO Institute for Statistics (2016) Data centre. Data extracted 20 July 2016.

Low income countries have 8.7% of the world's population but only 1.4% of the classified vocational education. While this may be due partly to these countries' lower need for vocational graduates because of their different economies, it is also likely to be due, or at least partly due, to the lack of resources to support vocational education in lower income countries. This further disadvantages lower income countries which should be redressed with increased investment, including of policy and analysis.

5. What happens in the informal economy?

None of these figures report activity in the informal economy. The International Labour Organization (2013b: xi-xii) estimates that employment in the informal economy is around 15% in developed economies and from 50% to 70% in developing countries, and around 90% if agriculture is included. Much work in the informal economy is skilled, but most skills are developed in non formal vocational education or informally such as in traditional apprenticeships (Marope, Chakroun & Holmes, 2015: 75).

Contributing to the development of skills in the informal economy is an important role for vocational education, which has so far been mostly overlooked in practice, policy and analysis. While the informal economy is by its nature difficult to reach and is unlikely to have much resources for formal vocational education, its economic and social importance, particularly in low income countries, provides a strong case for improving its skills development.

6. Diverse roles of qualifications

Regulated occupations

Vocational qualifications are used in different ways in a variety of different contexts and have different roles. Sometimes employers use qualifications as a signal that graduates have specific knowledge and skills needed for a job they want to fill. Examples are nursing diplomas, engineering degrees and welding certificates. The content of these qualifications are specified tightly and often their pedagogy is also specified to include minimum experience in the workplace. This describes an **occupational labour market, where entry to and progression in these occupations is via specific qualifications**. The qualification and occupation is often regulated by a government body, by an occupational association or by employers and unions.

Unregulated occupations

Other times employers use **qualifications to screen applicants for potential to undertake a variety of jobs.** Examples are high school diplomas and diplomas and degrees in general arts and sciences which might be used to screen applicants for jobs such as administrator, analyst, carer, clerk, machine operator, manager and salesperson. While labour markets for these jobs do not specify occupationally specific qualifications as a condition of employment, they may be identified by sector such as finance, hospitality, property or transport. These jobs are subject to only general regulation such as of occupational health and safety, anti discrimination and minimum wages (Table 2), and consequently we can refer to them as unregulated occupations.

Unregulated occupations are found in internal and external labour markets. **Internal labour markets** are where employers use the initial qualification to screen potential employees for entry and provide enterprise specific training to graduates as part of their employment. Occupational and internal labour markets are declining in importance, and **external labour markets** are increasing in importance. External labour markets are characterised by labour market flexibility, interfirm mobility, temporary, short-term or contingent employment

and outsourcing of employment. Graduates in external labour markets must 'second-guess' the kinds of qualifications that are needed in the labour market and often have to provide and fund their own continuing education.

Table 2: qualifications as signals and screens

Characteristic	Signal	Screen
Qualification role	To indicate specific skills	To indicate general potential
Qualification specification	Tight	General
Regulation	Usually specific	General
Labour market	Occupational	Internal and external

