Myths and Brands in Vocational Education
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This book is the outcome of the 20th anniversary conference of the ‘VET&Culture’-Network, which took place in Tampere, Finland. It had two topics, myths and brands and historical development in vocational education, bringing together researchers from all over the world. Through discussions within the network and subsequent editorial work, a set of papers was selected and further developed into this publication. They show that a cultural perspective adds substantially to the understanding of how vocational education has been enacted in various historical periods, and that the dominating concepts of models and systems need to be questioned and reframed.

We express our gratitude to all who contributed to making this publication possible, especially Mr. Markus Huhtamäki for proof-reading and editing of chapters and the staff of Cambridge Scholars Publishing for their advice and help in getting into print.

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In Tampere and Vienna, September 2015
INTRODUCTION

MODELS FOR MYTHIFICATION AND BRANDING
OF VOCATIONAL EDUCATION

ANJA HEIKKINEN AND LORENZ LASSNIGG

**Bringing culture from the margins to the shop window**

The policies and politics of industry- and market-relevant learning triumph world-wide in all forms and stages of education. Different models of (vocational) education are on sale at the global skilling mall, while traditional solutions of relating work and education lose their credibility. Researchers engage in ranking and bench-marking educational systems, and in developing quality-assurance and evaluation tools for their trans-national bargaining. Since the beginning of the Vocational Education and Culture-research network in the early 1990s, the interest in research on vocational and work-oriented education has increased dramatically. The liberation of financial markets, the launch of utopias about knowledge-based economies and learning societies have gone hand in hand with the trans-national search for best practices and their justification in educational politics. Studies assessing and comparing countries’ performance in learning and in qualification systems have mushroomed everywhere.

In their 1st conference in 1993, the networkers considered that “most European and national research… is quite pragmatist, short-termed and without reflection on cultural and historical context… If researchers find necessary an educational contribution to European science and policy-making in questions of vocational education, a joint endeavour is needed. This… should make a step away from monological, nationally restricted comparisons towards a reflective dialogue… A dialogue among different academic traditions is one prerequisite for understanding peculiarities of European vocational education also in a wider context” (Heikkinen 1994). Since then historical and cultural notions have become increasingly included into trans-national and comparative studies. However, this seems
to have been paralleled by exploitation of historical and cultural research for the advancement of skilling industries and education export. Education providers and practitioners are increasingly expected to generate brands, which would attract global customers – policy-makers and industries. Educational brands also advertise countries as smart environments for global investments and industries. While successful branding most often includes mythification of the branded objects their findings may, despite researchers’ good intentions, end up into myth-fabrication and promote marginalization of autonomous research collaboration.

This publication has two main intentions. On the one hand, it tries to describe and discuss whether and how, and with which consequences certain developments in (vocational) education have become mythified and branded in different cultural contexts, and what kinds of interpretations may be provided for this. On the other hand, it aims at questioning, how researchers are contributing to mythification and branding processes. In this context, the use of the concepts of myth and brand is especially motivated by the overwhelming discourse of ‘models’ both in educational policy and in research. Although the contributions to this volume repeatedly show, that the developments and solutions in (vocational) education are difficult to explain through universal and abstract criteria, why is ‘modelling’ so attractive for policy-makers and researchers, and with which consequences? We may hypothesize that modelling in fact contributes to mythification of historical developments into such forms that allow the creation of brands, which are in turn suitable for national and trans-national marketing that considers education as a function of business-economic competitiveness of countries, regions or companies.

Misuse of models

Models of vocational education, which were originally motivated by the goal of understanding different configurations of institutions, result in abstract and simplified ‘objectified structures’, which can be further discussed and analysed, and also refined through the research process. However, these modelled structures at the same time develop a life of their own: they transform into seemingly real objects that are prone to be manipulated and even transferred from one context to another. Although this transformation is typically done by practitioners and policy-makers, advocacy driven researchers or developers also contribute. We contend that at this stage of reification mythification of models starts to take place, followed by branding them with creative and colourful phantasies.
Examples from this are the imagined transparency of qualifications through Qualifications Frameworks, or the automatic transition of young people into employment provided by Dual Apprenticeship Systems, or the increase of educational opportunity provided by a Comprehensive School Model.

Myths and brands are, however, also strongly questioned by research on policy transfer and policy learning. The main argument is that in attempts to transfer models from one context to another, they are substantially transformed. This is due, firstly, to lack of understanding, and to false selection of elements from a holistic model. We can compare this with the export of a complex industrial plant, when the question arises, whether the plant as a material object is the same in a very different geographical and cultural context, with a different climate, different industrial relations, work habits and education structures. The immateriality of educational models, which are also embedded in certain polity structures, even multiplies these problems of transferability. We assume that branding and mythification processes make a transfer even more difficult, because they drive attention away from reality, and towards abstract expectations and specifications.

In the development of models of vocational education, the historical conceptualisation by Wolf-Dietrich Greinert (2004, 2005, 2010) has been particularly influential. He has analysed exemplary solutions in vocational education in selected nations of Europe, compared differences in their work cultures, and finally embedded three models of vocational education into their holistic context. As outcome he describes “the liberal market economy model in the United Kingdom, the state bureaucratic model in France, and the dual corporatist model in Germany” (Greinert 2005, 12), which include their own distinct orientation towards training. Greinert considers these models as exemplary responses to the first industrial revolution, and as different modifications of the common traditional craft-based education. He applies a system-theoretical approach for understanding how the models emerged, considering them as sub-systems embedded in sub-systems of labour and capital, in the self-referential closing of nation-state systems.

In the mythification process the complex reflective approach has been simplified into a topology of school-based, market-based, and dual market-and school-based models of vocational education. This simplification conceals the difficulty of classification based on models because of their embeddedness in the broader culture, and the conceptual closure of
transferring them from one culture to another. However, based on his analysis on the US and Japan, on Austria and Switzerland, and more sketchy on other countries, Greinert (2010) does claim that the ‘immense variety of methods of qualification’ in the world can be classified according to his typology. The classification of the three selected nations provides them a pure and hegemonic status, to which others have to be matched. We might ask why not other ideal-typical models of qualification and work culture exist in the world, and how they would compare with the ‘classical’ ones.

