Article

Reconstructing policy transfer in adult and vocational education and training

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Abstract

The article contributes to the understanding of educational policy transfer with a particular focus on VET and
labour-market related training. A review of VET policy transfer literature is followed by a description of
travelling VET reforms in adult and vocational education and training around the globe. Historical foundations
of VET policy transfer are described with an emphasis on lending and borrowing from the global North to the
global South. Finally, contemporary forces that influence global policy transfer, derived from personal ob-
servation, are described. We aim to contribute to a better understanding of policy cycles by depicting the
influence of different dynamics on decision-making for policy transfer in VET. We argue that there can be
various reasons to policy transfer, not just attractiveness of a particular educational system or approach, but
also global industry demands for workforce development or the influence of big data and social media.

Keywords

Policy transfer, adult education, VET, governance 2.0, history of VET

Introduction

In this article, we use the term vocational and adult education as a kind of placeholder term for the
highly diverse understandable term of (technical) and Vocational Education and Training (TVET)
(e.g. King, 2020). In general, we include all types of education and training with a clear relevance

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for gainful earning and with relation to the labour market. We also add the term adult education, as there is a wide range of such educational provision for gainful employment outside formal TVET, in the semi-formal sector and beyond.[1]

In vocational and adult education, policy transfer is a highly relevant topic with numerous stakeholders working in this field. At international level, it is predominantly the World Bank, the ILO, and the OECD while at European level, key stakeholders are the European Commission, the European Training Foundation (ETF) and the European Centre for the Development of Vocational Training (CEDEFOP) with each of the institutions being 'a global governor in [their] own rights, and a member of a larger system of interstate and transnational relationships' (Mundy and Verger, 2015: 9).

Policy transfer is a notion with a diversified understanding, depending on the academic discipline, the perspective of interest and the location in the broad field of education in international relations, for example, as a policy maker, as a practitioner or/and as a scholar. As (Li and Pilz 2021: 2) express '"Policy transfer" can be defined in various ways, and this can be confusing – partly due to the nuances involved in policy transfer, and partly due to the fact that different definitions have emerged within different academic disciplines'.

Although agreeing with this statement, we do not seek to contribute solely to a scholarly discussion on the notion of policy transfer. Instead, we will use policy transfer as an umbrella term which implies 'the transfer of procedures, measures, strategies and concepts in the broadest sense' (Li and Pilz, 2021: 2; see also Barabasch and Wolf, 2011: 284; Barabasch and Wolf, 2010).

Moreover, in our understanding, policy transfer covers the whole range from voluntary transfer or lesson-drawing to negotiated transfer and direct coercive transfer (Evans, 2009: 245). It encompasses the complete range of the term, depending on the perspectives of the academic interest as well as the differing usages in the various disciplines, such as political science, political sociology or comparative education.

Policy borrowing and lending is often used together in the academic literature to describe the continuum from, on the one hand, the adoption of foreign educational experiences in recipient countries to the activities of influential actors to embrace and import their advertised, exemplary educational examples (Steiner-Khamsi, 2012; Portnoi, 2016). Whereas in policy borrowing we focus more on the adoption of 'foreign' education issues in a country (recipient perspective), in policy lending (donor perspective) we focus more on the activities of influential countries or supranational organisations (e.g. the World Bank) that offer examples for take-over (Ochs and Phillips, 2004). Policy learning (Grootings, 2007), on the other hand, focuses on the conditions and possibilities of taking over 'foreign' educational issues for the benefit of a country and overcoming the weaknesses of borrowing and lending (Raffe and Semple, 2011).

Given such understanding of policy transfer, it is not restricted to particular countries or to the transfer of policies from the Global North to the Global South. It is rather an everyday phenomenon addressed by policy makers, researchers and practitioners seeking for (reform) solutions in particular regions or policy fields. For example, over the last two decades, the World Bank has spent more than 66 billion USD supporting all types of education, including vocational and adult education as well as lifelong learning. These efforts were addressed to 160 countries and 25 regional states and covered 'technical assistance, loans and grants designed to improve learning and provide everyone with the opportunity to get the education they need to succeed' (World Bank 2021, 3). In comparison, the OECD states 'We are providing countries with timely and tailored policy advice to better design and implement reforms offering policy makers support in two main ways: (1) education country reviews and (2) policy dialogue and implementation support'.[2] Moreover, the 2019 OECD Education Policy Outlook is meant to 'look […] into "what is being done," as well as "why

