

Transnational Perspectives on Lifelong Learning Policies

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The influence of PIAAC results on (inter-)national adult education policy: A critical discussion of Austria and Estonia

Abstract: This article compares and analyses the results of the Programme for the International Assessment of Adult Competencies (PIAAC) in Austria and Estonia, as well as the reaction to these results in national adult education policies and in the scientific community. By the comparison, tendencies of an international influence can be recognised, namely the influence of human resources management guidelines in national policies.

Introduction

In 2012, the Organisation for Economic Cooperation and Development (OECD) performed several rounds of surveys of the Programme for the International Assessment of Adult Competencies (PIAAC). 23 European countries took part in this evaluation of adults' (16–65-year-olds) basic functional learning skills for workplace and everyday problem-solving in literacy, numeracy, and information and communication technology. The results fostered political discussions in these countries' national political institutions, and adult education scholars responded to the ranking of competencies.

Stressing policy on the national and European level, this article analyses and compares the results of the PIAAC surveys carried out in Austria and Estonia. After presenting and discussing selected data on the socio-economic background of the two countries, we compare the results and their impact in Austria and Estonia concerning policy reactions and reactions by adult education scholars. Given the similarities and differences of the two countries, the research question is: How has PIAAC influenced adult education policy in Austria and Estonia?

To answer the question and to accomplish a comparison, it is important to understand the main idea behind the OECD's development goals concerning adult education policy. As a second step, we address some methodological aspects about comparisons. Further, we take account of the methodological conditions of comparison concerning cultural similarities and differences of adult learning in different countries. We then present and compare selected PIAAC results from

Austria and Estonia and discuss responses of relevant parties. As a conclusive statement to these results, we point out some discursive and methodological aspects of PIAAC that need to be researched further.

Lifelong learning according to the OECD

The OECD aims at promoting the economic and social well-being of people around the world (OECD, 2017). It is primarily concerned with economic policy. However, education has taken on increasing importance within that mandate: education has been reframed as central to national economic competitiveness and linked to an emerging ‘knowledge economy’ (Grek, 2009, p. 24). The success of OECD in shaping the public discussion on education policies in Europe can be assessed through surveys in national education systems and the international comparison of their results, such as PIAAC, even if national differences can be noticed (Jakobi, 2012). According to Jones (2007, p. 94), ‘[s]ince the middle of the last century, international organisations have been increasingly playing an influential role as “purveyors of ideas” and as leading participants in the struggle over education policy content’. One of the main ideas brought to the political discussion by international organisations like OECD is lifelong learning (Field, 2006). In recent definitions, the term stresses the role of the individual, who is primarily responsible for his or her education and training. Additionally, individuals have to learn over the whole life span in order to be able to participate in the everyday workplace and social life and to cope with fast changes (Field, 2001).

Lifelong learning was first adopted by the OECD in the 1990s (Rubenson, 2015), and in 2002, education and training became the main issue of a separate directorate. Since then, strategies to influence education and training policies have been made more visible, for instance with the Programme for International Student Assessment (PISA). The Survey of Adult Skills of the Programme for the International Assessment of Adult Competencies (PIAAC) is an initiative of the directorate, designed to assist governments in assessing, monitoring, and analysing the level and distribution of skills among their adult populations. It is referred to as ‘an unparalleled source of evidence for policy makers’ (OECD). PIAAC is directed at providing internationally comparable data on key skills under three domains: numeracy, literacy, and problem solving in technology-rich environments. It allows for comparing statistical data on adult education for many different countries. Up until now, PIAAC includes three rounds of data collection: 2008–2013, 2012–2016, and 2016–2019.

As critics point out, the OECD has favoured an economic approach to lifelong learning (Rubenson, 2015). National education and training systems are

understood as crucial factors in improving economic growth as well as the prosperity of individuals and society. PIAAC helps to find key cognitive skills and workplace skills based on the idea that there can be a mismatch between education and training and the needs of the economy, thereby pushing nations into policy reforms for the attainment of desired results. Therefore, PIAAC allows more accurate measurement of the stocks of human capital than standard and traditional indicators of educational attainment, years of work experience, and occupational classifications. In this sense, PIAAC may help to identify areas where the greatest growth returns are likely to be had for different overall education and training investment strategies. As such, it can be understood as 'governing by numbers' (Ozga & Lingard, 2007, p. 69) in order to foster competitiveness and growth of the economy (Grek, 2010).

Theoretical framework for analysis and comparison

The analysis and the comparison of PIAAC results in Austria and Estonia will be discussed according to three social policy analytical models referred to by Lima and Guimarães (2011). The first model – the democratic emancipatory model – is based on polycentric education and training systems in a framework of participatory democracies characterised by a range of social struggles and conflicts. Policies tend to favour decentralisation and bottom-up dynamics, to the detriment of top-down ones. State programmes prefer local support for self-governing and self-managed projects and activities, promoted by civil society organisations, particularly non-profit ones, and social movements. The priorities of adult education policies are to construct more inclusive, just, egalitarian, democratic, and participatory societies, in which all the action of all the social actors matters. Social, economic, and political change is an essential purpose; education and training are regarded as empowering processes, mechanisms for social emancipation and basic social rights.

The second model – the modernisation and state control model – includes guidelines that are geared towards valuing education and training as support for social and economic modernisation. In this context, the state is a key player in defining and providing education, and its intervention in ensuring free education for all is essential. These guidelines set out to plug the gaps and social and educational needs of people singled out by various government departments. In addition, adult education and lifelong learning, especially the basic and vocational components, help to train citizens and workers, fostering social, civic, and political participation within the framework of formal public authorities and labour organisations. The policy priorities emphasise basic education projects and initiatives, namely

functional literacy, adaptive literacy, and second chance education (such as evening courses for adults).

Finally, in a third model – the human resources management model – profit-making organisations are central and the individual is seen as a rational, strategic actor. The policy priorities preferred in this model are driven by economic growth through increased productivity, competitiveness, and employability of working adults, since education and training are at the service of the development of human capital. Adult education is concerned with social, economic, and educational adaptation, where citizens are regarded as enjoying freedom of choice and being responsible for their education and training options. Education and training (in formal, non-formal, and informal forms) are gaining market value since they can be translated into investments with an economic return.

Comparing PIAAC results in Austria and Estonia

Methodological considerations

With a population of 8.6 million and 1.3 million, respectively, Austria and Estonia belong to the smaller members of the European Union. Both countries have several qualities in common and hence can be compared internationally (Reischmann, 2008): Both are rather small countries belonging to the European Union with developed, albeit differing adult education systems. Additionally, Austria and Estonia are active members of the OECD in the sense that they are some of the fastest growing skill-based economies with well-developed adult education systems and high rates of lifelong learning participation (Eurostat 2017). Considering adult education policy commonalities and differences in the developments of the two countries, we therefore aim to describe the instances where PIAAC has been part of policy development and to provide explanations for the differences in the countries' responses.

Having in mind that 'care is needed in reading reports of international surveys' (Evans, 2014) and considering the difficulties and problems of international comparison, the research question is directed at identifying and interpreting similarities and differences in terms of how the PIAAC results influenced Austria's and Estonia's adult education policy and how these results reflect characteristics of the analytical models. We hypothesise that there are tendencies of an international influence of PIAAC on adult education policy. We will try to show this using methodological guidelines proposed by Reischmann and Bron Jr (2008). Accordingly, the comparison should focus on interpreting lifelong learning and adult education in a way 'in which one or more aspects in two or more countries

are compared' (Reischmann, 2008, p. 9). The criteria established for our analysis with an emphasis on comparison include: a) main conclusions from the PIAAC results from a national (Austrian and Estonian) point of view; b) national political reaction referring to the definition and development of lifelong learning and adult education policies and programmes; c) reception by researchers, including the discussion that developed based on the PIAAC results at the national level. These criteria were established due to their relevance for understanding the influence of PIAAC results in Austria and Estonia.

Data were collected separately for the two countries, using written sources such as policy documents, research reports, and public statements of officials in the media; the main criterion for data collection was their relevance to the PIAAC study or its results. The gathered data had to be either in English or in the official languages of the countries. The selected data was analysed using content analysis, a research technique that 'seeks to analyse data within a specific context in view of meanings someone attributes to them' (Krippendorff, 1989, p. 403). Thereafter, the two countries are compared by highlighting the similarities and differences in their education policies to show tendencies of an international influence of PIAAC and the extent to which characteristics of the abovementioned policy analytical models apply.

Data discussion

Austria

For the analysis of Austria's results, a main database was the Statistik Austria report (Statistik Austria, 2013). Its data as well as public documents and research papers were analysed according to the three models (Lima & Guimarães, 2011).

The most important PIAAC results were: Austrian adult learners showed above average competences in daily life mathematics; they are under average in literacy tasks and average in dealing with digital competence (Statistik Austria, 2013, p. 71). The results showed that persons with low formal education, especially non-native speakers of German, unemployed people and older people had lower basic and workplace competences and did not take part in adult education as frequently (Gruber & Lenz, 2016, p. 88). These results confirmed a status quo of Austrian adult education and problems still to solve. A closer view showed some in-depth results (*ibid.*): Only 8.4 per cent of adults in Austria reached the highest levels of literacy competence in PIAAC. At 11.8 per cent, the OECD average was significantly higher. About one million adults in Austria had problems reading and understanding different kinds of texts. About 11.4 per cent scored low in all of the

three tested competencies. This risk group included especially older people and women, who presented deficits in basic mathematics and in digital competencies.

The political reaction in Austria to the PIAAC results was on the one hand optimistic, as Austria's numeracy results were above the OECD average and its digital skills were average. On the other hand, it was concerned, as Austria's literacy skills were below average. Schmied, Austria's minister of education in 2013, stated that Austria was on track with reforming the national education system towards a more comprehensive system that fosters lifelong learning. She emphasised the importance of early interventions in language learning at kindergarten and elementary school, the expansion of all-day schools, the provision of basic skills for migrants and educationally disadvantaged people, and the possibility to improve educational attainment through adult education (Bundesministerium für Bildung, 2015).

Since 2011, Austria has followed a 'Strategy to Support Lifelong Learning in Austria – LLL: 2020' (Knett, 2014, p. 104), which includes goals of modernisation and state control as well as human resources management guidelines (Lima & Guimarães, 2011). The strategy was approved by the federal government, and the ministries were entrusted with its implementation. Some of the action items from this lifelong learning strategy are similar to the OECD's 'central approaches for policy-making' (Knett, 2014, p. 108). With the present PIAAC results, it became clear that many of the OECD policy approaches related to PIAAC were also central for LLL: 2020. New tasks to be performed involve the following: a comprehensive school system of lifelong learning; the transfer of learning results to the economy; accessible further education opportunities for educationally disadvantaged people; and the recognition of non-formal knowledge (Knett, 2014, p. 108). From the ministry's reaction to PIAAC and the adjustment of the LLL strategy, it is evident that Austria's adult educational policy follows an economic approach based on human resources management characteristics (Lima & Guimarães, 2011).