Furthermore, Greinert builds his analyses on ‘classical’ responses to the second industrial revolution of mass production and Taylorism. We might ask, whether the responses to the third or fourth industrial revolutions based on information, bio-technology and digitalization can be analysed through his typology. Globalisation and the emergence of new world powers with diverse cultural traditions might cause changes in the models. It may be that the models have broken and new demarcations are coming up. Suggestions for them are a multi-polar view of several cultural realms, that might conflict or not with each other (Huntington 1996; Sen 2006) and a revision of the Eurocentric view of the economic powers in global history (Theory, Culture & Society 2006). Still others point to a breakdown and regrouping of demarcations by globalisation that would set new standards for the development of education (Drori et al 2006) or lead to transnational manpower strategies in the realm of the multinational companies (Brown et al 2011).

New classifications have also emerged that focus on the interrelation of education and employment and on the tertiarisation of education. A recent classification (Busemeyer & Trampusch 2011) is based on the degree of involvement by state or companies in the system of vocational education. It includes four types: statist (Sweden, France), liberal (Anglo-Saxon), collective (Germany etc.) and segmentalist (Japan) systems. The classification is similar to Greinert’s models, but the segmentalist type with high involvement of firms and low involvement of the state is new.

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1 Greinert (2005, 21) states that “Structures of vocational education and training are not institutional arrangements that can be exchanged at will but are, as we have been able to show, integral parts of national cultures of work which are generally both firmly rooted in history and interwoven with the current specific structures of national labour markets, e.g. with the particular recruitment strategies of various enterprise cultures; they are also linked to the specifics of each country’s employment law and with the widely varying ways in which social security is organised. And not least, they are firmly tied in with the values of the working population of each country.”
Instead of holistic models, this typology suggests an analytical device to differentiate political processes and actor constellations in collective skill formation.

**Myths and brands in cultural context**

While the universal models and brands of vocational education primarily originate from certain regions in Europe, this publication problematizes their viability in different cultural contexts. The section about the Mediterranean and Continental region includes chapters with inputs from Spanish, Italian, Swiss and Austrian contexts, and in particular provides insights from the Mediterranean region which is not much covered in literature so far. Although influenced in different ways by Europeanization, the East-Asian and East-African regions provide different perspectives, discussed in chapters from Tanzanian, Ugandan, South-Korean and Japanese contexts. Finally, the Nordic region seems to have enough in common to be introduced in a separate section discussing developments from Finland, Sweden and Norway, compared with globally influential British and French traditions. Despite this clustering of the chapters, they still have rather different approaches. Some focus more on descriptions of historical developments, others on comparing differences between countries and systems, yet some being more policy-analytical and theoretical.

Europe has extensively influenced economic, political and (vocational) educational development in the rest of the world, but the impacts of its various regions differ, not least because of differences between regions themselves. According to the chapters in the section of Mediterranean and Continental Europe, initiatives by industry and apprenticeships are distinctive to myths and brands of vocational education in this cultural context. In her historical analysis Chiara Martinelli shows, how the attempts of Italian politicians to learn from German evening schools and to implement daytime vocational schools similar to Germany and to new French vocational schools failed because of dominant popular expectations, which prioritized careers and positions in public administration and big industry. Lorenzo Bonoli and Esther Berner, on the other hand, challenge the myth about rational and consensual adoption of the ‘Swiss model’ in vocational education. While in the French part of Switzerland apprenticeship has been aggressively branded in order to become accepted, in the German part it has rather been an outcome of autonomous industrial actors than implemented by politicians. Although increasingly mediated by the EU, competitiveness in global markets puts countries in Europe into uneven
positions. Fernando Marhuenda provides an analysis on how during the economic crisis national solutions in vocational education are undermined. The precarious labour market, weakening of unions and occupations, is justified by introducing the superior German ‘Dual System’, however relying on teachers’ and schools’ efforts without commitment from employers. Lorenz Lassnigg analyses critically the promises of efficient transition to labour market in the brands of ‘dual systems’ in Germany, Switzerland and Austria. He shows that in fact the nature of transitions builds on wider economic and political structures, where vocational education is also embedded. Simplifying assumptions about functioning of apprenticeship in different contexts make export of certain models very questionable.

Although East-Africa and East-Asia differ considerably, they share a history of adopting European models of education (even if later as Anglophonic versions outside Europe, such as the US, Australia and South Africa). Supra-national agencies and global competition have promoted implementation of certain models in both regions. However, in East-Africa this is linked to exert suppression and to negative branding of indigenous knowledge, skills and ways of life. A striking indicator of the denial of their value is the still continuing dominance of colonial languages in education as well as politics, economy and administration. On the contrary, in East-Asia indigenous world-views and religions have been respected and national and cultural pride for industrial and occupational heritage have been maintained and are backing the translation of foreign models to local contexts.

In his chapter Wycliffe Tusiime discusses attempts to combine indigenous knowledge and skills to formal vocational education in Uganda, with its strong influence from Britain prioritizing academic education, especially for civil service and administration. Interestingly there seems to be a need for branding workshop-based education as a solution for inclusion of indigenous knowledge and skills into vocational curricula. Perpetua Kalimasi analyses popular and political myths of education in Tanzania, developed in pre-colonial, colonial and post-colonial periods, and visible in a low status of vocational education. She considers universities as crucial actors in self-critical reflection, which should promote a move beyond indigenous, colonialist, village-socialist and supra-national sponsors’ conceptions. Richard Daly makes an interesting historical comparison about export of European educational brands. There are striking similarities between the colonialists’ industrialization projects in North-West America in the 19th century, and sponsors’ efforts to modernize economies in East-Africa today. In both
cases, initiatives for relating education to indigenous skills and knowledge have been marginalized in favour of exported educational models, representing cultures and values of areas of their origin.