and how it works" to help education systems gain better understanding of how policies can have greater opportunities of success in their specific contexts' (OECD 2019: 21). It is in particular the OECD's Skills Strategy (OSS[3]) that supports countries with a policy framework to invest in skills and promote economic growth (Valiente, 2014: 40). In the European Union, knowledge transfer as a key element of policy transfer is at the core of European VET policy and reflected in numerous policy measures, such as the research and mobility programmes (e.g. Erasmus+ or the EU's cohesion and good governance policy). Though not all these policies and initiatives address (vocational and adult) education, they clearly point at the relevance of policy transfer. Why is it so relevant? Realizing that the roots of policy transfer lie in policy making and not in political science, Pal (2014) has shown that 'the basics of policy transfer are straightforward. On the demand side, governments "puzzle," they search for solutions, they seek "best practices," they wish to be leaders rather than "laggards," they need resources and will accept conditions […] if necessary. On the supply side, the hawkers are almost endless: NGOs, think tanks, corporations, unions, citizens' movements, movie stars, individual governments, regional governmental associations (think EU), and of course international organizations like the ever-clucking World Bank and ever-stern IMF' (Pal, 2014: 195–196). Next to seeking for best practice and for answers to reform needs, not being 'laggards' seems an important reason to adopt educational reforms from elsewhere.

Against this background, our paper contributes to the understanding of educational policy transfer with a particular focus on VET and labour-market related training. Mapping the field of VET policy transfer allows for both, describing and analysing the policy cycle of the transfer initiatives and identifying examples of educational transfer. One policy cycle we will take into account refers to the stages of agenda setting, policy formulation, adoption, implementation and evaluation of the embedded policy (e.g. Jann and Wegrich, 2007: 43). Another relevant cycle in our context is the one on policy borrowing from Philipps and Ochs which refers to the stages of (1) the cross-national attractiveness of certain elements of foreign educational solutions, (2) the decision process of the main stakeholders in the borrowing country, (3) the high complex implementation with the involvement of significant actors which leads to either resistance or support for the proposed reforms and at least (4) the process of growing into one's own – the so-called indigenisation (Phillips and Ochs, 2003; Wolf 2015: 67). Also, we show that policy transfer is not necessarily based on the attractiveness of a particular educational system or approach but can have various other reasons, such as global industry demands for workforce development or the influence of big data and social media. In this context, we question in which ways new steering logics are emerging in education – a term that was coined by Raffe and Byrne (2005) and refers to the political economy and societal logic in the context of an education system.

The article starts with a discussion on the question why there are travelling educational reforms and what makes a reform attractive to be (not) adopted. The article then turns to the emergence of policy borrowing in adult and vocational education and training and reflects on actors, underlying conditions and experiences of selected countries with policy transfer. The following chapter indicates current trends and the emergence of big data's influence on policy transfer, for example, by digital networking, policymaking 2.0 and changes in work and competence requirements. We conclude that policy cycles are nowadays shaped by dynamics that tended to be neglected in the policy transfer discourse and finally provide an outlook for future research.

Educational reforms travelling around the globe

With its roots in policy making and – much later – adopted by political science and comparative education, in our article, we understand policy transfer as a process 'by which knowledge about

policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system' (Dolowitz and Marsh, 2000: 5). In contrast, we understand the analysis of policy transfer as 'a theory of policy development that seeks to make sense of a process or set of processes in which knowledge about institutions, policies or delivery systems at one sector or level of governance is used in the development of institutions, policies or delivery systems at another sector or level of governance' (Evans, 2009, 243f.).

In current discussions on adult education and VET policy transfer, ideas of policy transfer, policy learning and policy diffusion across regions and states are dominating the field. With respect to VET in Germany, for instance, there are numerous examples describing the transfer (and its failure) of the dual apprenticeship model and its elements to other countries (e.g. Borrmann and Stockmann, 2009; Euler, 2013; Pilz and Wiemann, 2021). Other examples of such 'travelling reforms' (Steiner-Khamsi, 2006: 665), policy diffusions and policyscapes (Steiner-Khamsi and Waldow, 2012: 337) – within and beyond the scope of VET – include the Bologna process in higher education, the learning outcomes orientation, qualifications frameworks, recognition of prior learning or quality assurance mechanisms (Allais, 2014; Martin and Alderson, 2007; Wheelahan, 2011; Table 1).

(Jakobi, 2012, 2012b) has pointed out that such 'travelling reforms' are often promoted and (co-) financed by international organisations such as the OECD, the World Bank or the ILO. From a sociological institutionalist perspective, she is arguing that particular educational policies such as lifelong learning have become 'global norms' in education policy (Jakobi, 2012b: 31). Implementing such reforms is seen as a result of global competitions among education systems and the strive for best practice as regards governance of education, international rankings as well as efficiency and effectiveness of education. However, Jakobi also concludes that, while ideas can be transferred easily, this is not the case with reforms which are 'closely linked to the capacity of the national political system and rely heavily on national preconditions and path dependency' (Jakobi, 2012b: 56). These findings indicate the massive influence of international stakeholders in the field of policy transfer, and at the same time, they reveal that the diffusion of policy reform also depends on the wealth of a nation (Jakobi, 2012b).