Researchers voiced a more pessimistic view on PIAAC. Titelbach criticised the validity of the results, stating that literacy skills – in terms of writing and interaction – could hardly be researched using standardised international surveys like PIAAC (Titelbach, 2014, p. 45). He also noted the restricted validity of PIAAC in terms of measuring the individual and collective economic outcome of a country, especially when comparing it to another.

For Schmid, Tölle, Steinklammer, and Lichtblau (2014), PIAAC was a warning sign for Austria to take its problems with illiteracy and basic competencies more seriously (p. 114). As the results showed, about one million people had trouble reading a text and understanding its content. Furthermore, many of these

people only had a lower school degree, a low income and tended to be older people, women, and migrants (p. 114). Schmid et al. underline the necessity to start literacy in kindergarten; furthermore, they argue that primary schools need to do more team teaching and literacy intervention; adult education needs to offer more low-threshold classes for educationally disadvantaged people to cope with the problem.

Knett points to the ongoing international competitiveness of Austria's companies, asking whether PIAAC really matters for them. Nevertheless, he stressed the importance of the PIAAC key competences for shaping a sustainable knowledge-based society and economic prosperity. He also believes that Austria's strategy LLL: 2020 is a good base to be implemented courageously (Knett, 2014, p. 104). Regarding the three analytical models, the criticism by Austria's researchers reveals a more humanistic view towards a democratic model on adult education policy.

Estonia

Estonia's results for functional literacy and numeracy (both above OECD average) were found to be satisfactory, but problem-solving in ICT-rich environments was somewhat disappointing (Halapuu & Valk, 2013, p. 8), especially considering the importance of such competences for the labour market following a human resources management trend (Lima & Guimarães, 2011). Altogether, two major issues were raised in response to the results: ICT proficiency and a skills mismatch among older adults. ICT skills are seen as important basic skills for participation in Estonian society, because the country has some of the most advanced Internet-based systems for interacting with public and private institutions. From this perspective, it is very worrisome that large parts of the population lack these ICT skills (Halapuu & Valk, 2013, p. 130), reflecting concerns related also to the modernisation and state control model characteristics (Lima & Guimarães, 2011).

Another problematic issue was the loss of skills over time. While young people perform very well on the literacy and numeracy tests, older people tend to 'lose' the skills over time. This is related to the fact that Estonia also ranks high in over-education, especially among older adults. A likely cause for this are the sweeping changes in the labour market since re-independence, which have made some previously widespread occupations (and the related education) redundant. Therefore, the critical issue is mismatch between skills and labour market needs, which could be addressed by increasing adult education and training for these groups, revealing human resources management concerns (Lima & Guimarães, 2011). PIAAC also showed that Estonians wish to participate in adult education more often than the OECD average (Saar, Unt, Lindemann, Reiska, & Tamm, 2014).

Based on a review of the major news outlets at the time, the reaction to the publication of these results was modest. The PIAAC results were mainly promoted and discussed by the ministry itself. The ministry also tendered research reports based on the PIAAC data, which are available to all on the ministry's website (see also Ministry of Education and Research, 2015). The results were presented publicly at a conference in 2015 and it was broadcast over the Internet (Postimees, 2015), but no significant public discussion followed. This can be attributed to the mostly uncontroversial nature of the results.

Since the publication of first results in 2013, a number of policy documents have been put into action. The most important of these is the Lifelong Learning Strategy 2020, which guides the entire field of educational policy. The influence of PIAAC is clearly visible in the recent documents, even though there are few direct references. The clearest link can be seen in how well the aims of the lifelong learning strategy and its programmes are in concordance with the OECD (and EU) guidelines and aims in accordance to human resources management orientations (Lima & Guimarães, 2011). The main priorities of the current LLL strategy include (Estonian Government, 2014):

1. change in the approach to learning,
2. competent and motivated teachers and school leadership,
3. the concordance of lifelong learning opportunities with the needs of the labour market,
4. a digital focus in lifelong learning,
5. equal opportunities and increased participation in lifelong learning.

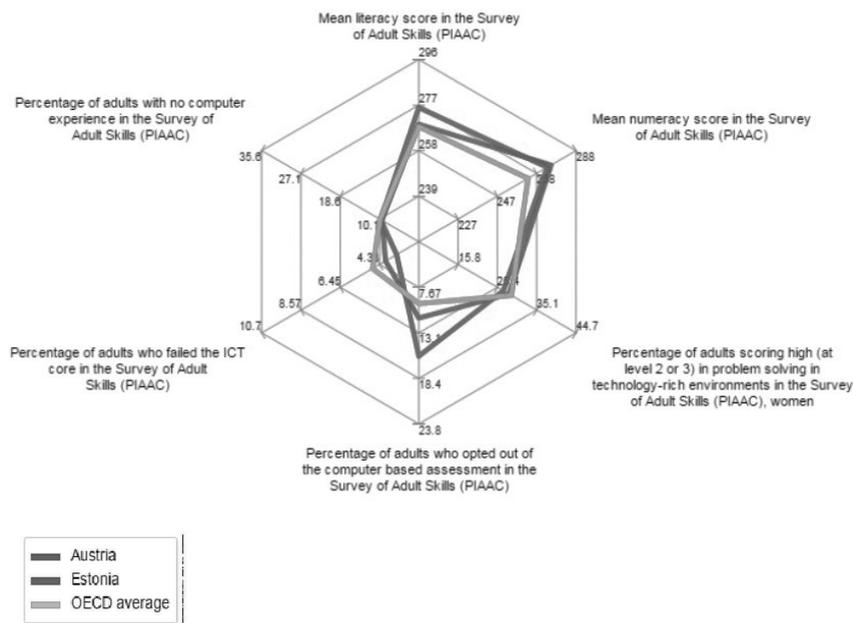
The strategy is accompanied by programmes that specify the actions to be taken. The strategy's programmes for achieving the main goals of adult education (Estonian Minister for Education and Research, 2016b) are all in line with the EU's general target to increase participation in adult education by including disadvantaged groups and increasing access to different types of education. The programme references PIAAC directly, saying that the PIAAC study showed that people who do not speak the official language have less security on the labour market and need to develop vocational skills alongside language skills (*ibid*, p. 8).

The programme for the concordance of labour market needs and education includes the target of participating in the next round of the PIAAC survey to assess the results of the LLL strategy programmes (*ibid*, p. 13), thereby indicating human resources management characteristics (Lima & Guimarães, 2011). The programme text also states that participation in the survey must be followed by in-depth analysis along with policy recommendations that address skills, education, and their use on the labour market. The programme for competent and motivated

teachers is also based on the PIAAC input, as mentioned in a previous thematic analysis of teachers' skills according to PIAAC (Valk, 2013, p.1).

The influence is likely wider than can be deduced from public documents: it cuts across multiple policy fields (labour market, education, and communications) and is often implicit rather than explicit. Multiple ministries are involved in providing adult education in specific fields with the clear aim to a) increase participation in adult education and training and b) increase the supply of specific skills needed on the labour market (Estonian Minister of Education and Research, 2016; Estonian Minister of Economic Affairs, 2015). This can all be linked to the international influences as well as to the PIAAC results. It is difficult to distinguish the influence of the OECD agenda from the EU influence on policy development, but there is no doubt that it has been significant.

Figure 1: Main PIAAC results for Estonia and Austria.



Source: OECD Education GPS, 2017, compiled by authors

Comparison

Similarities

Both Austria and Estonia have elaborate systems of adult education, which are partly state-financed and guided by scientific principles. The systems cooperate with the national ministries, the universities, and business organisations, and they are responsive to the European Union's education policy guidelines. As EU members, both countries follow the European Commission's Programmes of Lifelong Learning, which have guidelines that can be easily related to OECD and PIAAC aims (Bieber & Martens, 2011).

In PIAAC, both Austria and Estonia ranked above the OECD average. Although Austria reached good results in numeracy and satisfying results in digital literacy, the national results in literacy were disappointing. Estonia was satisfied with adults' performance in literacy and numeracy but disappointed with results in ICT skills. After PIAAC, the countries put efforts into reframing their existing education policies according to these results. A common consequence was the emphasis on adult education in the national LLL 2020 strategy goals. Both Austria and Estonia focused on a human resources management strategy stressing a) the need for concordance between school education and labour market needs, b) better support of disadvantaged groups like migrants or older people, c) development of a comprehensive system of lifelong learning, and d) the need for making informal learning results more visible.

In Austria and Estonia, the PIAAC results were mainly promoted by the ministries of education, which dictated the public discussion around the subject. Both ministries ordered research reports based on the PIAAC data, showing great interest in the practical use of this data. In Austria, Statistik Austria was responsible for the report (Statistik Austria, 2013). In Estonia, reports were prepared by researchers at public and private research institutions as well as compiled by the ministry itself. Although the official reaction was quite positive in both countries, the researchers asked some critical questions about what was being measured (Halapuu & Valk, 2013) and highlighted the analytical limitations of the data (Anspal, Järve, Jürgenson, Masso, & Seppo, 2014, p. 87; Titelbach, 2014, p. 45).

Both countries also lacked a significant public discussion, as the main economic actors and other interest groups remained silent. This can in part be attributed to the ambiguity and versatility of the adult education field, where it is difficult to identify the 'responsible' parties. Although the PIAAC results showed important tasks for Austria to be developed in the future – tasks that also concern the job market – there were no reactions from the business community. One possible

reason might be Austria's nevertheless satisfying economic growth, which gives companies a feeling of safety (Knett, 2014, p. 105).

Currently, attention has been turned towards disadvantaged groups in both systems (e.g. migrants in Austria; older people and non-Estonian speakers in Estonia). Different target groups require special attention to their specific skills deficits. With this task in mind, both countries are working towards improving their adult education systems (Estonian Minister for Education and Research, 2016b; Schmid et al., 2014).