In her chapter about Japan, Mikiko Eswein questions the myth of Japanese vocational education, often classified as a kind of market or mixed (Greinert) or segmentalist model (Busemeyer et al. 2011). She analyses a historical transition period, when political attempts to develop schoolish forms of vocational education were rejected in favour of company-based education and academically oriented technical institutes. The importance of cultural heritage both in political and industrial decision-making and in popular preferences of education in East-Asia is further analysed by Sunghoe Lee. She shows how patriarchal order in Korean industry and households is visible also in the meanings of education. Majority of both men and women maintain a cultural myth, where women are considered as managers of their children’s careers, and are expected to subsume their educational interests to this purpose.

Most chapters dealing with Nordic cultural context discuss the status of apprenticeship-type of education. It may be argued, that distinctive empirical features in Nordic vocational education are under-researched and under-theorized, while both researchers and policy-makers tend to remain in exported discourses on models, such as school-based, dual and market models by Greinert. This may be due to the short history of vocational education research, especially from historical and philosophical perspective, and its emergence during neo-liberalist politics, which has promoted the search for best practices in global education and research markets. However, the chapter by Fay Lundh-Nilsson and Anders Nilsson show that classifying Swedish vocational education simply into a schoolish model is misleading. Their analysis on changing strategies of big companies and policy-makers makes clear, that the idea of countries choosing a certain model of vocational education is a myth. Through comparisons between Finland, France and England Anna Mazenod questions both the myth of apprenticeship as the best vocational education practice as well as the model-approach in vocational education research. She shows that what is called apprenticeship in fact means quite different things in different cultural contexts. Liv Mjelde reflects on the Nordic discussion around apprenticeship in the beginning of 20th century. In their defence against growing big industry and modernization, craft associations willingly used Georg Kerschensteiner’s current ideas about the educational value of traditional workshop learning. The chapter by Leena Lietzén, Johanna Lätti and Anja Heikkinen discusses the myth of strong Finnish (Nordic) women and whether and how (vocational) education has
contributed to this. They argue that occupational and educational sex-distinctions are embedded in culture, which actualizes in interdependencies of local (national) and global economy and politics.

Despite the variety of topics and approaches, all chapters challenge the myth of free choice of models in vocational education. The concrete and complex economic and political interaction inside and across different cultural contexts seems to lead to solutions, which are not planned or decided by distinctive actors. This reminds of Greinert’s comments about emergence of the models as interaction between structures, institutions and actors. “The pattern-setting effect did not relate to the policy or ‘system’ level of vocational training, however, which was as yet not discernible as such. The adoption of new types of training occurred rather at the level beneath, the operational level, i.e. the level of immediate teaching and learning: there is plenty of evidence for the creation of a number of typical training plans for particular industries” (Greinert 2005, 44). However, in the context of globalizing and regionalizing markets, holistic models of vocational education in a nation-state seem to be losing their attractiveness among companies and policy-makers. For example the German ‘Dual System’ is increasingly advertised by supra-national agencies and exported in an incremental manner. There may be emerging new myths and brands of vocational education, where previous models are deconstructed into elements, which respond to the needs of flexible and standardised competences of global companies. Whether this provides new options for cross-cultural collaboration in shaping vocational education among workers, researchers and policy-makers, remains to be seen in the future.

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PART I

MEDITERRANEAN AND CONTINENTAL EUROPEAN REGION
Despite its relevance in economic history, the history of vocational schools has not been given very much attention by research. In several countries (e.g. Germany, Japan, France and Scandinavian countries) the topic is widely studied, but this is not the case for Italy (CEDEFOP 2004).

A few reasons prevent scholars from tackling the research (Zamagni 1996). Vocational schools were established and managed by councils, private institutions and citizens; it is only starting in the last decades of the nineteenth century that a few governments tried to regulate the schools. Hence data about them is rare and sources do not collect information in a standardized way. Pursuant to teachers’ and politicians’ claims during the so-called “Italian liberal age” (1861–1914), vocational education was tantamount to popular post-elementary education. However, until now it has not been possible to verify their assertions through quantitative data. Was the vocational education “brand” effective? Elaborating quantitative data helps to understand which role vocational schools played in Italian post-elementary education; findings can be compared with scholastic booklets in order to assess how much vocational education was a mythical brand and what dovetails with the data.

This paper aims to focus on the quantitative and qualitative history of Italian vocational schools between 1861 and 1914, with the intention of filling this remarkable gap. The analysis will deal with male industrial schools and male schools for draughtsmen; female vocational schools were too few to influence Italian industrial development. It aims to answer the following questions: what is the legislative history of vocational education and the extent of state involvement in vocational schools? Was enrolment in vocational schools higher than enrolment in the other post-elementary schools? Thus, the first section deals with legislative history
and will compare the history of vocational schools in Italy with that of France and Germany. The main sources are ministerial reports, acts and bills discussed between 1861 and 1914; original files from the Ministry of Agriculture, Industry and Commerce (hereafter MAIC) archives have also been analysed. The second section deals with data about vocational enrolment and compares it with data about post-elementary enrolment: the sources and methods used to collect this data are also explained in the second section. Finally, the third section presents conclusions and outcomes.

**The legislation of Italian vocational education**

From the second half of the nineteenth century to the Great War, the second wave of industrialization in Europe brought with it a new set of technologies. In terms of human capital, the second wave of technology needed new skills (Lazonick 1979). At the same time, the middle classes were pushing for more of their sons to attend secondary schools as, until that time, they had only been opened to a narrow élite (Ringer 1987, 3). Along with lyceums, a new kind of school was organized in order to educate the intermediate ranks of workers in factories – the vocational schools.