The 'global agenda' of lifelong learning is only one of many examples travelling across countries and regions. While the following table is not meant to provide a complete and concise overview of such travelling reforms, it illustrates more or less prominent examples of such reforms and indicates when and by which region or by which particular institution it began spreading across the globe:[4]

A particular mode of policy transfer is based on publicly available results from (international) assessments or monitoring, such as UNESCO's Education for all and the Sustainable Development Goals. Such reports often initiate a search for best practice to improve education systems. Similarly, while there is not (yet) any large-scale assessment in VET,[11] indicator-based reporting and monitoring (such as the progress reports of the European Commission for achieving Europe, 2030 educational objectives) have become common in reforming education systems.

One of the issues that arise from such travelling reforms refers to the question which policies, reforms and solutions have proved successful or have at least a realistic chance of being implemented sustainably. In this context, a one-size-fits-all-solution and the idea of 'exporting' educational elements seem unrealistic:

'There are no absolute answers in such decisions, any more than there is an absolute answer to what constitutes an ideal society. The question is one of efficiency – what inputs into the system will give maximum output of the educational products (skills, knowledge and attitudes) identified as desirable in a particular society' (Broadfoot, 1977: 134).

Instead, policy makers and practitioners must consider the system environment and respect the cultural, socio-economic and educational context. In that sense, Kingdon's concept of *policy formation* as the result of a coincidence is highly relevant (Kingdon, 1995: 19). He assumes that three simultaneously converging phenomena play a major role in actually initiating policy changes. These phenomena (policy streams) became known as *policy windows* or *windows of opportunity* and include the *problem stream (*the recognition of a problem); the *policy stream (*availability of

Table 1. Examples of the origin and spread of 'travelling' educational reforms.

Reform	Educational sub-system	Originating from	Period
3 cycles of higher education, credit point systems	Higher Education	United Kingdom, Canada, USA	starting in the early 1960s; massive spread since the late 1990s
Apprenticeship education ('dual' apprenticeship model)	VET	German-speaking countries	since the mid-1950s
Core skills	Mostly VET but also higher and general education	ILO (based on ideas by, for example, the OECD in the early 2000s and initiatives in, for example, Germany in the 1960s)[5]	since the late 2010s
Developing a Curriculum (DACUM)	VET and higher education	Ohio State University (Robert E. Norton)[6]	Since the 1980s
Large Scale Assessments (e.g. PISA, PIAAC)	General education	OECD (based on a UNESCO idea)	since the 1990s
O*Net	Classification of all qualifications	Financed by the U.S. Department of Labour, Employment and Training Administration, developed by the National Center for O*NET Development[7]	Since the 1990s
Outcomes-based education	General education, VET, higher education, adult education	New Zealand	since the 1980s
Qualifications' frameworks	Varying from country to country: General education, VET, higher education, adult education	(France) Scotland	since the late 1980s[8]
Recognition of prior learning	Varying from country to country: General education, VET, higher education, adult education	European Commission, UNESCO (based on early initiatives in, for example, the US or Norway in the 1940s and 1950s[9])	Since the 2010
Structured on-the-job-training SOJT	VET	Ron Jacobs and colleagues[10]	since the mid-1990s

solutions and alternatives); and the *politics stream* (changes in the political environment, such as upcoming elections or changes in public opinions) (Howlett et al., 2014).[12]

With respect to the policy cycle mentioned above, Jann and Wegrich (2007) have pointed out that it is particularly the process of agenda setting where policy windows become relevant: '[A]genda setting is far from a rational selection of issues in terms of their relevance as a problem for the wider society. Instead, the shifting of attention and agendas […] could eventually lead governments to adopt policies that contradict measures introduced earlier' (ibid, p. 47).

Steiner-Khamsi (2014) adapted the model of policy formation to educational reforms to analyse why some educational ideas, approaches and countries serve as reference models while others do not. This so-called externalization framework (Schriewer, 1992; Steiner-Khamsi, 2004, 2014, 2016) addresses the question how and under what conditions policy transfer is initiated and implemented. Steiner-Khamsi concludes that many so-called international educational reforms derive from the Anglo-Saxon countries where they originated as 'quasi-market, neo-liberal, or hyper-liberal reforms […], they were borrowed from New Zealand and Australia, adopted in the United Kingdom and in the United States, and then disseminated to every corner of the world. Precisely because they were introduced so long ago, policy makers in late-adopter countries refer to them as "international reforms," without explaining where they originated' (Steiner-Khamsi, 2014: 160).