Differences

Like the OECD, Austria and Estonia consider skills and competencies to be systematically learnable, measurable, and of high practical use, which is why they are of importance for the labour markets in both countries. From among our analytical models, human resources management seems to be dominant here (Lima & Guimarães, 2011). Aligning people's skills and the needs of the labour market has become a high priority. However, differences in the reactions in policy and the programmes being implemented have to be stressed. In Estonia, this can be seen through the importance given to it in the Lifelong Learning Strategy 2020, which includes an entire programme for enhancing the concordance between education and labour market-relevant competencies. The Ministry of Economic Affairs, which coordinates the area of ICT, has in fact directed €8.5 million (in the years 2014–2020) to support organisations and enterprises in increasing the 'digital literacy' and ICT skills of the working population (Estonian Minister of Economic Affairs, 2015). In Austria, this is evident from the fact that the country now holds a lively discussion about how to provide adult learners with ICT skills and that it develops training programmes. For example, 'EBMOOC' (Adult Education Massive Open Online Course) is a six-week online school offered by CONEDU, an Austrian service provider for adult education (Aschemann, 2017, p. 91). The curriculum, which includes a digital tools programme for adult educators, contains different tasks in adult education training and management; participants receive a certificate and ECTS points.

Estonia and Austria also differ markedly in their response to PIAAC due to the differing conditions in the countries. Austria's performance in literacy, unlike Estonia's, was disappointing. Just 8.4 per cent of Austrian adults reached 'good' or 'satisfying' results in literacy, which means that a lot of people have difficulties in understanding texts of any kind; they only understand information if it is explicit and if the grammar is simple. These people with lower literacy skills are massively disadvantaged at the workplace and in everyday life (Gruber & Lenz, 2016, p. 88).

A call for action may involve an extended and free offer of adult literacy classes through the 'Adult Education Initiative', a nationwide programme, financed by the state and the regions (Schmid et al., 2014, p. 116), reflecting a modernisation and state control strategy (Lima & Guimarães, 2011).

Estonia faces problems with ICT skills and widespread insecurity in dealing with computers. This is seen as a serious barrier to participation in society. For this reason, the importance of ICT skills has been given even more importance, and the goals of teacher education and training have been modified to make certain that all teachers have the necessary competences to educate the younger cohorts and to be able to work in the changing economy (Estonian Government, 2014). Unlike in Austria, little attention has been paid to literacy and numeracy, because mass immigration has not (yet) affected Estonia, hence there are few illiterate people.

Another aspect in which the countries differ is the number of follow-up studies. Especially in Austria, researchers have reacted with further studies to analyse in depth the weak results in literacy and to provide some advice for national adult education policies. Lassnigg, Steiner, and Vogtenhuber (2014) identified a large group of adults who have to be provided with basic literacy offers through the 'Adult Education Initiative' (p. 95). The study revealed a strong uneven distribution of this group according to demographic characteristics. While gender was not a strong factor for belonging to this group, age was significant: Among 6–24-year-olds, 12.9 per cent belonged to this group, which is relatively low compared to 27.6 per cent among 55–64-year-olds (p. 94). These results can be seen as a first marker to improve the national situation in terms of teaching literacy skills. In Estonia, there have been no large-scale follow-up studies so far, but Estonia has made it a goal to keep participating in the PIAAC studies.

Another notable difference between the countries was in the critical response of the scientific community. In Austria, the scientific critique gained a lot of attention and included discussions on the lack of methodological validity and the difficulties that come with researching skills and competencies of national labour markets in standardised international surveys (Knett, 2014). Estonian researchers were more reserved in this regard, and there was no public critique of the methodology, although researchers working with the data were aware of its limitations (see e.g. Anspal et al., 2014; Halapuu & Valk, 2013).

Final remarks: Results and reflections on the comparison

In recent years, international organisations have become prominent actors in lifelong learning and training policy. It is believed that transnational adult education might improve the competitiveness of national economies with regard to the

wealth of nations. Therefore, adult education now matters for decision-making in international settings (Grek, 2010), as international organisations are considered to be 'key agencies for change' (Evans, 2014). These matters are dealt with by a wide set of tools, including processes of 'soft law' performed by the OECD (Marcussen, 2004; Bieber & Martens, 2011) and benchmarks set by the European Union (i.e. the lifelong learning participation rate). Owing to these reasons, adult education policies are currently being developed on a transnational scale, following mainly human resources management guidelines. Increasing globalisation phenomena and competitive economic environments are forcing national governments to seek a competitive advantage, which is defined through evaluating the performance of national education and training systems according to international standards.

As Rubenson (2015) points out, PIAAC is strongly related to this trend, as many of the survey questions concern activities such as learning undertaken for job-related reasons. The PIAAC guidelines fall in between a human resources management model and the modernisation and state control model. The guidelines claim the need to adjust workers to the job, to promote adaptability and productivity growth. As a result, education and training in all forms gain market value, since adult learning can be translated into investments with an economic return. Complementarily, following OECD aims and according to several authors, even without having a direct impact, PIAAC results influence policy-making, because they stress the need to develop the education and training system for economic modernisation and the production of skilled labour (Jones, 2007; Grek, 2009). The influence of PIAAC in national (Austrian and Estonian) adult education policies was made clear in this article. Our research has shown that PIAAC survey results have had an impact on national policy discussions, on official documents, and/or on research in the field of adult education. This influence was similarly visible in both Austria and Estonia.

On a national and a transnational level, PIAAC encourages participating countries to work on standardised areas and goals of adult education. Taking international best practices into account is an important part of improving future policies on both levels. But we have also seen that harmonisation through standardisation does not necessarily mean strong convergence – as different national and local situations imply the need for differing approaches.

In Austria and Estonia, current adult education policies emphasise aims that follow human resources management guidelines, combined with modernisation and state control ones (Lima & Guimarães, 2011). These aims have the purpose of making the two countries' economies competitive on a transnational scale. As stated by Rubenson, with the aim of 'promoting the relationship between lifelong

learning and economic and social prosperity as a production function' (Rubenson, 2015), PIAAC had a relevant influence on the definition of national policy programmes. This influence was and is directed at improving adults' knowledge by upskilling them for current and future labour market requirements.

Questions regarding the process of including international evaluations in national policy making and public discussions remain pertinent. Although we identified influences that were written down, we did not focus on behind-the-scenes processes. Another question worth exploring is how and/or how much the PIAAC influences real changes in (adult) education practice. In addition to this, another question concerns the validity and the comparison of the results: The development of the survey methodology remains an open issue.

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Lisa Breitschwerdt & Vicheth Sen

Implementing National Qualifications Frameworks: Difficulties in Cambodia and Germany

Abstract: Drawing on Young's (2009) framework on difficulties during the implementation of qualifications frameworks, this contribution compares the difficulties of implementation in Cambodia and Germany. The main problem in Germany is translating the framework into practice at the professional level, whereas in Cambodia, implementation is being hampered by fragmentation and competition among the involved ministries and institutions.

Introduction

Qualifications frameworks have been increasingly adopted by countries throughout the world since the 1980s, rendering it a global phenomenon (Young, 2003). Countries such as the United Kingdom, New Zealand, Australia and South Africa are among the pioneers in designing qualifications frameworks. Largely driven by 'powerful political and economic forces' and underpinned at the core by the 'debates about the nature and purposes of education and training' (Young, 2003, p. 236), this popularity has intensified in the past several years, with more than 100 countries now considering, developing, or implementing qualifications frameworks (Allais, 2011; UNESCO, 2015).

State governments are interested in having their own qualifications framework because they see them as a tool for making educational institutions 'more accountable' and for comparing their education system to those of other countries (Young, 2003, p. 228). Qualifications frameworks have been considered a useful policy instrument to improve the relationships between labour markets and education and training institutions (Allais, 2011). They also provide a mechanism that enables governments to recognise prior learning and to 'validate non-formal and informal learning' (Bohlinger, 2012, p. 282). They encourage lifelong learning by functioning as a mechanism to integrate initial and ongoing education and training, higher education, and non-formal and informal learning into a unified system (ibid.). In a nutshell, qualifications frameworks offer several benefits: 'the modernisation of education and training systems and programmes, the promotion

of labour market mobility and transnational cooperation and the promotion of all forms of lifelong learning' (Bohlinger, 2012, p. 283).

Although there is a common idea of perspectives and benefits, the realisation of a national qualifications framework cannot be based on a uniform concept. The specificity of every country's circumstances and parameters plays an important role in this. The authors of this paper expect that these country-specific contextual disparities lead to different problems and challenges when it comes to the question of implementing qualifications frameworks. The paper aims to answer the following question: What difficulties do Cambodia and Germany face during the implementation of their qualifications frameworks? What are similarities and differences? The countries were selected because of their different geographical location and societal structures. This allows for determining whether there are similar difficulties despite different contexts. Both countries face linkage needs to regional qualifications frameworks (EU and ASEAN), and both are currently in the process of its implementation.

Therefore, the paper first outlines the main characteristics of the national qualifications frameworks of Cambodia and Germany and identifies comparative categories concerning difficulties in implementing qualifications frameworks. Afterwards, difficulties in implementing qualifications frameworks in both countries, and the commonalities and differences between the two cases will be analysed. Finally, the paper summarises the different difficulties in implementing qualifications frameworks in both contexts and provides an outlook on further research questions.

Characteristics of national qualifications frameworks in Cambodia and Germany

Cambodian Qualifications Framework

The Cambodian Qualifications Framework was born out of a policy process that aims to promote a highly competitive and economically integrated Association of Southeast Asian Nations (ASEAN). In recognition of the varying developmental states and levels of qualifications frameworks of its member states, ASEAN has its own policies and processes for the mutual recognition of qualifications granted by its member states and other associated member states. The process towards the ASEAN Economic Community in 2015 was accompanied by various policy instruments. The ASEAN Qualifications Reference Framework, for instance, was developed to 'enable comparisons of qualifications across ASEAN Member States',

focusing on education and training and lifelong learning (Association of South-east Asian Nations, 2015, p. 4).

Within this regional context, the Cambodian Qualifications Framework aims to ensure that qualifications within Cambodia and in the region can be compared in terms of equivalence (Royal Government of Cambodia, 2012). The Royal Government of Cambodia considers the Cambodian Qualifications Framework a crucial instrument for the country to standardise its system of education and training, so that its citizens are able to attain qualifications comparable in quality to the regional standard (RGC, 2012). It aims to provide recognition of prior learning and flexible pathways to academic and technical and vocational education and training; promote lifelong learning; encourage the provision of quality education and training relevant to the labour market needs; promote national and international recognition of qualifications attained in Cambodia; and facilitate the regional flow of skilled labour (RGC, 2012).