Almost every West European state tried to meet the new demands and between the nineteenth and twentieth centuries enacted laws about vocational schools. The most important laws to influence the history of Italian vocational schools came from Prussia (and then Germany) and France (Raicich 1993). Italian politicians and vocational teachers linked vocational education to industrial development in pre-industrial areas. Indeed, for politicians and teachers, to improve workers’ skills was to modernize Italian industrial processes and technology.

**Vocational education in Prussia and Germany**

The Prussian scholastic system started to be organized as of 1830, when private citizens and factories developed a system of industrial post-elementary evening schools for workers. There were two kinds of evening schools: the first one was a three-year school for young workmen, the second a three-year school for prospective foremen (Frommberger & Reinisch 2004). Prussia was the region where most of these kinds of school were established: after German unification, workers’ schools were also founded in the other regions, particularly in Bavaria and Saxony. In 1891 a federal law developed evening tuition and allowed German states
to force workers under the age of eighteen to attend vocational schools; eventually, through a federal law approved in 1900, Germany forced young workers to attend at least three years of post-elementary vocational evening schools (MAIC 1907).

### Vocational education in France

The German system was characterized by the significance of workers’ tuition and by private initiative regulated by federal and state legislations (Greinert 2004). The French system featured a growing state involvement and it was focused on daytime tuition. The suppression of guilds in 1791 through the Chapelier Act urged the revolutionary government to establish vocational education in order to educate artisans and foremen and three post-elementary vocational day schools were already established under Napoleon I. The most important innovation concerned the *Conservatoire des arts et métiers*, an industrial museum and evening school which organized courses for workers and artisans (Day 2001). The French undertakings were imitated by other European countries such as Austria and Italy, where the Industrial Museum was opened in Turin in 1871 (MAIC 1908).

After the Bourbon Restoration, vocational tuition enjoyed scarce consideration. Only under Napoleon III did the establishment of a network of vocational schools feature on the political agenda again. In 1868 the Morin government guaranteed vocational schools financial aid which could cover two thirds of the whole outlay (Day 2001).

The establishment of the Third Republic in 1879 made a mark on the history of vocational schools. The nation-building process involved vocational tuition too, as republican politicians opened industrial and artistic-industrial schools to improve workers’ skills and shape their mentality (Frommberger & Reinisch 2004). The French government increased its power over vocational schools. In 1880, the Corbon Law allowed the state to establish industrial day schools and founded the *écoles manuelles d’apprentissage*, a post-elementary day school which lasted three or four years (Anderson 1970). A second kind of school was established in 1899: the *école nationale professionnelle*, which devoted the main part of its weekly activities to manual training. Notwithstanding the great differences between the two systems, we notice a common element, namely the growing involvement of the state in vocational education.
First steps in Italy

This process also happened in Italy in the same years. In 1861, during the so-called Risorgimento, the kingdom of Sardinia unified almost all the former Italian pre-unitary states. Only Veneto, Latium (with Rome), Trento, Trieste and South Tyrol were not included in the new-born kingdom: Veneto was annexed by Italy in 1866, Latium in 1871, and Trento, Trieste and South Tyrol in 1918, after the First World War. Italian scholastic organization adopted the Casati Law, which was signed into law in the Kingdom of Sardinia in 1859 and took its name from the Minister of Public Education, Baron Gabrio Casati. The law laid down four years of primary school for children between 6 and 10 years. After primary school, it set out three post-elementary schools: the ginnasio-liceo (gymnasium), the scuola tecnica (technical school) and the istituto tecnico (technical institute), as well as the scuola normale (teachers’ school) for training primary school teachers.

All of these schools were managed by the Ministry of Public Education. Only the istituto tecnico was controlled by the Ministry of Agriculture, Industry and Commerce until 1878; then it was managed by the Ministry of Public Education. The ginnasio-liceo was a school similar to the Prussian Gymnasium and it was divided into the ginnasio, which lasted five years, and the liceo, which lasted three years. Only the liceo allowed students to attend universities (Scotto di Luzio 2001).

Technical education mirrored the Prussian Realschulen and it was divided into the scuola tecnica, which lasted three years, and the istituto tecnico, which lasted five years (Soldani 1981). According to Minister Casati and his assistants, technical schools were to be a sort of manual training school. However, between 1862 and 1877 istituti tecnici and scuole tecniche were reformed five times and they started to turn out their enrolled students as middle-ranking clerks.

The Casati Law allowed the establishment of post-elementary schools, which did not have to follow the curricula the law had determined for technical schools and lyceums. Therefore, each vocational school was different from the others in terms of the subjects and the number of years each course lasted. During the first decade after the Risorgimento, the number of industrial and artistic-industrial schools was low and it increased very slowly. In 1862, a report written by the Ministry of Agriculture, Industry and Commerce (hereinafter MAIC) stated that in Italy there were only 10 vocational schools (MAIC 1862).
Influence from the Paris exposition

The Paris Exposition in 1867 changed politicians’ ideas about vocational education. The Exposition highlighted two issues: the first was the economic convergence of the Prussian, French and Belgian industrial systems with the English one and the second was the relationship between the industrial development of these countries and the establishment of vocational schools (Are 1964; Soldani 1994). A few years later, day schools providing manual training started to spread throughout Europe. An example was the Imperial Technical School of Moscow where students worked with workmen and foremen (Meyser 2004).

The Paris Exposition led the Italian government to increase its interest in the European industrial and artistic-industrial schools systems. The Italian government appointed a few scholars in order to analyse foreign vocational schools. Among the inquiry reports, the most important one was written in 1870 by the ministerial inspector and pedagogue Dino Carina. He urged the establishment of day schools for prospective skilled foremen in the most important industrial towns, but he advised against manual training and evening schools. In his opinion, the investments to buy up-to-date machinery made manual training schools too expensive for the state budget and the improvement of pupils’ skills was not guaranteed by evening schools.

Benedetto Cairoli and the reform of vocational schools

The Italian government shared Carina’s concerns about manual training schools. Nonetheless, due to the low rate of people enrolled in post-elementary day schools, politicians decided to look to the Prussian example of evening schools for workers.