Still today, educational policy transfer is attractive as it promises solving national reform needs and can have a 'salutary effect' (Steiner-Khamsi, 2014: 156) on long-lasting reform conflicts in both, the foreign system and the home system. Moreover, it is a coalition builder as it 'enables opposed advocacy groups to combine resources to support a third, supposedly more neutral, policy option borrowed from elsewhere' (Steiner-Khamsi, 2014: 156). Rather than providing the best possible answer, this 'coalition builder' often serves as legitimisation. It is a symbolic certification that provides an answer to regional/national reform needs. In this context, Steiner-Khamsi uses the metaphor of the octopus for travelling reforms and states that 'local actors reach out and grab the arm of the octopus that is closest to their particular policy agenda, and thereby attach (local) meaning to a (global) policy' (Steiner-Khamsi, 2014: 155–156).

The risk harboured in 'grabbing the arm of the octopus' lies in the salutary effect promised by (international or foreign) stakeholders, organisations or governments while, at the same time, education is – traditionally – deeply rooted in national policy contexts. Thus, reaching out for the arm of the octopus labelled 'global education and international competition' harbours the risk that international stakeholders massively impact on national education systems by their (international) agendas, benchmarks and indicators (Jakobi, 2012b; Nóvoa and Yariv-Mashal, 2007: 426).

In parallel, such behaviour has become common in policy fields in which 'no single actor can claim absolute dominance' (Burns et al., 2016: 18) and where difficulties derive from 'increased interdependence of governments representing different territorial levels, as well as interdependence between governments and non-governmental actors' (Milana and Klatt, 2020: 2).

While none of these findings provides answers to the question how to best implement an educational policy transfer, they all indicate that the decision to adopt a particular (vocational or adult) education policy can derive from considerations far from the system's attractiveness and its de-facto provision of a reform need solution in its home country and that is rarely considered in

research on educational policy transfer. This is also reflected in the history of policy transfer in VET, with a particular focus on policy transfer in developing countries.

Policy transfer in vocational education and training – historical foundations and challenges with developing countries

Historical foundations of policy transfer in vocational education and training

The history of vocational education and training is characterised by an exchange of experiences and the mutual communication of people about their own work and working practices. A typical example of this is the wanderings of craftsmen in the Middle Ages and Early Modern Times in Europe, especially in the context of building cathedrals, where foreign workers brought along work practices and technologies, the latter being understood as techniques in their socio-cultural embedding (Dierkes and Hoffmann, 1992; Williams and Edge, 1996; Sørensen, 2014). This type of personalised policy transfer was concerned with technology, not with the mode of training since this has been rather similar within the crafts across Europe (Epstein, 2008; Greinert, 2013). While this individualised, person-bound exchange, dominated for a long time, the systematisation of the exchange started with accelerated industrial developments in the 19th century. In this capitalistic economic development, the nation states competed with each other in economic, military and political terms. Therefore, they failed to transfer technological innovations from abroad. This was also due, because since the 18th until the early 19th century, the governments of progressive industrial developed countries restricted the mobility of their skilled workers and their hiring from abroad (Kroker, 1971; Reith, 1999).

The reason was that the occupational expertise of specialised skilled craftsmen was not exclusively concerned with manual work knowledge and expertise but also with knowledge about means, measurements and regulations for high technology operations (e.g. steam machines or puddling oven for steel production), that is, a highly complex intertwining of techniques and activities (Fremdling, 2017).

The interconnection between technology transfer and education started to be in the interest of attention in the second decade of the 19th century (Wolf, 2021). One example for a more systematic policy transfer in VET, from a Prussian-German perspective, are the French higher vocational schools, the Écoles Polytechniques and the Écoles des Arts et Métiers, which became role models and were borrowed by Germany (Greinert, 2017). Another example is the course instruction method (Lehrgangsmethode),[13] which was adapted from its origin as technical training for engineers in tsarist Russia over Austrian railway workers training to a systematic introduction into apprenticeship training for skilled workers in Germany (Ploghaus, 2003). Other examples for the transfer of training practices between industrialised countries are the project-based instruction method (Greinert and Wolf, 2013) as well as the four-step-method of workplace instruction[14] (Greinert, 1997).

It was a specific constellation of actors with a high level of agency that, in a historical process, determined by contingency and social dynamics, absorbed foreign influences, reshaped them according to their own social and institutional rules, adapted or rejected them and formed their own technical and vocational education and training (Wolf, 2021; on the agency concept: Mick, 2012; for organisational and structural development: Di Maggio, 1988; on the constellation of actors, especially organised interests: Busemeyer and Schlicht-Schmälzle, 2014).

The results of policy transfer were strongly influenced by organizations, such as crafts or industrial associations (Thelen, 2003). In conjunction with the industrial development of the European

nation states, which evolved concurrently in the 19th and 20th century, they also shaped their VET systems. The range of feasible adaptations of foreign vocational training experiences was restrained within the borders of a complex historical process and existing social rules. Specific actor constellations, organised interests, institutional orders, etc. played a determining role in this process. Framed by the existing and specific socio-cultural regulatory patterns of the countries (Greinert, 2017) – that is, the common understanding of what is understood by good 'Technical Vocational Education and Training' (TVET) – borrowing and adaptation of policies became 'en vogue'.