There are four core elements: levels of qualifications, credit hours, learning outcomes, and study pathways (RGC, 2012, pp. 2–7). There are eight levels of qualifications for technical and vocational education and training; the first four levels lead to a vocational certificate, and technical and vocational certificates 1, 2, and 3, all of which are equivalent to the secondary education standard. For higher education, there are four levels of qualifications. For the Cambodian Qualifications Framework, 15 hours for 1 credit is a measure of the amount of instruction. For teaching activities that involve laboratory work or workshops, 1 credit equals 30 hours. And for fieldwork or internship training activities, 1 credit equals 45 hours.

Learning outcomes are organised into two sets of competence: basic and core competence, both divided into five major areas: (i) knowledge, (ii) cognitive skills, (iii) psychomotor skills, (iv) interpersonal skills and responsibility, and (v) communication, information technology and numerical skills. The five areas of learning outcomes apply to all programmes in technical and vocational education and training. For higher education, only four areas are applicable to all programmes; a fifth area, psychomotor skills, applies to only some programmes. By means of regulations on the accumulation and transfer of credits and the accreditation of prior learning acquired through formal, non-formal, and informal learning, the Cambodian Qualifications Framework provides study pathways that enable individuals to move between technical and vocational education and training and higher education. As of this time of writing, the Cambodian Qualifications Framework has yet to be implemented.

German Qualifications Framework for Lifelong Learning

In Germany, the development and implementation of a qualifications framework is strongly guided by the European processes and goals, beginning with the Bologna Declaration of 1999 and the Lisbon Strategy of 2000. The main aim of these strategies was to make the European Union a competitive and dynamic economic zone, based on knowledge and including education and training for living and working in this society (European Parliament, 2000, no. 26). The idea was to define the necessary and important areas of knowledge and skills for each educational level to have a quick overview of the workforce and make educational levels comparable across Europe. This was set within the development of the European Qualifications Framework in 2008.

In Germany, two coordination bodies were established in 2007 to generate the German Qualifications Framework. The 'Federal/State Coordination Group' (Bund-Länder-Koordinierungsstelle) is composed of government bodies (e.g. ministries); the 'German Qualifications Framework Working Group' (Arbeitskreis Deutscher Qualifikationsrahmen, AK DQR) consists of representatives of all relevant areas of society (e.g. education, economic organisations, scientists, and practitioners). The aim of developing a National Qualifications Framework for Germany was to link the German qualification levels to the European levels and take account of the exceptions in the German education system.

According to the recommendation of the EU, Germany developed its framework and linked it to the European Qualifications Framework by the end of 2010, assigned the qualifications, and documented national qualifications and European qualifications levels on national certificates by the end of 2012 (Eckelt, 2016, p. 101). The final framework was officially implemented on 1 May 2013, and since 2014 the process of assigning formal qualifications to the levels of the German Qualifications Framework has been underway. For formal qualifications, an obligatory procedure assignment was introduced, whereas the assignment of non-formal and informal competencies has not taken place yet, but there is a suggestion about the criteria and procedures.

Similar to the European Qualifications Framework, the German Qualifications Framework is structured in eight consecutive levels (starting with level 1 on the bottom) describing the necessary learning outcomes. Levels 5 to 8 are compatible with the German Higher Education Qualifications Framework. Unlike in the European Qualifications Framework, the described outcomes are segmented into four pillars of competence areas, covering 'professional competence', subdivided into 'knowledge' and 'skills', and 'personal competence', subdivided into 'social competence' and 'autonomy' (Arbeitskreis Deutscher Qualifikationsrahmen,

2011, p. 5). Methodological competence does not appear in the framework as it is considered a part of all other competencies.

In the German Qualifications Framework, the concept of competence encompasses all learning outcomes. With this focus on competencies, especially personal competencies, the framework tries to refer to the characteristics of the German education system, which is particularly based on the term *Bildung* and the related idea of the possibility of enlightening and developing each person through education. This understanding also becomes visible in the definition of competence in the German Qualifications Framework as ‘the ability and willingness of every individual to use knowledge and skills, and also personal, social and methodological abilities and to act deliberately, individually and socially accountably’ (AK DQR, 2011, p. 4).

Categories for comparison

There are different contextual circumstances for the implementation of National Qualifications Frameworks, which refer to the characteristics of the nation. Nevertheless, it is not unusual for problems to occur when implementing big structural reform projects like a National Qualifications Framework (Young, 2009). In this paper, Young’s (2009) comparative categories are used for the discussion of difficulties in implementing national qualifications frameworks. In his overview of implementation problems, Young (2009) distinguishes between three areas or levels of problems: political, administrative, and technical/professional.

By political difficulties, firstly, Young (2009) refers to the fact that the responsibility for developing and implementing a national qualifications framework involves more than one government department (e.g. ministries or departments of education, labour, and trade). This presents major difficulties for a smooth process of implementing a national qualifications framework, simply because each department has its own agenda. Secondly, administrative difficulties refer to problems that accompany the development of new instruments of structure and regulation (e.g. quality assurance, standard setting, and assessment) in the process of national qualifications framework implementation. The main difficulties at this level concern the uncertainty of responsibilities that these new agencies are to perform and the difficulties for them to recruit staff members with appropriate skills and knowledge to perform the tasks in the implementation process (Young, 2009). Finally, Young (2009) understands technical or professional difficulties as problems concerning the concrete realisation of new activities (e.g. assessment, new language standards, and defined criteria) connected with the focus on learning outcomes. These difficulties arise from the fact that the descriptions

for different levels of learning outcomes and for different qualifications are often jargon-laden and prove to be challenging for non-specialists or people outside of a particular sector to understand and relate to. Also connected to this is the question of what knowledge is and how it is acquired and assessed, which presents another layer of difficulties in implementing a national qualifications framework. Besides offering this classification of difficulties, Young also points out that one overall problem of the system of national qualifications frameworks is that the people who are working in the system increasingly become disconnected from it (Young, 2009, pp. 2917–2918).

Comparison of the difficulties in implementing national qualifications frameworks

The goals and objectives of implementing a national qualifications framework are quite similar in Cambodia and Germany: to simplify and support the transparency of qualifications and make them comparable internationally. It should improve and strengthen the overall perspective of the labour market. Nevertheless, there are minor differences, owing to the countries' different socio-economic status. In Cambodia, the focus lies on the provision of high-quality education, the connectivity to international standards, and the improvement of access to education and training. As a country emerging from prolonged civil armed conflict, Cambodia's current state of educational development is still in its initial stage and is confronted with many issues that are not present in countries such as Germany. In contrast, Germany is more focused on topics of improving overall permeability in its education and training system and strengthening the orientation on learning outcomes, including the recognition of non-formal and informal acquired qualifications.

These similarities and differences are also shown in the structure of the national qualifications framework outlined in Table 1. Both qualifications frameworks contain eight levels and are divided into the areas of general, higher, and vocational education, with Cambodia explicitly outlining technical training in their vocational education area. Both countries place the bachelor's, master's, and doctoral degree at levels 6, 7, and 8. In Germany, there is no qualification at level 5 (transition between general and higher education), because the general higher education entrance qualification is assigned to level 4. In Cambodia, the higher education system is divided into academic (or higher education) and technical and vocational education and training. Both streams offer the highest degree programme at the doctoral level.

Table 1: The structure of qualifications frameworks in Cambodia and Germany.

Cambodia				Germany			
Min. Credit Hours	General Education	Higher Education	Technical and Vocational Education and Training	Levels	Vocational Education and Training	Higher Education	General Education
54		Doctoral degree	Doctoral degree	8		Doctoral degree	
45		Master's degree	Master's degree in technology/business	7	Advanced vocational training* e.g. professional educator, economist, technician, business economist	Master's degree	
120		Bachelor's degree	Bachelor of technology/engineering/business	6	Advanced vocational training* e.g. business administrator, master craftsman level	Bachelor's degree	
60		Associate degree	Higher diploma of technology/business	5	Advanced vocational training* e.g. service technician		

Cambodia				Germany			
Min. Credit Hours	General Education	Higher Education	Technical and Vocational Education and Training	Levels	Vocational Education and Training	Higher Education	General Education
30	Upper Secondary Certificate		Technical and Vocational Certificate 3	4	Dual vocational training (3 and 3 ½ years training)		General higher education entrance qualification Subject-related entrance qualification Advanced technical college certificate
30			Technical and Vocational Certificate 2	3	Dual vocational training (2 years training)		Intermediate school leaving certification
30	Lower Secondary Certificate		Technical and Vocational Certificate 1	2	Vocational preparation Vocational school (vocational basic qualification)		Lower secondary education school leaving certification
30			Vocational Certificate	1	Vocational preparation		

*Further qualifications will be assigned step by step following the jointly agreed procedure.

Sources: RGC (2012, pp. 3–6); UNESCO Institute for Lifelong Learning (2015, p. 80); Bund-Länder-Koordinierungsstelle (2016); BMBF et al. (2017, p. 2).

Although the levels are the same, there are some differences in the definition of categories of learning outcomes. Both the categories of knowledge and skills and the aspects of personal factors are important. But while the Cambodian framework goes deeper into defining the skills needed in a globalised world, such as information technology skills, Germany is more general and focuses on the translation of skills into practice by using the concept of competencies.

As expected in the beginning, a detailed look at the national qualifications frameworks shows some differences. That is why it is not surprising that there are also some major differences when it comes to the question of implementation difficulties. Based on Young's (2009) categories of difficulties in implementing national qualifications frameworks, the following commonalities and differences can be outlined.

Political difficulties

Cambodia

In the current context of Cambodia's higher education system, the multiplicity of authorities governing higher education creates major political difficulties that potentially challenge the implementation of the Cambodian Qualifications Framework. Although numerous reform efforts have been made to improve the governance of the system, it continues to be fundamentally fragmented (Chet, 2006; Dy, 2015; Sen, 2013, forthcoming; Sen & Ros, 2013; Un & Sok, 2014). The higher education institutions are under the supervision of a wide range of parent ministries/institutions. According to the 2016 Education Congress Report (MoEYS, 2016), there were 118 higher education institutions located in 19 provinces and the capital; 46 of these were public higher education institutions and 72 private higher education institutions. These higher education institutions were supervised by 15 different parent ministries/institutions. In particular, these supervisory ministries/institutions very often have competing interests and do not necessarily come to common terms, especially in the areas of policies and regulations (Sen, forthcoming). For example, there exists a high degree of competition and a lack of cooperation between two of the main ministries responsible for education and training in Cambodia; namely, the Ministry of Education, Youth, and Sport (MoEYS) and the Ministry of Labour and Vocational Training (MoLVT) (United Nations Development Program, 2011).