Vocational education was regulated in 1878. In the same year responsibility for technical institutes passed from MAIC to the Ministry of Public Education. Hence, as of 1878 MAIC only managed vocational schools.3

In 1879 MAIC Minister Benedetto Cairoli sent an official letter to the Italian prefects. The letter urged private initiatives in the field of industrial education and guaranteed financial aid of up to 40% of the whole outlay. Eventually, Cairoli suggested the establishment of two kinds of schools, the scuola di arti e mestieri (arts and craft school) and the scuola di arte applicata all’industria (school of industrial arts). The scuola di arti e applicata all’industria, Annali dell’industria e del commercio, n° 13, 6–10.
mestieri was a three-year course for the workers of big factories who had obtained the five-year primary school leaving certificate. The scuola di arte applicata all’industria was a three-year course focusing on draughtsmanship for artisans with two or three years of primary school attendance. The curricula taught in industrial and artistic-industrial schools were practical and they were focused on drawings, science and technology.

Cairoli was influenced by both the French and the German models (Charmasson, Lelorrain & Ripa 1987). The blueprint of Cairoli’s official letter linked ministerial financial aid to the law enacted by the French Minister of Commerce eleven years before. In 1879, politicians and vocational teachers began to maintain that vocational schools were fitted to industrial demands and training the working classes. Booklets and presentation addresses focused on the advantages a working-class family could enjoy if they chose a vocational school over a scuola tecnica or an istituto tecnico. In their opinion, technical education was too theoretical and diverted the working class from practical jobs towards clerical ones. Their fears of an increase in unemployment among high-school leavers were associated with conservative views: in their opinion only vocational schools could maintain the traditional social structure as their manual training accustomed the working class people’s offspring to manual jobs. Thus, vocational schools were presented as the best choice for working-class families and they were contrasted sharply with technical education.

Stagnation after Cairoli

After Cairoli’s initiative, the history of Italian vocational education reached a deadlock. Between 1878 and 1892 three bills were proposed with the aim of centralizing vocational education. However, they were not signed into law because of unstable governments. The first bill was proposed by Minister Grimaldi in 1886 under the last Depretis government (1886-1887): it aimed to increase the state contribution from 2/5 to 2/3 of the whole budget of each school. Moreover, it declared the compulsory role of manual training in industrial

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4 Italian National Archives (hereafter INA), MAIC paper, bundle 371, Relazione al Signor Ministro, 1 January 1877.
5 Such as the following booklets: Scuola industriale di Belluno 1892, Distribuzione de' premi, Belluno, [s.n.] and Scuola d’arti e mestieri di Udine 1887, La scuola d’arti e mestieri di Udine e la proposta di legge speciale sull’incremento dell’industria e dei commerci, Udine, [s.n.].
6 Italian Parliamentary Papers, Chambers of Deputies, n° 118 bis., 29th November 1886.
schools. However, the death of Prime Minister Agostino Depretis in 1886 and the following collapse of the government stopped the bill going through. Grimaldi’s successor, Minister Miceli, tried to repropose the bill under the first government led by Francesco Crispi (1887–1889) but another government collapse occurred in 1889 and this bill was also stopped.\[^7\]

Eventually, during Giovanni Giolitti’s first government (1892–1893), in 1892 Minister Lacava wrote another bill to standardize industrial and artistic-industrial tuition. However, he did not include Miceli and Grimaldi’s most important proposal, that is, the increase of ministerial financial aid. Boosting state subsidies was judged controversial because between 1890 and 1894 the Italian state budget was struck by the economic and financial crisis.\[^8\] However, Lacava’s bill was stopped because his government collapsed again in 1893.

**Cocco-Ortu and the centralization of vocational education**

The beginning of the new century marked a new stage in the history of vocational schools in Italy. Pupils in industrial and artistic-industrial schools rose from 25,673 in 1896 to 56,024 in 1914. However, post-elementary enrolment grew faster: the numbers of pupils enrolled increased from 165,575 in 1896 to 295,660 in 1914. The majority of students chose the *scuola tecnica*, which allowed them to work as a clerk or to prosecute their studies in the *istituto tecnico*: thus, increasing enrolment in the *scuola tecnica* was judged dangerous for the social order. Politicians tried to strengthen vocational schools as they did not allow students to pursue their studies after graduation. The promotion of vocational schools increased greatly and between 1906 and 1912 a review written by a few vocational teachers, “La scuola industriale”, was published with the aim of branding vocational education: in their opinion, unlike technical schools, vocational schools only trained useful workers.\[^9\]

In 1907 Italian vocational schools were centralized by the Cocco-Ortu Law, which was proposed and championed by Francesco Cocco-Ortu, the Minister of Agriculture, Industry and Commerce during the third government led by Giovanni Giolitti (1906–1909). The law divided

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\[^7\] Italian Parliamentary Papers, Chamber of Deputies, n° 78, 2/12/1889.
\[^8\] Italian Parliamentary Papers, Chamber of Deputies, n° 243, 23/11/1893.
\[^9\] Il nostro programma, *La scuola industriale*, 1 (1906), n°1, 2.
vocational schools into five groups: industrial schools, artistic-industrial schools, commercial schools, female professional and agrarian schools.\(^\text{10}\)

The Cocco-Ortu law established three kinds of industrial schools and two kinds of artistic-industrial schools. Among the industrial schools, the three-year *scuola di arti e mestieri* was aimed at students who had completed four years of primary school; the four-year *scuola industriale* was open to pupils who had completed six years of primary school; the four-year *istituto industriale* was aimed at students who had completed the *scuola tecnica*. Among the artistic-industrial schools, the *scuola di disegno* (school for draughtsmen) required two or three years of primary school attendance, and the *scuola di arti applicate all’industria* four years. Guidelines for vocational education were published in 1913 in order to provide national curricula for each institute (MAIC 1913).