Underlying conditions of policy transfer in developing countries

This historical trend of VET policy transfer between industrialised countries led to policy learning and has conditionally been reshaped within development cooperation in the second half of the 20th century. Enforced by the idea of a technocratic development towards a catching-up industrialisation, the idea of actively and intentionally replicating the European-United States industrialisation path through technological, pedagogical and structural measures in developing countries, evolved and led to high attention towards VET. In the mid-1950s, the Federal Republic of Germany, for example, started a project to transfer its own dual training model to a technical school in Baghdad. Until the end of the 1990s, VET played a key role in German development cooperation. To cooperate in the field of VET with other countries was based on the technocratic view that economic growth and welfare would need to be based on large infrastructure projects, active intervention in the economy and the labour market, in combination with social engineering techniques (Ekbladh, 2002; Kunkel, 2008). Another argument for a focus on education is based on experiences of the colonial powers in stabilising their rule after the First World War, reinforced after 1945 by the concepts of colonial development, which sought to maintain colonial rule against independence efforts through promises of development and social well-being (Ahmad, 2019; Jerónimo and Dores, 2020; Rempel, 2018; Van Laa, 2004)

Development theory assumed a direct connection between technical and vocational education and training and the success of the industrialisation process, which should be actively established; a consideration that still holds ground today. In this context, the necessity of caught-up industrialisation according to the Western model was unquestioningly assumed as a law of nature. This is well illustrated in Möller et al. (1986):

> (…) 2. A major obstacle to the further progress of the industrialisation process is the lack of a well-trained skilled labour force. Technical vocational training is therefore the basic prerequisite of any industrialisation process. 3. The demand for these skilled workers is almost unlimited. 4. The training of skilled workers must be carried out according to the most modern standards. This can be done either in appropriately equipped training centres or in a cooperative form with companies (dual system).[15] (Möller et al., 1986: 113).

Since the first decades of development policy as manpower planning in the context of large infrastructure projects in the 1950–1970s, the paradigm of direct coupling vocational training with the industrialisation process was dominant (Greinert, 1997).

Ideas about the role of VET in development cooperation beyond industrialisation concepts arose with the global political change in the 1990s. Policy transfer was diversified and took existing economic structures more into account, especially the informal sector. It also considered the role of

VET in crises and conflict situations as well as in respect to social justice and social well-being (Wolf, 2009; Heitmann, 2019).

New actors in the policy transfer process

In the industrialisation process of the 19th century, policy transfer between industrialised countries was dominated by the borrowing side. Their it was decided which foreign experiences were to be selected for a transfer process, studied for improved economic development and, if necessary, adapted.

The dominance of the recipient side changed profoundly in the new political constellation, with the birth of development policy from the late 1940s onwards. The donor side became very dominant, especially with the arrival of new, historically absent international actors. They provided significant financial resources for the implementation of VET. Increasingly, their policies were overruling bilateral cooperation. Their representatives acted as 'travelling salesman' for specific national concepts of VET that were brought upon the international agenda and meant to serve as blueprints for all countries.

Among them were the International Labour Organisation (ILO) as well as European agencies, such as CEDEFOP and the ETF. The World Bank, which had been promoting the development of human capital since the early 1960s, also funded large, vocational education and training projects (Carnoy, 1995; Heyneman, 2003; Heyneman and Lee, 2016; Schröder, 2020). In addition, some Northern countries also became dominant in VET policy transfer towards the Global South (Holmes and Maclean, 2008). These new actors, countries as well as international organisations, represented their own political and conceptual ideas of good vocational education and training, increasingly marketed them in the international arena, since both foreign policy prestige and influence could be gained through it and increasingly also financial income (Hüsken, 2008; Kothari, 2006).

Overall, development work in VET was hardly built on well-defined national needs, but rather a result of Northern economic interests transmitted via VET policies. The donors largely depicted which policies should be transferred and how. Receiving countries, however, were little prepared to respond critically due to a lack of technical expertise and representative organisations with an educational agenda. In addition, external material resources were readily available, for example, for the establishment of well-equipped vocational schools, but due to a lack of alignment with national policies and needs as well as a cultural disconnect to certain training approaches, when funding ended, most projects vanished (Klees, 2012; Köhne and Stockmann, 2008; Lauglo, 2010; Ojiambo, 2018).