Moreover, although the MoEYS is mandated to formulate policies and plans to evaluate the education sector and to improve the quality of education (RGC, 2009), it has the same legal status and jurisdiction as the other supervising ministries/institutions; that is why its authority at inter-ministerial meetings with

other ministries to discuss cross-sectoral issues related to education and training is mainly limited to non-policy discussions (Sen & Ros, 2013). An effort to address this power competition among parent ministries/institutions through the establishment of a national coordination body (the Supreme National Council of Education) proves to be a failed attempt. Although stipulated to be established in the 2007 Education Law (RGC, 2007), a decade later the Supreme National Council of Education has not yet materialized.

Although the Cambodian Qualifications Framework is yet to be implemented, this contextual landscape in relation to the political environment in Cambodia's current education system presents fundamental difficulties for a successful implementation of the framework. Any implementation of a national qualifications framework will definitely involve inter-ministerial or inter-departmental coordination and collaboration. The current governance structure of Cambodia's education system does not lay a stable foundation for an effective implementation of the country's national qualifications framework.

Germany

In Germany, the idea of developing a qualifications framework was supported strongly by federal policy. As a consequence, many difficulties in its implementation lay, and still lie, in the administrative process of developing the German Qualifications Framework. The decision to include a huge variety of stakeholders with different interests in the implementation process necessitated many consensus-building discussion sessions between them.

As a consequence, when the German Qualifications Framework was enacted on 22 March 2011, a rough concept of the competence levels and categories was fixed, but the qualifications of the German education system had not yet been assigned to the eight levels. In addition, it was unclear at this time how to include non-formally and informally acquired competencies in the qualifications framework, which was one of the goals. Overall, several compromises were made to reconcile the interests of different actors in the process of enacting the German Qualifications Framework. Sometimes these compromises were hard to understand. For example, the former representative of the Ministry of Education and Research demanded that the competence category 'self-competence' be changed to 'autonomy', although the task force had worked with the first term for about two years. To make the concept easier to understand for citizens, the term was changed and did no longer conform to the underlying concept of an overall 'action competence' (Odenwald, 2012, p. 202).

Consequently, even though there was the shared political intention to implement a German Qualifications Framework, there were, and still are, many points of discussion, arising not least from the inclusion of so many actors in the process. Especially after the official enactment of the German Qualifications Framework in 2013, further problems and discussions arose concerning its realisation.

Comparison

Cambodia and Germany face political difficulties at different levels. In both cases, the main difficulty is the clash of competing interests that have to be negotiated. While in Cambodia the final implementation and practical realisation of the Cambodian Qualifications Framework is still prevented by the issues of system fragmentation and communication between the involved ministries and institutions, in Germany, where the German Qualifications Framework has been successfully implemented, this problem arises again in the ongoing development process, preventing the finalisation of the Qualifications Framework. In Cambodia, it is more about the governance structure of the education system in the first step of implementation; in Germany, there is the challenge of including the educational needs of the different parts of a highly divisive education system in the second step of implementation.

Administrative difficulties

Cambodia

Administrative difficulties in implementing the Cambodian Qualifications Framework are another major challenge rooted in the current quality assurance system. If the implementation of the Cambodian Qualifications Framework were to be undertaken under the same structure and regulation of quality assurance, a wide range of administrative difficulties would be imminent, particularly the capacity of the quality assurance body (Sen, 2016, forthcoming; Sen & Ros, 2013). Established in 2003, the Accreditation Committee of Cambodia (ACC) plays a central role in accrediting education programmes offered at higher education institutions, both academic and technical and vocational, across the country (RGC, 2003).

However, the ACC has not moved beyond accrediting the foundation-year programmes at most higher education institutions (Dy, 2015; Un & Sok, 2014; Touch, Mak, & You, 2013), although it was led by qualified individuals. The question of the quality of higher education in Cambodia remains a major issue (Dy, 2015; International Labour Organization and Asian Development Bank, 2015; MoEYS and the World Bank, 2015; Sen, forthcoming; Un & Sok, 2014). This issue

may be attributed to the rapid and uncontrolled expansion of the number of higher education institutions over the past 15 years, which has overwhelmingly exhausted the capacity of the ACC to sufficiently carry out its tasks (Dy, 2015; Sen, forthcoming). In particular, it was and remains challenging to recruit and train assessors with relevant knowledge and expertise (Un & Sok, 2014). Coupled with these challenges is the shortfall of funding (Dy, 2015; Sen, 2013; Sen & Ros, 2013).

It remains to be seen how the new instruments of structure and regulation in relation to quality assurance, standards setting, and assessment for the implementation of the Cambodian Qualifications Framework will be developed. However, lessons from the existing quality assurance mechanism have shown that there are numerous challenges in doing this. There is a need to rethink the organisational structure and approaches at the administrative level in the context of Cambodia.

Germany

Eckelt (2016) states that a lot of the problems in the German process of implementation are grounded in the type of administrative procedure chosen, for example the dominance of vocational training and the precarious position of the field of continuing education (Eckelt, 2016, p. 107). In the years after the German Qualifications Framework came into force, the interest groups discussed a lot about the assignment of formal qualifications and have not even reached a partial agreement now. For example, there is continuing discussion and disagreement about the position of general and vocational education in the framework. The general qualification for university entrance should be assigned to level 5, whereas the assignment of occupations varies from level 3 to 5. This means the school leaving examination has a higher value than a vocational training programme, which lasts for three or three and a half years. This was criticised sharply by the trade unions and the economic representatives, resulting in a long gridlock until general school leaving qualifications were finally assigned in March 2017 (Bundesministerium für Bildung und Forschung, 2017). In addition, there were discussions about the formulation of learning outcomes, such as the nature of the scientific problem-solving competence, which was perceived as too vague by the higher education sector as compared to the field of vocational education from the perspective of its representatives (Böllert, 2010, p. 96). Representatives of continuing education in particular currently criticise the previous procedure of assignment, which they say neglects the value of informal education by focussing on formal qualifications first. The idea of a comprehensive understanding of education in which formal, non-formal, and informal education stand side by side equally was so far ignored in this process (ibid, p. 97).

Next to these problems of assignment and formulation there are difficulties caused by the adoption of foreign models with too little reflection or without creating own models during the implementation process. One example is the establishment of accreditation agencies based on the Anglo-Saxon model, which are responsible for the quality assurance of German study programmes (Immer, 2013, p. 3). Recently, there was a resolution of the Federal Constitutional Court (Bundesverfassungsgericht, 2016) concerning study programs in the state of North Rhine-Westphalia, stating that the process of accreditation conflicts with the right to academic freedom in Germany, as it intervenes directly into the formation and contents of scientific teaching. As a result, legislators have to pass a new law by 31 December 2017 showing that the steps of developing their own structures and rules as part of the fast-paced implementation process must not be neglected by the responsible authorities (ibid., pp. 3–6).

Comparison

In both cases, the common challenge at this level concerns the uncertainties about the roles and responsibilities of the accreditation agencies. While in Cambodia the existing accreditation agency does not have a good history of having adequate capacity to carry out its tasks, the case of Germany involves the role of accreditation agencies, in particular in the context that these agencies are established based on foreign models without sufficient attention paid to adapting them to the country's own system. Moreover, in Germany, the administrative procedure adopted for the implementation of the German Qualifications Framework creates tension between higher education and vocational education in terms of assigning certifications. In Cambodia, in contrast, this kind of tension between the Ministry of Education, Youth and Sport, and the Ministry of Labour and Vocational Training is present at the political level; however, it is highly likely that it trickles down to the administrative level when the implementation of the Cambodian Qualifications Framework commences.

Technical or professional difficulties

Cambodia

The main challenge to implementing the Cambodian Qualifications Framework at the technical or professional level involves the fact that Cambodia's higher education institutions, both academic and technical and vocational, are severely underfunded. In general, Cambodia's higher education institutions are basically teaching-based institutions and support themselves through tuition fees (Ahrens

& McNamara, 2013; MoEYS & World Bank, 2015; Peou, 2015; Sam & Dahles, 2017). Teaching itself is largely lecture-based and rarely informed by research (MoEYS & World Bank, 2015). While 80 per cent of the revenue for public higher education institutions is privately funded (Ahrens & McNamara, 2013), all private higher education institutions do not receive government funding and rely almost totally on tuition fees (Sam & Dahles, 2017; Sen & Ros, 2013). Government funding for public higher education institutions is mainly to cover the institutions' basic operational costs (Sen, forthcoming).

The academics at both public and private higher education institutions engage in heavy teaching because there is no funding source for research for them to apply for and engage in research activities (MoEYS & World Bank, 2015). Within this contextual reality, both public and private higher education institutions find it extremely challenging to respond to the new demands of the Cambodian Qualifications Framework, particularly in relation to developing a new language of standards, units, and levels that defines assessment criteria applicable to the learning outcomes of the Cambodian Qualifications Framework. In this context, where lecturing and marking exams is the predominant aspect of higher education instruction, responding to the kinds of assessment required by different levels of learning outcomes in the new Cambodian Qualifications Framework would prove to be a major challenge for the stakeholders concerned at the higher education institution level.

Added to this series of challenges is the fact that research is virtually non-existent at Cambodia's higher education institutions. So the question related to different types of learning and knowledge acquisition might not even be considered by the actors involved at this level of implementation. Although this may not be necessarily a challenge to implementing the Cambodian Qualifications Framework, the lack of discussion on this issue among the concerned actors may in fact present a cause of concern over the lack of critical evaluation of the outcomes-based qualifications framework.

Germany

After enactment, the most challenging step of implementation lies ahead: educational practice. The change of focus from learning contents to learning outcomes requires educators to rethink the practice of teaching and learning. There are no valid statements about the acceptance of the German Qualifications Framework in German educational practice yet.

First surveys and interviews of people involved in the implementation process indicate that the German Qualifications Framework is accepted as an important

instrument that generates opportunities for the modern and international education system (Neß, 2009). There are differences in acceptance between the various areas of education, which are partially justified by the state of assignment of the formal qualifications in the German Qualifications Framework and their relevance to practice. For example, the representatives of school education have reservations because of the continuous assignment of its formal degrees, whereas representatives of vocational education and training are encouraged by the visibility of their field in the far advanced process of assigning degrees (Eckelt, 2016, pp. 364–365). In contrast, estimating the extent to which the German Qualifications Framework is accepted and realised in the field of continuing education, which does not work with formal degrees, is difficult, because a system for the assignment of non-formal and informal competencies does not yet exist. In other cases, providers in the area of continuing education nevertheless are quite interested in using the German Qualifications Framework and started to assign the non-formal qualifications they offer to the different levels (*ibid.*, p. 370). This comparison shows that it is important to include the actors working in the field of education in the further process of implementation (Neß, 2010, p. 37). Furthermore, it is necessary to inform and educate the personnel about the new approach of qualifications frameworks and the implementation of new wordings, concepts, and understandings relating to it (Fuchs, 2011, p. 7).