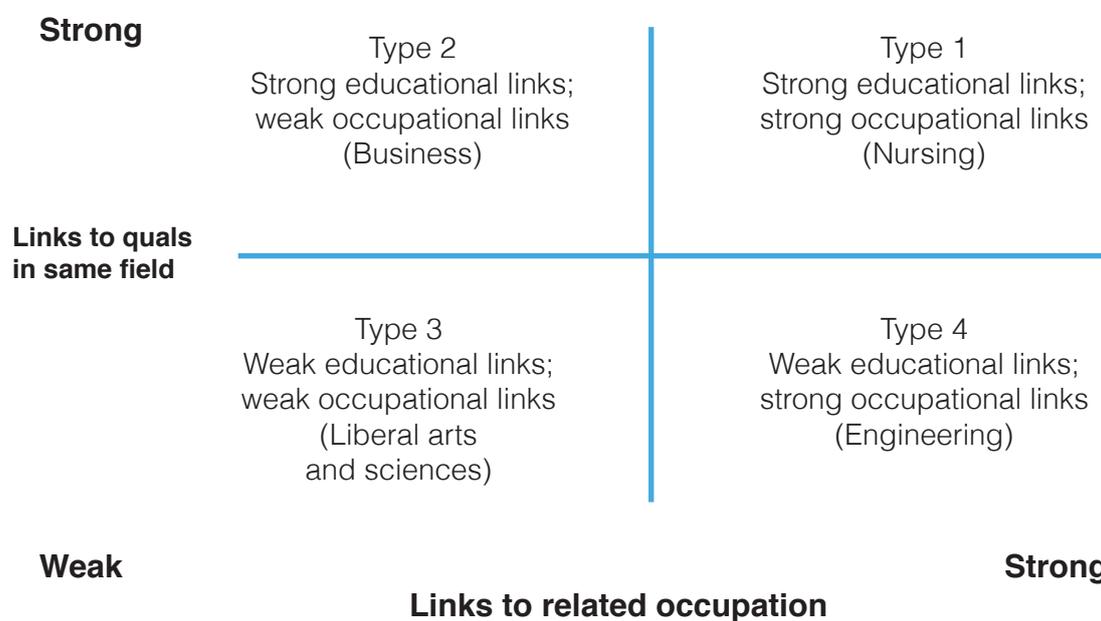**Links to other educational qualifications and to work**

Some qualifications are closely linked to an occupation: most graduates work in the occupation and most people who work in the occupation hold the corresponding qualification.

Some qualifications are closely linked to another qualification: a high proportion of graduates proceed to the related qualification and a high proportion of students in the related qualification transferred from the linked qualifications.

This generates four types of qualifications:

1. strong links to education and strong links to work (for example, nursing);

2. strong links to education and weak links to work (business);

3. weak links to education and weak links to work (liberal arts and sciences in Australia);

4. weak links to education and strong links to work (engineering) (Figure 2).

Figure 2: types of qualifications

	Strong		
	Type 2 Strong educational links; weak occupational links (Business)		Type 1 Strong educational links; strong occupational links (Nursing)
Links to quals in same field			
	Type 3 Weak educational links; weak occupational links (Liberal arts and sciences)		Type 4 Weak educational links; strong occupational links (Engineering)
Weak			Strong

Links to related occupation

Source: adapted from Moodie, Wheelahan, Fredman and Bexley (2015: 17) Figure 1 Four types of qualifications pathways.

7. Systems for transition from education to work

Vocational education is positioned differently in liberal market and coordinated market economies (Hall and Soskice, 2001). Iannelli and Raffe (2007: 50) observe that in countries with strong links between vocational education and the labour market, such as the Netherlands, the student transition system is dominated by an **employment logic**. In these systems:

- there are strong institutional networks which can support transitions from education to work (Raffe, 2008: 285);
- there are frequent interactions between vocational education and labour market institutions which transmit strong and clear signals from the labour market to the vocational education system and accord employers and/or trade unions a bigger role in designing, updating, delivering and assessing vocational programs.

In contrast, in transition systems dominated by an **education logic** such as in Scotland and other liberal market economies post compulsory vocational education:

- has weak links with employment;
- is less sharply differentiated from academic education; and
- has stronger links with higher education.

Iannelli and Raffe (2007: 51) note that in transition systems following an education logic employers select job applicants with the greatest potential indicated by the highest level of educational attainment rather than those with specific vocational skills. Vocational education functions more clearly as part of the education system, and the relationship with upper secondary education is defined more by lower status than by stronger orientation to employment.

8. What are the different purposes of professional qualifications?

The different contexts and different roles served by qualifications are reflected in three different purposes for qualifications:

1. to guide entry to and progression in the *labour market*;

2. to equip graduates to proceed to higher level studies in the *education system*; and

3. in *society* to widen access to education and work and to support social inclusion and mobility by providing access to higher levels of education and work, particularly for disadvantaged students and students from under represented groups. Vocational education can help engender tolerance, reduce racism andincrease the development of an inclusive society and acceptance of change.