Against the logic of development policy in vocational education and training – Experiences of selected countries

Countries, such as China, Malaysia, Korea and Singapore, turned away from these trends and developed their own VET models (Barabasch and Wolf, 2010). Similarly, in Latin America, the independent development of VET models dates to the 1940s as, for example, the foundation of the cooperative model in Brazilian VET, by starting SENAI[16] in 1942 or similar activities in Argentina. South Korea built up an independent model of VET, with international exchange being an important driver. According to Rösch (1994) attempts to introduce Germany's dual vocational training approach were blocked. Instead, the cooperation with Germany was used to refine its model based on foreign experiences, which ultimately led to the introduction of a vocational training model very similar to that of Japan.

Since the mid-1970s, South Korea has purposefully built up (...) elements of a vocational training system modelled on the Employment Promotion Corporation (EPC) of the Japanese system[17] (Rösch, 1994: 287).

The strong interventions of the German side to enforce cooperative training according to the German model led to project delays and it became apparent that the German advisors were 'too caught up in the German "dual system ideology" and thus not able to react flexibly enough to the partners expectations (...)'[18] (Schröter, 1994: 335). Germany's VET cooperation with South Korea ended when the agreements expired in the 1990s and has not been renewed ever since.

The interests of the South Korean side were clearly articulated and ultimately established (Green et al., 1999). It became apparent that an efficient development state with a functioning administration as well as active employers and trade unions could break away from policy lender dominance in VET cooperation. In addition, there was also a common cultural agreement in South Korea on what was to be understood by 'good' vocational education and training, and here the Japanese experience formed an important reference (Ashton et al., 2002; Chai et al., 2018; Fleckenstein and Lee, 2019; Hultberg et al., 2017; Viktoria and Eunah, 2012). While being a policy borrower, South Korea also became a VET policy lender in developing countries (Barabasch et al., 2017; Chun and Eo, 2012; Kim, 2017; Kim and Gray, 2016; Lumsdaine and Schopf, 2007). Similar developments occurred in China since the mid-1980s (Barabasch A et al., 2009; Brunstermann, 2001; Zhao and Liu, 2019). There, as in South Korea, a strong developmental state operates, with a powerful administration and political leadership, and implements VET policies in accordance to their identified needs and interests (Barabasch et al., 2009).

The exemplary history of VET policy borrowing from a Germanic perspective shows that, whether a country adopts policies due to funders expectations or uses development cooperation mainly for policy learning, strongly depends on the availability of powerful stakeholders, nationally well-developed organizations representing the needs of employers and employees and a cultural compatibility of policies. The stronger donors align their cooperation work and policy transfer activities to local conditions and requests, the higher is the likelihood that newly implemented policies will support functioning VET approaches or systems.

New trends in and reasons for educational policy transfer

While research has largely addressed intentions, processes and outcomes of policy transfer as well as transnational dynamics, less emphasis has been given to current global dynamics in VET policy transfer and how these may shape future developments. The following section addresses three reasons for changing VET policy transfer dynamics and discusses how they may lead to shifts in development cooperation. These principles were derived from global digital developments, new workforce qualification demands and shifts in power relations between the global and the national level. Overall, these contemporary developments shape the ways in which policy cycles are conducted. The three changing VET policy transfer dynamics are: (a) changes in the ways work is conducted (Heerwagen et al., 2016), such as a new emphasis on agility, flexibility and mobility and the accompanying demands for new skills and transversal competence development (e.g. ILO 2010; OECD 2019), (b) the influence of big data on information spreading, evidence building and policy adoption (e.g. Höchtl et al., 2016), and (c) digital exchange of information as well as digital networking and knowledge building via social media (Crow and Jones, 2018; Jeffares, 2014; Margetts et al., 2015). All these dynamics may impact the ways in which VET is conducted in schools and at workplaces. This is because global innovation trends, such as competence orientation (action competence and transversal competences), flexibilization of teaching and learning with a

potential modularization, individualized learning pathways with possibilities for more self-organized learning, flexibilization of learning pathways between different strands of education and the integration of more work-based learning in all forms of education are widely known and are spreading accordingly. The described trends also have the potential to be used as sources of information about different approaches to VET or workplace learning by national politicians and serve them to take informed decisions about the policies they implement or adapt to their contexts. On the other hand, social media tools as much as big data are powerful informants for global players and can be used accordingly. The trends will be described in more detail below.