Comparison

The two countries face similar difficulties in the sense that the introduction of national qualifications frameworks represents a shift from content-based to outcomes-based learning. This will require rethinking in terms of teaching, learning, and assessment. However, a major challenge for Germany concerns the uncertainties regarding a system of assigning competencies in the areas of general, vocational/technical, and continuing education. On the contrary, while Cambodia may face the same challenge, one important challenge for Cambodia is that the country's higher education institutions are teaching-intensive institutions and follow a traditional model of assessment, that is, examinations as the primary assessment of learning. Therefore, implementing the new qualifications framework, which requires a move towards a new model of assessment based on learning outcomes, presents a significant challenge. This is particularly so in the Cambodian context, where higher education institutions are severely underfunded by the government.

Conclusion

It could be shown that there are several challenges in implementing qualifications frameworks, and that Germany and Cambodia face different challenges. There may be many reasons for that. First, the differences can be attributed to the large disparities in the education systems. In Germany, there already is a highly standardised education system with standardised training programmes for teachers, compulsory education until ninth grade, and various fixed pathways for students. The implementation of a standardisation instrument like the qualifications framework can build on these qualities of the Germany education system, which now asks for more international transparency. Furthermore, Germany could gather experiences with standardisation processes when it implemented the Bologna Process and the three cycles of the Higher Education Qualifications Framework relating to it. The Cambodian system, in contrast, although characterised by high centralisation in its educational system at the governmental level, has few nationally standardised structures at the local level, which is one result of prolonged civil armed conflict in recent history. This means the country is facing the challenge of implementing a system of standardisation for its whole education system without having any experience in that regard. This becomes visible in the fragmentation of Cambodia's governing authorities. Furthermore, the differences can be caused by the structure of management and participating stakeholder groups. Whereas Germany's educational system is broadly linked to governmental funding and control, Cambodia's is characterised by stronger private engagement in education, with the government's role rather focused on passing and implementing laws and quality regulations.

But in addition to the differences, the two countries, although they are very different from each other, also face similar difficulties. By implementing a national qualifications framework, both countries follow the global trend of more standardisation and transparency in qualifications. Their shared goal is to adjust to global needs, as laid down in the respective regional qualifications frameworks, develop their education and training system, and strengthen the labour market. Given their long history of national education systems, influenced by changing political, societal, and cultural circumstances, both countries now face the challenge to reconcile the call for international transparency with the particular needs of their local education system.

Although the overall goal of transparency is widely accepted and the implementation of different national qualifications frameworks is underway, there also has to be further reflection on the importance and influence of this development in general. Especially when looking at the importance of the historically grown

national educational systems, it is important to note that some aspects of the global rise of qualifications frameworks also give reasons for concern regarding the direction this development is taking. Noticeably, the general idea of improved transparency, efficiency, and mobility is linked to the ideas of neoliberalism and human resource management, which focuses on the improvement of qualifications first but not necessarily on human beings themselves. In this context, Lauder (2011) warns against the global orientation taking place in the world of business and employment, which is linked to the increasing development of national qualifications frameworks. Based on key trends in the global economy, like the the reducing of costs of knowledge work, which results from the global rise in the supply of graduates, one may raise ‘fundamental questions about the nature of knowledge and skills’ (Lauder, 2011, p. 213) in general, and national qualifications frameworks in particular. Therefore, a suggestion for further research would be to compare the extent to which qualifications frameworks may be contributing to promoting an individualistic, private consumption of education rather than the dimension of education as a public good.

Implementing a national qualifications framework is not only about fulfilling the requirements of an international context on paper; it also has an important influence on the national educational system and labour market and requires sensitivity from all concerned stakeholders. Therefore, further research about the processes and difficulties in implementing national qualifications frameworks is needed to increase reflection on the reasons for the implementation and the factors and circumstances which accompany the whole implementation process. This means observing and analysing countries like Cambodia and Germany in the further process, especially because they are facing problems on very different levels within the implementation process.

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Supporting entrepreneurship in higher education for young adults' employability: A cross-border comparative study

Abstract: This paper presents a comparative analysis of theoretical aspects and policy statements concerning entrepreneurship in Italian and Nigerian higher education. It analyses the development of entrepreneurial education and concludes that both countries share common values. It therefore recommends integrating entrepreneurship as one pillar of future universities.

Introduction

The issue we discuss in this paper concerns an unaddressed aspect of adult education courses at the higher education level. It is traditionally closely related to economics and generally not so popular. Entrepreneurship represents a relevant aspect of young adults' educational process. The patchiness depends on the specific context in which the country is situated: we are fully aware, for example, that Italy does not have a culture of entrepreneurship at the higher education level, and that such a culture is still very young in Nigeria.

The policy statements of the European Commission nevertheless clearly say:

To bring Europe back to growth and create new jobs, we need more entrepreneurs. The Entrepreneurship 2020 Action Plan is the Commission's answer to challenges brought by the gravest economic crisis in the last 50 years. It is a blueprint for action to unleash Europe's entrepreneurial potential, remove existing obstacles and revolutionise the culture of entrepreneurship in the EU. It aims to ease the creation of new businesses and to create a much more supportive environment for existing entrepreneurs to thrive and grow. (European Commission, 2017, p. 3)

Following the analysis that focuses on the best higher education models for the development of global citizens, we should take into account the strategic challenge of work. We should not be simply interested in the issue of educational offerings. In fact, we know that higher education is everywhere involved in an improvement process to foster graduation rates; at the same time, we also recognise that employability is increasingly becoming a key issue for the reflection on university courses, especially in countries with high youth unemployment rates. As a matter

of fact, both problems generate issues of social exclusion that impact on society and on young people's transition to adulthood as well.

Discussing social inclusion and citizenship for the quality of our future societies, demands that these categories be translated into human actions (Arendt, 1958) that identify the sense of being part of the same world. Adult education directly relates to human formation and, in this sense, entrepreneurship could represent one of its specific features, because it is an issue of education and its most effective application is at the higher education level. Even before discussing business, we should focus on entrepreneurship as a personal capability, as a skill (or soft skill) to be acquired to increase the quality of individual and social human life.

The Ancient Greeks already suggested the importance of self-formation. We could be able to understand self-formation changes, transformation, and evolutions in past centuries (Hadot, 2002). Nowadays, it is possible to talk about self-entrepreneurship as one aspect of being capable of self-formation in the same way that philosophy has provided self-wisdom 'guidelines'. What does self-formation mean? It denotes the ability to self-orient and self-guide, to identify goals; it means to be flexible and able to understand others; it means the sense of time and place in which you operate; it means to be capable to mentalise and anticipate context and institutional needs and the needs of people involved in them (Boffo, Del Gobbo, Gioli, & Torlone, 2017). These elements represent the soft skills that employers seek during job interviews and the same life skills identified in many adult education studies (Epale, 2017). Soft skills can be learned, and they can be taught. However, university courses still don't know how to effectively teach the 'rare bird' of transdisciplinary skills.

Entrepreneurship is one key element of self-formation. We could consider it an element of higher education but also the final outcome of education itself. Anyhow, the close connection between disciplines, entrepreneurship, and education could be considered the first axis for the comparative study we elaborate in this paper. The second axis is represented by the conviction of the strong link between entrepreneurship and learning. You learn to become an entrepreneur, to understand the importance of undertaking work and doing so during your whole life (Federighi, 2013). Perhaps the university has lost sight of this last aspect. Who can become this driving force today? It is a crucial topic, especially in this age of uncertainty and liquidity, where barriers and new walls are erected to separate us from our neighbours, from migrants and, in general, from ourselves, too. These two axes guide the research on a marginalised category, which has been traditionally conceived as belonging only to the market field but is, conversely, directly related to the self, life, and work dimensions. That's why it is a key topic:

because it concerns our students' and graduates' future lives. If we want to create an appropriate educational offer at the higher education level, we should be able to know also about entrepreneurship and its multifaceted variants, starting with self-entrepreneurship.

A glance at the European Commission's definition could provide a clear outline of this perspective: 'Entrepreneurship is an individual's ability to turn ideas into action. It includes creativity, innovation, risk taking, ability to plan and manage projects in order to achieve objectives.' (European Commission, 2006, p. 8).

The definition is a standpoint for higher education that considers employability part of the curriculum. In fact, universities are increasingly asked to support the development of those skills to bolster students' capability of navigating multidimensional working pathways with a renewed sense of entrepreneurship.

Employability and entrepreneurship: Concepts and clarifications

There are two basic approaches currently being adopted in the research on employability. One is the employment-centred approach; the other is the competence-centred approach (European Commission, EACEA, & Eurydice, 2014). The employment-centred approach can broadly be defined as focused on the ability to gain employment and to maintain it. This definition only considers the outcome of getting a job, with no attention to the personal and professional development of the individual. On the other side, the competence-centred approach focuses on the skills and competence that students could develop during their higher education studies.

Clearly, employability implies something about the capacity of the graduate to be functional and productive in a job and is not to be confused with the acquisition of a job (Yorke, 2006). This standpoint is derived from the scientific work of Lee Harvey¹, Mantz Yorke², and the Higher Education

1 Lee Harvey is a former director of the Centre for Research and Evaluation at Sheffield Hallam University. He is currently a visiting professor at Copenhagen Business School. He cooperated with the UK's Higher Education Academy in many research programmes.

2 Mantz Yorke is Honorary Visiting Professor at Lancaster University. His research interests are predominantly connected to students' experiences of higher education, covering areas such as student success, employability, assessment, and retention. He worked at the UK's Higher Education Academy for many years.

Academy³. They propose two interesting understandings of the concept, based on the importance of the university in the development of students' employability.

The definition by Harvey (2001) emphasises both individual and institutional roles in employability. On the individual side, employability could relate to 'the propensity of students to obtain a job' (Harvey, 2001, p. 98). On the institutional side, employability is a responsibility of higher education itself (Harvey & Knight, 1996). Harvey clearly underlines that

in some institutions or parts of institutions, this employability-development is explicit and integral to the education provided and in others it is not. Medicine, nursing, social work and initial teacher training have programmes of study closely linked to learning in practice settings that are directly related to future employment. (Harvey, 2001, p. 99)

From this perspective, employability is a matter of learning (Taatala, 2010) and not just a simple indicator of employment.