Cocco-Ortu certainly enacted one of the most advanced laws concerning vocational schools because the government increased its involvement in vocational schools dramatically. The act aimed to fill the gap between Italy and the most advanced West European countries in terms of the vocational enrolment rate. As the census data shows, in Italy in 1904 the enrolment in vocational schools was less than one seventh that of Germany.\(^\text{11}\)

**The quantitative development of vocational education**

This section will consider the role of vocational schools in the Italian post-elementary scholastic system. It will describe time series of post-elementary schools with the aim of explaining the role of vocational schools within the Italian post-elementary scholastic system.

Historical sources are the first issues to be considered. Vocational schools data is not available for every year. The main sources are MAIC censuses and the *Annuario Statistico Italiano* but the data retrieved is not standardised. Another question is linked to unsubsidized schools, which are only listed in four reports published by the Ministry.

Data for subsidized schools is available for the following years: 1868–1874, 1876–1877, 1881–1882, 1885, 1889, 1892, 1896, 1898–1908, 1911–1914. Data for unsubsidized schools is only available for 1868, 1903–1904 and 1908. A linear interpolation was used for those years that were not included.

\(^{10}\) Gazzetta Ufficiale del Regno d’Italia, XLVII (1908), n°128, 2941.

\(^{11}\) My elaboration from MAIC 1907, *Notizie sulle condizioni dell’insegnamento*, 1052–1067.
Regarding lyceums and technical education, owing to the state control over *ginnasio-liceo*, *scuole tecniche* and *istituti tecnici* their data sources are retrievable and reliable, as the state recorded quantitative data from 1865 on. In addition, data about the *ginnasio-liceo* and technical education was retrieved from the *Annuario Statistico Italiano*. The only years with no available data about lyceums and technical schools were 1896 and 1897. Development in vocational education is highlighted through the contrast between vocational data and *ginnasio-liceo* and technical education data.

Figure 1-1 shows enrolment in post-elementary schools. The time series can be split into three periods. The first one lasted from 1873 to 1893 and it was characterized by a moderate but steady increase in student enrolment. The second occurred during the 1890 financial crisis and it was characterized by a decrease in the number of students. The years between 1896 and 1914 marked an exponential increase in post-elementary enrolment.

![Figure 1-1. Time series of enrolment in post-elementary education, 1874–1914. Sources: Annuario statistico italiano 1878–1915, MAIC 1868–1911.](image)

Post-elementary enrolment has to be adjusted for age cohorts. Daniele Checchi’s (1997) data is used as it records the number of people of a particular age in a particular year. Checchi’s data about the number of children potentially enrolled in post-elementary education (11–18 years) is
available from 1880 to 1914 and it is the only reliable population index for every year between 1880 and 1914. Figure 1-2 reveals that the percentage increased steadily during the first years of the twentieth century, but it remained low. In 1880, 2.5% of children who could potentially enroll attended a post-elementary school, whereas in 1913 figures had risen to 5.7%. Though the percentage doubled, post-elementary schools were only attended by high-class people. Italy was far behind developed countries such as the United States: there, in 1870, post-elementary enrolment among 11–16 year-olds had already exceeded 60% (Cvcerk & Zajcek 2013). Moreover, the percentage of people enrolled in vocational schools was insignificant: in 1913 only 1.9% of 11–18 year olds attended a vocational school.

Figure 1-2. 11–18 year old enrolled in post-elementary education (vocational schools included) and only in vocational schools, 1881–1914. Sources: Own calculations; data retrieved from MAIC censuses published between 1881 and 1920, Annuario Statistico Italiano (1881–1915) and Checchi (1997).

Figure 1-3 shows time series for lyceums, technical education and vocational schools. The time series start in 1863 since no data is available before this year.

As the figure indicates, the first significant increase in vocational enrolment occurred between 1879 and 1882, when Cairoli sent his official letter. From 1882, lagging industrial development and political initiatives threatened to lower enrolment rates. Vocational schools' income dropped between 1890 and 1892, when MAIC and local administrations reduced their
funding because of the huge economic crisis. As of 1900, the number of students started to rise again; the main increase is recorded after 1907, that is, after the centralization of vocational education thanks to the Cocco-Ortu Act.

The *ginnasio-liceo* and technical education followed different development paths. Until 1896 a steady increase occurred in student enrolment in the *ginnasio-liceo*, in other words, the most prestigious post-elementary school and the only one that gave access to all the university faculties. Between 1896 and the economic crisis in 1907, *ginnasio-liceo* enrollment was affected by a long recession.

The time series on technical education can be divided into two periods. The first one lasts from 1863 to 1896 and it was characterized by a moderate increase in the number of students; the second one, between 1896 and 1914 – that is, during the most important Italian economic development in the liberal age – was marked by a steady increase in the number of students.

![Time series chart](chart.png)

**Figure 1-3.** Time series of enrolment in the three main scholastic streams in Italy, 1868–1914. Sources: MAIC 1868–1914, ASI 1911–1917.

**Concluding remarks: The social aspects of vocational education in Italy**

This paper briefly sketches a history of vocational education in Italy between 1861 and 1914. Like in the other main West European countries, the Italian government displayed a growing interest in defining and
Introduction

In Sub-Saharan Africa, vocational skills are still believed to be important for the development of various sectors of the economy (Bennell et al. 1998, 2). Since the 1960s, vocational skills in Africa have roots in many countries and in different forms, such as village polytechnics of Kenya, Brigade of Botswana and the well-known “education for self-reliance of Tanzania” (King & Martin 2002). According to URT (1995), education can be divided into two types: formal and non-formal. Formal education includes vocational- and professional-based systems. The professional system is mainly academic and ranges from primary school to university. This comprises two years of pre-primary, seven years of primary, four years of ordinary secondary school, two years of advanced-level school and three or more years of university education. Another form/route to formal education is vocational education associated with the acquisition of skills for wages, self-fulfilment and further vocational advancement. The admission requirements for formal vocational education range from primary school leavers to form-four leavers (URT 1995). Historically, the intention of vocational education was to impart workers with necessary skills for the enhancement of efficiency based on specialisations and/or trades to meet different industrial and organisational needs (Mushi 2009; Redecker, Wihstutz & Mwinuka 2000). This implies that vocational education entails orientating learners to a generalised subject matter on a range of life skills or “trades of life” around which they
could develop some basic abilities to support and lead their lives after school (Ishumi 2008, 10).