Changes in work and competence requirements

With spreading globalization since around 2000 and more international companies around the world, the ways in which work is conducted there has largely merged. Similar skill sets as much as transversal competences are requested, including the requirement for workers to be more mobile and offer their skills where they are needed as much as being flexible in acquiring new skills. (British Council, 2021; McLean et al., 2012). In addition, forms of agile work are spreading, a principle which enables more flexibility in terms of time and space. Teamwork and mobility are emphasized. The need for fast product development, often innovation-driven, goes along with the request for the development of transversal skills, such as communication, cooperation, critical thinking or creativity. Especially being more self-organized and able to take over responsibility for one's work and oneself are increasingly relevant in resource-oriented work and learning environments. Employer-driven skill demands are reflected in new occupational profiles and statistics on skills and the labour force, both are mainly translated into English documents that are used around the world to hire new staff and guide human resource development. The globalization of production and consume and the resulting similar skills and competence demands have shaped labour market policies at national levels aligned to global agendas. However, it has to be remarked that the understanding of core skills or transversal skills as well the emphasis on these skills vice versa technical skills and subject specific competence varies across the large variety of policy documents available around the world.[19]

The influence of big data on information spreading, evidence building and policy adoption

Big data collections and their analysis help to reduce the time frame for policy making and increase the evidence base for policy decisions (Misuraca et al., 2014). It may include the collection of opinions about a variety of VET and workforce developments to gather an overview and develop an estimation about the potential for policy adoption. These grand data collections also provide an overview of employers skills demands, enable the production and analysis of daily census data, and the use of algorithms to estimate effects and connections between different policies (Höchtl et al., 2016). The collection of data via cookies helps to track data, such as interaction patterns with websites, workflow traces, authentication data, or system survey data. These data are a by-product of the execution of internet sites and can be a valuable source for identifying (mining) or improving (reengineering) processes in an automated manner (Van der Aalst, 2011).

The use of big data for so-called e-policy making or policy informatics (Johnston, 2015) is processed within data driven policy analytics, which seeks to identify and describe new analytic methods that can be used to support public policy problem-solving and decision processes by

delivering convincing analyses taking into account the need for satisfying legitimate public expectations about transparency and opportunities for participation (Daniell et al., 2016). Examples for large data collections in the field of workforce planning, competence mirroring and occupational profiling are O*NET in the United States[20] or ESCO[21] in Europe, but also the European Labour Force Survey,[22] Employers Surveys,[23] European Skills Intelligence Frameworks[24,25] (also see European Commission 2020) and collections of qualitative data about VET from different nations, such as ReferNet.[26] While some of these sources largely depend on public data and information, there is an attempt to integrate the information of private providers, for example in terms of job descriptions and recruitment. Overall, these transnational data collections serve policy makers to justify policy agendas and guidelines and employers and employees as points of orientation for competence development and skills demands. Hence, the labour market regulates the information policy and policy agenda setting of international organizations (e.g. see CEDEFOP, 2013).

In parallel, with the high volumes of data it becomes more likely that justification of policy agendas is not only based on 'quick-fix solutions' but also suffers from what we pointed out with reference to Jann and Wegrich (2007) as well as Kingdon (1995) in a previous section: Against the background of large amounts of big data and the pressure to provide policy solutions policy formulation becomes more dependent from opportunity windows where 'different variables–actors, institutions, ideas and material conditions–interact […] highly contingent [ly]' (Jann and Wegerich, 2007: 47).

Digital exchange of information as well as digital networking and knowledge building *via* social media

Industry, VET providers as much as policy makers are communicating *via* various digital channels, which they use for digital networking and knowledge building. The term 'policymaking 2.0' takes account of the inclusion of social media in government (Ferro et al., 2013). Policy makers have realized the influencing power of these information channels and that it is urgently needed to follow discussions there, but also take part to gain acceptance for their policies. Therefore, most organizations are now represented and actively using platforms, such as Twitter, Facebook, Messenger, Linkedin or YouTube. The rapid exchange of information and opinion *via* these channels influences or even changes policy making processes. As much as with the global developments in changing skill demands, the globalization of information exchange makes it hard to entangle where ideas and approaches originally started. The information and opinion exchange at these platforms have become a concern for policy makers, who cannot ignore the discourses taking place there and may take them into consideration throughout their agenda setting and policy making processes.

Dynamic policy shaping cycles

The described reasons for changing patterns in policy transfer indicate that analysing policy transfer, including policy attraction or lending and borrowing, becomes increasingly opaque. Overall, we can observe dynamic policy shaping cycles in VET as well as changing roles of stakeholders within the policy making process while a multi-dimensional spreading of policies takes place (also see OECD, 2013).

Dynamic policy shaping cycles are characterized by continuous interaction between policy institutions and network members, caused by the need to exchange resources and negotiate shared purposes. It is hardly detectable anymore where an idea evolved, who took it on or how it travelled to other countries. The spread of ideas and policies is multi-dimensional, recursive, iterative and

sometimes also taking place in parallel among somewhat competing international organizations (Jann and Wegerich, 2007). The speed and scope of exchange has increased, the boundaries between different policy spheres, institutions and between policy and practice are becoming more permeable. Members are communicating more often, more open and cooperative and are using increasingly the same language. The struggle between maintaining one's relevance while cooperating constructively with others is increasing. In VET, institutions such as ETF, CEDEFOP, ILO, Eurofound, EU Commission's DG Employment or the OECD are communicating more, organizing collaborative events, such as on apprenticeship development or on the implementation of transversal skills in VET, but also on developing statistical surveys and conducting large-scale studies. There is constant exchange with practice and co-participation in different kinds of policy events.