In the same perspective, Yorke (2006) illustrates this point clearly. He defines employability as 'a set of achievements – skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy' (Yorke, 2006, p. 8). Overall, Yorke suggests focusing not only on the gain of employment but on a broader perspective that considers the successful contribution to the labour market, the economy, and the community. Hence, from a pedagogical perspective, it opens new pathways (such as the design of innovative university curricula and new specific educational programmes with the study courses) for the research on employability linked to the formative process of the subject.

It is necessary to clarify exactly what is commonly meant by entrepreneurship. In this sense, entrepreneurship is a matter of employability since it occurs in any worker, regardless of sector and specific content. In detail, it describes the ability of finding opportunities to create value through innovation (Moreland, 2006). That is why entrepreneurship could be understood as a key competence for students' employability, enabling them to act effectively in different contexts and to manage personal and professional challenges. In this sense, it is directly linked to specific skills (Kucel, Róbert, Buil, & Masferrer, 2016) that could be bolstered at the higher education level.

3 The Higher Education Academy started working on employability in 2006 with a paper series. The works comprised Professor Peter Knight (Open University), Professor Lee Harvey (Sheffield Hallam University), Professor Stephen McNair (Surrey University), Dr Brenda Little (CHERI), Professor Kate Purcell (University of the West of England), Mike Hill (Graduate Prospects), and Val Butcher from the Higher Education Academy.

Moreover, entrepreneurship continues to attract interest from both academics and policy makers, so much so that many universities now include entrepreneurship studies as part of their curricula. Similarly, empirical studies exploring the extent to which entrepreneurial education influences the decision to become an entrepreneur are steadily increasing (Peterman & Kennedy, 2003).

Entrepreneurship is the act of risk-taking in the production of goods and services for profit maximisation. This process goes beyond ideation but also conceptualisation, enterprise creation, commercialisation, and business growth (Dionco-Adetayo, 2014). In Osemeke (2012), entrepreneurship refers to the process of enhancing entrepreneurial skills and knowledge through structured training and institution-building programmes. Maigida, Saba, and Namkere (2013) describe entrepreneurship as an ability to think creatively and become an effective problem solver. They believe that entrepreneurship is the practice of consistently converting goods and ideas into productive and profitable commercial ventures. According to Klaipeda Business School (2009), entrepreneurship is defined as the main skill necessary to conform to the conditions of the ever-changing knowledge and information society. This means that entrepreneurship is about the acquisition of skills relevant to the contemporary needs of the dynamic society.

Table 1: Perspectives on the nature of entrepreneurship.

Creation of Wealth	Entrepreneurship involves assuming the risks associated with the facilitation of production in exchange for profit.
Creation of Enterprise	Entrepreneurship entails the founding of a new business venture where none existed before.
Creation of Innovation	Entrepreneurship is concerned with unique combinations of resources that make existing methods or products obsolete.
Creation of Change	Entrepreneurship involves creating change by adjusting, adapting, and modifying one's personal repertoire, approaches, and skills to meet different situations and demands.
Creation of Jobs	Entrepreneurship is concerned with employing, managing and developing the factors of production, including the labour force.
Creation of Value	Entrepreneurship is a process of creating value for customers by exploiting untapped opportunities.
Creation of Growth	Entrepreneurship is defined as a strong and positive orientation towards growth in sales, income, assets, and employment

Source: Onwuka, Ugwu, & Kalu (2014, p. 274)

Bassey and Archibong (2005) state that the goal of entrepreneurship education is to empower graduates (irrespective of their areas of specialisation) with skills

that will enable them to engage in income-yielding ventures if they are unable to secure formal jobs. This is a reorientation from job seeking to job creation. Likewise, Cheng and Chan (2009) point out that entrepreneurship training increases entrepreneurial self-efficacy, self-employment, and a risk-taking attitude in the entrepreneur. It also creates enormous business opportunities and trains people with innovative enterprise skills to grasp the opportunities for starting new entrepreneurial activities (Cheng & Chan, 2009).

The role of higher education institutions (HEIs) in solving problems of development through the production of skilled labour has received serious contributions in recent time across the world. HEIs are expected to become responsive to the demands of the labour market, in the context of an increasingly competitive, complex, and globalised knowledge economy. Postigo, Lacobucci, and Tamborini (2006) acknowledge the significance of higher education and the role it plays in entrepreneurial activity, stating that it is critical to attract young adults to entrepreneurship, especially as current industrial trends are towards a knowledge-based environment. However, since many of the factors that could unlock the employment potential of young adults are also on the demand side of the labour market, private sector development, including entrepreneurship and entrepreneurial activities, can be part of the solution (Brixiová & Kangoye, 2014). This may, however, be achievable through vigorous entrepreneurial skills development and training especially in the context of higher education.

To facilitate an evolving understanding of entrepreneurship, continued research efforts that investigate the skills required by entrepreneurs are essential. This is because skills acquisition involves the development of a new skill, practice the way of doing things usually gained through training or experience. Studies have shown that skill acquisition is the most critical factor in the utilisation of entrepreneurship opportunities for self-employment (Ekpe, Razak, & Mat, 2012). More importantly for economic prosperity in the twenty-first century, in which the entire world has become private sector-driven, possession of entrepreneurial skills is required to function productively.

Cross-border comparison of innovation and entrepreneurial learning

The execution, implementation, and practices of entrepreneurship education are observed to vary across regions and institutions. This paper therefore provides experiences in terms of implementation and practices from European (Italy) and African (Nigeria) perspectives. The choice of these countries was informed by the in-depth knowledge of the education system in the two countries, where the

authors practise as researchers and teachers and engage in community services. Indeed, the authors shared their perspectives during the International Winter School that took place in Würzburg in February 2017. In this sense, the comparison is the joint effort to analyse and compare theoretical aspects and policy actions in both countries.

The implementation of a national strategy for entrepreneurship in Italy is strongly supported by the European Commission. The Entrepreneurship 2020 Action Plan, published in 2013, stresses the challenge of new and innovative entrepreneurs for Europe (European Commission, 2013) in the context of an economic downturn, started in 2008, which severely affected the global and continental economy. In this direction, the European Union tried to face these structural changes through incentives for competitiveness and growth (European Commission, 2013). Entrepreneurship represents one of the pillars of the Europe 2020 Strategy. As a matter of fact, an effective strategy for entrepreneurship 'creates new companies and jobs, opens up new markets, and nurtures new skills and capabilities' (European Commission, 2013, p. 3). The Entrepreneurship 2020 Action Plan identifies three areas for intervention:

1. entrepreneurial education and training to support growth and business creation;
2. strengthening framework conditions for entrepreneurs by removing existing structural barriers and supporting them in crucial phases of the business lifecycle; and
3. dynamising the culture of entrepreneurship in Europe: nurturing the new generation of entrepreneurs (European Commission, 2013, p. 5).

In detail, the plan intends to: 'unleash Europe's entrepreneurial potential; remove existing obstacles and to revolutionise the culture of entrepreneurship in Europe; ease the creation of new businesses; and create a much more supportive environment for existing entrepreneurs to thrive and grow' (European Commission, 2013, p. 5). Unfortunately, Italy has not completely adopted the Action Plan yet. Starting from school education, which provides the medium-term perspective on which entrepreneurship is rooted, there is still no national strategy for the development of an entrepreneurial mind-set in primary and secondary school (European Commission, EACEA, & Eurydice, 2016). This is particularly important for creating a stimulating entrepreneurial environment, because

whether or not they go on to found businesses or social enterprises, young people who benefit from entrepreneurial learning, develop business knowledge and essential skills and attitudes including creativity, initiative, tenacity, teamwork, understanding of risk and a sense of responsibility' (European Commission, 2013, p. 6).

In this sense, entrepreneurship is not just ‘being an entrepreneur’, but developing the capability to transform ideas into actions that increase employability, too (Komarkova, Gagliardi, Conrads, & Collado, 2015).

The Italian government just adopted, at the national level, the definition of the entrepreneurship competence defined in the European Reference Framework for Key Competences in Lifelong Learning. The key competence is described as follows:

[A] sense of initiative and entrepreneurship refers to an individual’s ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance. (European Communities, 2007, p. 11)

At the higher education level, the Ministry of Education, University and Research (MIUR) and the Ministry of Economic Development (MISE) developed in 2012 a joint policy report called *Restart, Italia!* aimed at creating a stimulating learning environment for university students and bolstering the entrepreneurial and innovation culture. Among the policy proposals, the report suggests intervening on students’ awareness about future trends and opportunities. The statement is based on the importance of interdisciplinarity (Morin, 2015) in the world of work. Thus, the report proposes two actions:

- the realisation of activities, programmes, and initiatives aimed at promoting and spreading the culture of innovation and entrepreneurship in schools⁴ and universities;
- the creation of Contamination Labs (C-Lab), as special learning environments for students, researchers, and young professionals from different study fields who desire to improve their own entrepreneurial ideas (Fusacchia et al., 2012).

Indeed, unlike the traditional incubators and accelerators, the C-Lab intends to create a space for creative thinking and innovative project design. The report also stated that ‘the initiative could be regarded as a “step back”, since it aims primarily to build a network that allows to gather the human capital needed for highly innovative projects’ (Fusacchia et al., 2012, p. 107). From this perspective, the C-Lab is an experimental didactical project for higher education institutions.

4 As stated above, the strategy in school education has not been implemented yet.

The implementation of Contamination Labs at Italian universities was supported by a public announcement of the Ministry of Education, University and Research (MIUR) allocating one million euros for the realisation of such labs at universities situated in poorly developed regions. Four C-Labs were established in 2014 (Mediterranean University in Reggio Calabria, Calabria University in Cosenza, University of Catania, and University of Naples 'Federico II'). In addition to these subsidised initiatives, four more C-Labs started at the University of Cagliari, University of Trento, Catholic University of Milan 'Sacro Cuore', and Polytechnic University of Marche Region in Ancona. The first cycle of the project (2015/2016) saw great success, with 635 participants and more than 1,000 candidates (Calenda, 2016)⁵. These students generated 17 projects that could be further developed. In 2016, the National Research Programme 2015–2020, published by MIUR, provided more funds for new C-Labs and a new public announcement that opened in December 2016 for implementation during the current year.

In Nigeria, the gloomy unemployment rate has brought about the introduction of entrepreneurship education at universities; a course meant to encourage undergraduates to try self-employment, self-reliance, and self-sustenance through enterprise skills. This is currently high on the country's national agenda, with the hope that it will provide alternative channels of employment for young adults. Entrepreneurship education at universities is a way of alleviating the challenges of unemployment. It is one of the most important drivers of job creation and economic growth. It is crucial for the development of vibrant small and medium-sized enterprises (SMEs) and an informal business sector with multiplying effects on the national economy.