The formal vocational-based institutions have been operating under different ministries and authorities, such as the Ministry of Community Development, the Ministry of Industry and Works, the Ministry of Education and the Tanzania Vocational Education Authority (VETA), as well as the National Authority for Technical Education (NACTE). In collaboration with donor aid, these ministries have also been responsible for the curriculum, and for financing the institutions and regulating the accreditations. The common trades include plumbing, electrical, agriculture, carpentry, masonry and bricklaying.

Apart from the formal institutions in Tanzania, there are various informal small centres for vocational skills provision. These include small workshops for welding, garages for mechanics and tailoring marts for short-term training in rural and urban areas. In some instances, the informal training takes place within the household, depending on the location of the trainer. While various reviews have been completed with regard to evaluating the vocational skills in formal institutions, informal vocational education is facing the problem of continuing to be understudied. All of these forms of vocational education in Tanzania are influenced by the implementation bodies, accreditation levels and labour-market dynamics.

Based on this introductory background, this chapter discusses the contradictions associated with revealing the myths and brands beyond the recent and inherited systems and examines the ways in which various stakeholders can tackle the myths. The chapter is organised into five sections. The first part, which comprises the context of vocational education in a wider economic and political landscape, is followed by the myths and brands to be advocated. In the last section, the roles and ways in which stakeholders may tackle the myths are discussed.

The socio-economic and political context

Vocational education is perceived to be key to Tanzania’s development (UNESCO 2012). The history of vocational education can be traced back to German colonial education in the Republic of Tanganyika. During the colonial period, the main goal of different forms of education, including vocational, was to serve the interests of the colonialists (URT 1995). As in many other developing countries, vocational education in Tanzania has undergone some reforms in the past 20 years. The reforms have impacted its implementation in different forms (King & Palmer 2010). Some trade
schools were established after independence following the 1974 Vocational Education and Training Act, which enhanced the formation of the National Vocational and Training Division in the Ministry of Labour (Pfander & Gold 2000, 12). Following the insufficiency of the division, it was later recommended that the Vocational Education and Training Authority (VETA) had to be formed under the 1994 Vocational Education Act (Nkirina 2010, 3). Apart from the trade schools, vocational skills were variably incorporated into different levels of education systems. As in many other developing countries, vocationalisation at the primary school level was meant to combine education with production (Psacharopoulos 1987). In secondary education, some schools were established to be biased towards a certain skill, such as agriculture, commerce, military and home economics. Vocational education and the education sector, in general, were guided by a political ideology of socialism and self-reliance that emphasised living and working together in schools (Ssekamwa & Lugumba 2001, 163). The main objective of vocational education was to produce graduates with trade skills for increased socio-political (socialist) and economic growth. Self-reliance was a policy following the Arusha Declaration in 1967, which was used as a tool to boost development based on the centrally planned economy. It was also believed to be important for economic justice (Pfander & Gold 2000, 3). Curriculum was to integrate the school with the community and to prepare students for working life. Schools were supposed to be not only educational but also economic in regard to contributing to their own upkeep. Schools’ economic activities, such as school farm or shop, were implemented to enable students to learn techniques, tasks and attitudes to contribute to the development of the society. This position of vocational education in the socio-economic and political context forms the bases of myths and brands of the Tanzanian vocational education today and is discussed in the following part of the chapter.

Myths and brands about vocational education in Tanzania

Based on the inherited systems of vocational education, different myths have been part and parcel of its provision. The myths attached to vocational education in Tanzania have also led to a specific brand that has been given to this form of education among various stakeholders.

To begin with, there is the perception of low-status job orientation and the lower-achievers myth. This myth has given vocational education a brand of being the option of the last resort because evidence revealed negative attitudes towards both formal and informal vocational-based
education. Some reasons for this attitude include low-status job ends and no possibilities to progress from lower-level trades to higher education levels, such as university (Sifuna 1992). However, changes were expected after the full implementation of the Tanzanian national qualification framework, which came into place to enhance comparisons of qualifications and to facilitate the competences and mobility of graduates. The objectives also aim to integrate vocational skills, academic training, theoretical and practical education (TCU 2010). These objectives remain challenging due to the current situation, in which different kinds of education systems, such as higher education, require certain credits for the applicant to be admitted. Most vocational education graduates cannot meet these requirements due to their backgrounds; thus, vocational education and other academic training (e.g. secondary and university) may continue to be more separate than integrated systems.

The essence of this myth has been built from the fact that there are two routes, vocational and academic. Learners in the vocational route are perceived to be failures in the academic route (Killis & Hogan 1983). This is because the minimum entrance qualifications comprise the standard seven education level (VETA 2013). This entails the branding of work skills as irrelevant and not enough to enable a graduate to venture into higher levels of education. In terms of stakeholders’ perceptions, including those of parents and learners themselves, there is a belief that better living conditions can be obtained in forms of employment other than vocational-based activities (Killis & Hogan 1983).

Second, there is the supply-driven myth in vocational education processes. This has been partly caused by nationalisation processes which required staff to fill vacancies left by colonialists. This facilitates the vocational education and training processes to be supply-driven, as highlighted in the 1974 Vocational Training Act, in which the National Vocational Council was established to ensure that there is adequate manpower to meet the industrial needs. The need for vocational and practical work was emphasised due to the need of artisans and skilled workers as a response to the industrial development that emerged in the formal sector (Bennell et al. 1998). Education for the urgent need of specified staff has built up a misconception among youth that jobs are there, waiting for graduates and that they cannot be created (Ishumi 2008).