All vocational qualifications should serve all three purposes but the balance between each purpose depends on the nature of the qualification, how it is used in the labour market, its links with other educational qualifications and the nature of the transition system in which it is embedded. This means that policy must differentiate between different types of qualifications to support student progression in education and the labour market, rather than having a 'one-size fits all' approach to qualifications.

9. Productive capabilities

While there will be differences of emphasis between qualifications depending on the way they support student educational and occupational mobility, these purposes may be encompassed in a common high-level role for vocational education to develop peoples' productive capabilities.

Productive capabilities are an application of the capabilities approach developed by the economics Nobel Laureate Amartya Sen (1999a) and the philosopher Martha Nussbaum (2000).

Productive capabilities are the resources and arrangements of work and the broad knowledge, skills and attributes that individuals need to be productive at work, to progress in their careers, and to participate in decision-making about work.

The focus is on ensuring that individuals have the knowledge and skills and attributes they need to exercise judgement and agency at work, engage in skilful practice, contribute to the development of their occupation, and contribute to their families and communities. Because capabilities are embedded in their social context and manifest differently in different contexts, they require local engagement with social partners, educational institutions and a nuanced understanding of the different kinds and levels of resources needed by different learners.

To develop students' productive capabilities vocational education needs to develop individuals in three domains:

1. the knowledge base of practice;

2. the technical base of practice; and

3. the attributes the person needs for that occupation.

Capabilities would be realised in different ways not only between nations and regions, but also between industries and fields of practice. They provide the conceptual basis of qualifications, but the specific focus and content of teaching and learning and curriculum requires deep understandings of the contexts for which students are being prepared, engagement with local communities of interest, and negotiation over the outcomes.

10. Next steps

Teachers and strong publicly funded vocational education institutions are the key building blocks of strong vocational education systems that can contribute to social inclusion, and sustainable, fair and socially just economic prosperity. Publicly funded vocational education institutions are the key anchor institutions in their communities and local industries. Vocational education teachers and institutional leaders are deeply involved with their communities, understand their needs, and how to support them. If they are to do their jobs effectively, two conditions are necessary:

1. First, there must be an acknowledgement of the **role that vocational institutions play in supporting and sustaining strong, resilient and productive communities.** Unlike schools and universities where there is a broadly shared understanding about the role these institutions play in society, there is no shared understandings about the role of vocational education institutions and teachers, and this is a serious problem for our sector.

2. The second condition is that vocational education institutions, teachers, and their unions need to have **a good understanding of the nature of the transition system in which they operate**, and the kinds of policies, practices and approaches that are needed to support social and economic development, and to support students' transitions to the labour market. This includes an understanding of the different ways the capabilities approach can be applied in different types of transition systems, if it is to be used as a conceptual basis for vocational education qualifications as well as for evaluating the role and purpose of vocational education and its institutions more broadly.

Consequently, this paper proposes that Education International develop a research program that:

• Explores the nature of **different types of transition systems** in low, medium and high income countries, and the different kinds of 'vocational streams' that exist within these countries, the nature of the social partnerships that underpin them, and the potential for further development of social partnerships;

• Considers the role and relevance of **the capabilities approach** in these countries at the level of policy and at the level of qualifications;

• Develops and articulates an analysis of the **role of publicly funded vocational education institutions** in supporting strong student transitions within the different types of transition systems, and in the role that vocational education institutions play as anchor institutions in their communities, and in developing, articulating, codifying and institutionalising knowledge and skills needed for the future.

Such a project may be the basis for partnerships with key international bodies and national governments for a small number of action research projects that seek to develop the notion of vocational streams and the capabilities approach in different contexts. Such projects could inform the development of more nuanced policies that are based on policy learning rather than policy borrowing.

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