The introduction of entrepreneurship training in higher education is a purposeful intervention by an educator in the life of the learner to impart entrepreneurial qualities and skills to enable the learner to survive in the world of business. Entrepreneurship training could be the most effective method to facilitate labour market placement for the graduate population. Studies in this area have indicated that such training could identify responsible individuals and transform them into job creators, or confront risky individuals and create work challenges for them (Urbano, Aponte, & Toledano, 2008; Dionco-Adetayo, 2014; Akintola, 2014). Through such strategies, the unemployment rate and the rate of job placement failures could be reduced. Entrepreneurship training basically includes the philosophy of self-reliance through structured and formal conveyance

5 The data refers only to C-Labs financed by the Italian Ministry of Education and Research. There is no data available for the other projects.

of entrepreneurial competencies, concepts, skills, and mental awareness, such as creating a new productive environment and promoting new sets of attitudes that are central to developing entrepreneurial culture (Alberti, Sciscia, & Poli, 2004; Arogundade, 2011). The skills and competencies acquired in the process of this training should be for developing individuals' growth-oriented ventures. This is a reorientation from job-seeking to job creation.

However, the observed underlying problem in Nigeria is the fact that the training that young adults receive has not been fully successful in equipping them with desirable skills and competencies required for job creation, self-employment, and self-reliance, as evident in the high rate of unemployment in the country. The Federal Government of Nigeria (2004) in *National Policy on Education*, section 8, sub-section 59(d), emphasises the acquisition of both physical and intellectual skills to prepare prospective graduates to be self-reliant and useful members of the society. The actualisation of this goal, as reported by Owusu-Ansah and Poku (2012), has been largely determined by theoretical knowledge acquisition without functional skills. This implies that the structure and content of formal education in most developing economies, including Nigeria, is designed to prepare young adults for corporate jobs without emphasising creativity and entrepreneurialism (Ikpesu, 2014). Meanwhile, this negates the drive for economic development in a nation such as Nigeria.

To make up for the inadequacies of addressing the unemployment problem, various governmental and non-governmental organisations have initiated policy programmes through support agencies such as the National Office for Technology Acquisition and Promotion (NOTAP)-1979, National Directorate for Employment (NDE)-1987, Raw Materials & Development Council (RMDC)-1987, National Poverty Eradication Programme (NAPEP)-2001, and Small and Medium Enterprises Development Agency (SMEDAN)-2003. More recently, the Youth Enterprise with Innovation in Nigeria (YouWIN)-2011, the Subsidy Reinvestment and Empowerment Programme (SURE-P)-2012 and the Graduate Internship Scheme (GIS) programmes were introduced to promote entrepreneurship skills and address the challenges of unemployment among Nigerian young adults.

However, Ebiringa (2012) argues that many of these policy interventions aimed at stimulating entrepreneurship development via small and medium-scale enterprises in Nigeria have always failed and calls for a more inclusive approach. To this end, the National Universities Commission (NUC) in 2004 organised a workshop on 'Entrepreneurship for Nigerian Universities' for all federal universities in the country with the aim of inculcating an entrepreneurial spirit and mind-set in undergraduate students, improving the capacity of youths, developing positive

independent and innovative thought, and stimulating future graduates towards venture and wealth creation.

The NUC workshop produced a draft curriculum on entrepreneurial studies for Nigerian universities. The Federal Government of Nigeria (FGN), through the Ministry of Education (MoE) in conjunction with NUC, consequently approved the establishment of Entrepreneurship Study Centres (ESCs) at all federally owned universities across the country, to be funded by the Education Trust Fund (ETF). The ministry also approved the establishment of a project implementation committee to fast-track the institutionalisation of entrepreneurship education at the nation's universities (Pulka, Rikwentishe, & Ibrahim 2014). The primary role of the ESCs is to stimulate entrepreneurial competencies among students, staff, and the community.

Based on the established structures, many universities have initiated entrepreneurship education programmes to reverse the graduate unemployment trend by giving students the needed training in entrepreneurial skills, enabling them to set up businesses and to consider self-employment as a viable career option.

The policy projection for the first four years (2006–2010) of establishing entrepreneurship programmes at Nigerian universities was that at least 50,000 graduates would complete entrepreneurship training with sufficient entrepreneurial skills. Out of the projected 50,000 trainees, it was equally presumed that at least 10,000 graduates would be self-employed and possibly provide employment opportunities (Akintola, 2014). But today, there is no substantial data to reflect the exact number of students who were either self-employed or created jobs as employment opportunities for others. In no small measure, this leaves much to be desired about the efficacy of the programme at Nigerian universities.

Table 2: Comparison between entrepreneurship in Italy and Nigeria.

Category	Italy	Nigeria
Labour Market/Employment Rate	High level of Youth Unemployment Rate	High level of Youth Unemployment Rate
Aims	Self-Employment and Job Placement	Self-Employment and Job Placement
Name of Entrepreneurial Programme	Contamination Lab (C-Lab)	Entrepreneurship Study Centres (ESC)
Year of implementation	2012	2006
Institutional Promoters	Ministry of Economic Development and Ministry of Education, University and Research	Ministry of Education

Category	Italy	Nigeria
N° Participants	635 students/graduates in 2015/2016 ¹	50,000 graduates (2006–2010)
Assessment of Results	The Ministry of Economic development registered 17 projects developed by C-Labs in 2015/2016 ²	No substantial data available
Approach	Learning-oriented and Projectoriented	Learning-oriented

Source: Authors' own

Analysis of differences and similarities

In presenting the juxtaposition of situations in the two countries, some differences and similarities concerning the development of entrepreneurial education in Italy and Nigeria emerge. The unemployment rates of young adults in both labour markets represent the first common point. As a matter of fact, both countries started implementing an entrepreneurship strategy as an action for raising job opportunities. In this sense, the awareness about young adults' issues facing the transition from university to work is the basis for the design of specific measures in that field.

Equally, the aims of Italian and Nigerian strategies rely on the expected outcomes of fostering students' and graduates' employability. What both governments want to disseminate is a broad conception of entrepreneurship, directly linked to employability. Moreover, both C-Lab (Italy) and ESCs (Nigeria) are ambitious learning programmes aimed at spreading the culture of innovation, the development of entrepreneurial competencies, the capability to identify opportunities in different contexts, and the ability to elaborate new ideas for new start-ups and complex organisations.

These experiences present a different approach concerning the design and the structure of the institutional framework. On the one hand, the Italian C-Lab was a young project, created only in 2012 and offering at this point only two announcements for its implementation at universities. On the other hand, Nigerian ESCs started in 2006 and have already reached a well-established level of efficacy and dissemination. Indeed, the institutional promoters revealed some differences between the two strategies. In the Italian experience, the cooperation between the Ministry of Economic Development and the Ministry of Education, University and Research is a sign of new and innovative cooperation between the economic

and educational approaches at the higher education level. This aspect could be underlined also in terms of participants and results.

Despite the dissimilar starting point of the two strategies, differences could be detected concerning the participation of students, revealing very divergent levels of dissemination at universities (50,000 former participants in five years of the Nigerian strategies against only 635 in the first Italian cycle). Moreover, the technical report elaborated by the Italian Ministry of Economic Development (Calenda, 2016), which gives strong attention to impact and results as opposed to the lack of substantial data in Nigeria, could illustrate the presence of two different standpoints. In fact, we hypothesise that these final elements symbolise two different approaches. The Italian approach is oriented towards both innovative learning pathways and project outcomes, whereas the Nigerian one is directly focused on learning and competencies, without specific measurement (Akintola, 2014) of the efficacy of the project, as measured by the creation of new companies, for example.

Conclusions and implications for research, policy and practice

At the end of this reflective and comparative activity, we reached a clear touch point. The relationship between the need to foster entrepreneurship learning pathways at the higher education level and the need to combine them with goals is directly linked to the world of work.

It seemed really interesting to identify synergies between adult education, employability, and entrepreneurship. As stated above, this relationship is not commonly analysed in scientific research and, moreover, educational policies and strategies do give it the emphasis it deserves. Even today, discussions about business inevitably call into question the pursuit of profit. It is a deeply rooted way of thinking that has characterised the Western world for most decades of the twentieth century. The current debate on enterprise, by contrast, suggests that we are going beyond the ideological barriers that triggered wars, divisions, barriers, mourning, and pain.

Entrepreneurship should be linked to the concepts of democracy and responsibility (Jonas, 1984); it cannot operate without the ethical principles that will allow us to look at the future, in Europe and in Africa as well. From the research point of view, therefore, the ethical imperative of the principle of responsibility is the main standpoint from which to explore the world, starting from civil and social conditions. The imperative of responsibility, as formulated by Jonas in the late 1970s, inspires the presence of entrepreneurship in Higher education.

In fact, values share the comparative pathways more than the specific contents of learning.

Research can therefore be oriented towards: (1) the creation of alternative didactics capable of (2) generating ideas and (3) supporting the creativity of each student. Moreover, research should be capable of (4) identifying the perspectives of the educational programme by monitoring and evaluating graduates' careers, and of (5) providing solutions in line with local, national, and international needs. With regard to the relevance of entrepreneurship as a crosscutting and inter-disciplinary idea, a glance at the university of the future could summarise these points.

Practical activities have already been pointed out:

1. the creation of shared co-working spaces;
2. the presence of idea-generation laboratories;
3. the implementation of mentorship activities for single students or groups wishing to advance their business ideas;
4. the organisation of transversal courses aimed at understanding business models;
5. the statement of work as one of the pillar of university missions;
6. the valorisation of work as the result of study and research.

This second part should identify the idea that work is the driving force of higher education. If the university of the twentieth century became a mass university, and also a social elevator and a place of cultural growth, the university of the twenty-first century must be developed as the space for future ideas. It must become the centre for elaborating human values and ideals that focus on shared work, but also on decent work for all people.

In conclusion, we focus on educational policy guidelines. Mainly in Europe, too little thinking is devoted to innovation, work generation, and job diversification. Looking at the economic downturn that involved the whole world, we notice that most countries have no effective solutions for youth unemployment, particularly in Southern Europe. In this sense, higher education has to do more and better to provide young adults with useful and applicable skills, to make life-planning a central aspect of each student's experience in our courses. Moreover, we must educate men and women able to engage in dialogue in a new world: As Edgar Morin has said, a new education is still possible (Morin, 2015). Since the university is a place of learning, the revolution of 'learning entrepreneurship' is a new target to be reached and improved as a goal for the future.

Each teacher, as an actor of this new storytelling in the universities, should reinforce his/her disciplinary methods and contents to strengthen the transformation that is naturally inscribed in every educational process.

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