Third, there is the 1970s villagisation myth. Some forms of vocational education and training, especially the one provided in the post-primary technical centres during 1970s villagisation, aimed to enhance skills for development of the villages. Skills for village development were appropriate at that time but no longer exist because of the socio-economic
and development changes. On one hand, many youths do not prefer staying and working in village-based activities, such as agriculture. On the other hand, there is a huge change from a villagisation-based economy to a current market economy, free trade and the rising private sector, which attracts graduates to find jobs in big cities. This myth applies also to the folk-development colleges, established for rural people so that they can serve their rural communities.

Fourth, there is a new and different kind of perspective on entrepreneurial-based vocational education. While the government abolished the centralised labour market, the emphasis of VET has been on self-employment, which may not be conducive to a Tanzanian context. Research has shown some factors that have been seen to be obstacles for Tanzanian self-employment, including insufficient entrepreneurial skills (Nkirina 2010), lack of capital and the lack of a dynamic and supportive economic system (Killis & Hogan 1983).

Fifth, the degradation of indigenous knowledge and the rising Western thinking that is still influencing the education system in developing countries has resulted in the new myth of dependence-based vocational education. The curriculum development of dependence-based vocational education was influenced by the aid from various donor agencies (Watson 1994). An example can be cited in the implementation of the competence-based training curriculum, as well as World Bank and International Labour Organization-based frameworks. Another example can be the new gas exploration activities, which have attracted a lot of investors to engage themselves in the energy exploration. Despite the opposite reactions and reluctances of the local community and the poor majority, the government is still mobilising more and more investors to come.

Roles of higher education institutions in tackling the myths

Higher education institutions, especially universities, have a role to play in dealing with the myths and brands related to vocational education. The broad-based way of dealing with the myths is through research and collaboration between universities, practice partners and other relevant actors in education. The aim of these strategies should be based on curriculum development and the positive change of attitudes towards vocational education. This may lay a foundation for the implementation of ideal vocational education that is relevant to the developing country’s current context. Universities should play various other roles in specific ways, as discussed here.
Higher education institutions should strive to promote vocational skills so that they can be recognised in the community and in the labour market. The assumption that the purpose of education is to ensure a graduate of securing a job and to become a productive and self-reliant member of society emphasises the importance of integrating relevant work skills in the academic-based education system (Kinyaduka 2013). In the context of this chapter, I call these skills *vocational skills*. However, the status of vocational education entrants have impacted the feasibility of these skills in academic higher education. Even at the academic-based primary school level, in which efforts have been made to impart vocational skills so as to make students self-reliant, recent studies have shown various challenges. These include a lack of expert teachers in teaching practically different skills, as well as inadequate equipment, facilities and machines for teaching (Kinyaduka 2013).

Again, universities should expand vocational teacher-training systems to bachelor and postgraduate levels. Currently in Tanzania there is only one college, Morogoro Vocational Teacher Training College (MVTTC), which produces certificate and diploma teachers in vocational education who are ready to teach at various vocational education centres. In terms of teacher training, this reveals a gap in the enhancement of vocational skills in Tanzania. Having no higher-level teacher training, such as degree (master’s and doctoral) programmes, implies that there is a gap in the research on vocational education. However, there is also scant research about how higher education can best be vocationalised. This is perceived to be caused by reluctance on the part of higher education stakeholders (Olomi 2006). While higher education institutions and employers are discussing the need for skills development, the same stakeholders are in conflict regarding the responsibility issue. On the other hand, higher education institutions may think that enhancing professionalism or sector-specific skills is the duty of employers (Mkude & Ishumi 2004). This is revealed in one of the recommendations of the 2004 tracer study of the University of Dar es Salaam, which states:

> It was however observed and agreed that universities do not and cannot provide professional training for a specific occupation. This is the task of the employer or end-user who knows the range of specific activities and schedules of work awaiting an employee. It is a task of the employer/end-user to provide the kind of occupation-specific exposure and skills. Employers and other end-users should, therefore be called upon to provide the graduates not only with induction courses but also with large in-service training opportunities to enable them to grow into “professionals”.


Universities can never make the graduates professional; employers can and should. (Mkude & Ishumi 2004, 318)

Apart from a gap in vocational-teacher training and contradictions with regard to the vocationalisation of higher education, the issue of high unit cost for running vocational-based education is still considered to be critical, according to the literature (Sifuna 1992). However, to start with, universities may use the available regional resources in collaborating with practice partners in the sharing of infrastructures relevant for various skills. There can also be long-term strategies to mobilise resources through joint research and international collaborations to seek funds for facilities in collaboration with the government.

**Conclusion**

The ecology of vocational education in Tanzania is a product of the colonial inheritance, as well as of socio-economic and political development. To a large extent, vocational education is widely perceived as a skilled occupation for standard seven leavers enrolled in different vocational training centres: formal, informal, private, religious and public. Vocational education is also recognised as the type of skills-teaching that can be integrated with other forms of education, such as primary, secondary and higher education. This integration remains challenging due to people’s perceptions of it and to the debate on how the varied skills can best be integrated within the curriculum without skilled teachers and equipment relevant for different trades.

Based on the inherited systems of vocational education, various myths have led to various perspectives as brands attached to it. Recognition of informal vocational education is an important point because of its widely spread applicability in today’s developing countries, especially Tanzania. National efforts are apparently needed to do more research in order to determine the impacts of this type of vocational education.

It is recommended in this chapter that there should be a national strategy to establish more vocational teacher-training colleges. This strategy should go hand in hand with establishing undergraduate and postgraduate programmes in vocational education so as to produce more vocational teachers and vocational teacher trainers. This strategy can start with the development of projects that link higher education institutions with practice partners, such as vocational and technical institutes. Through projects, there can be joint research teams that together can explore
various aspects related to vocational education in Tanzania, Africa and throughout the world.

References