At the core of Figure 1, are actors such as international organisations, scholars, bureaucrats or pressure groups. We assume they are mostly organised in organisations in the widest sense and as such, there are intra-organizational dynamics between individuals and their power struggles to set oneself and a particular policy agenda on top of the rank (second inner circle). The third inner circle represents geopolitical and ideological shifts amongst most powerful member states of the actor (e.g. at the World Bank, the European Commission or the ILO). They are influenced by ideas arising in their respective networks with other (national) actors such as policy makers and colleagues from other international institutions. Stakeholders from powerful member states of these institutions, often represented in governing boards, steering committees, directorates, etc. influence policy agendas by prioritizing their own ones. The fourth circle represents big data and governance 2.0. As described above, these have started a new dynamic of influencing policy making, mainly by either being a transmitter of employer and industry demands, but also by being used as an incubator of public opinion. Together, they all impact on countries lending and borrowing educational policies.

While all the global developments described above largely explain a diffusion in the ways policies are travelling or being transferred, there are still cross-country co-operations taking place where countries learn VET policies and practices from other countries. As described earlier in this
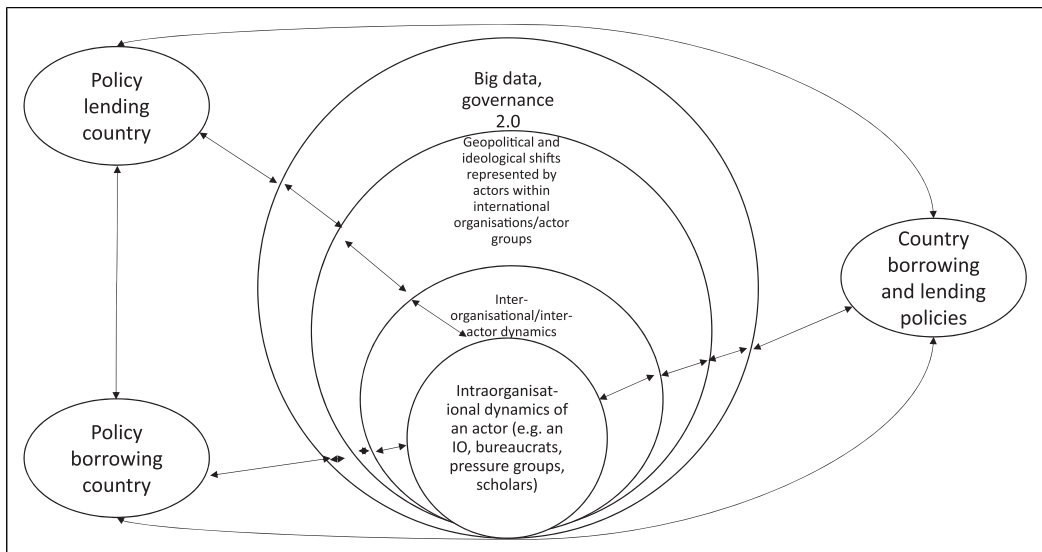

Figure 1. The interaction of stakeholders in policy transfer.

article, this used to be largely a transfer from the global South to the global North and was dominated by either Anglo-Saxon or German approaches taken in VET. However, the last decade has shown that countries which may have been primarily policy borrowers in VET (such as China, Singapore, Russia and South Korea) have also become policy lenders. They are exporting VET (and adult education) policy and practice to other nations in South East Asia and Africa. While there seems to be hardly any policy learning yet for Anglo-Saxon and German countries from these regions, the influence on VET policy and practice across the world is diversified.

Conclusion and discussion

The article intends to substantiate the claim that policy transfer attraction and policy travelling directions are not clearly assignable anymore and that more framing conditions need to be taken into consideration to understand the shaping of international VET policy. At the same time, there is still an observable trend to transfer VET from the global North, in terms of highly industrialized countries, to the global South, which are developing countries. These transfer activities are largely connected to certain economic development agendas and therefore follow mostly the VET systems logic of the lending country.

In order to better understand the new trends in policy transfer, a number of questions for research remain open: (1) What are the new 'steering logics' (see *Introduction*) for international VET policy design (e.g. global labour market information systems and skills intelligence, global toolkits for the implementation of apprenticeships or transversal skills, credit transfer systems and qualification frameworks)? (2) What are the underlying assumptions among representatives of international organisations who are steering and managing policy transfer processes and what is their information base for rational choice? and (3) How can local specificities be better understood and recognized in policy decisions in VET nationally and globally?

To address these questions, in-depth qualitative inquiry with interviews among various stakeholders may provide insights that serve a better understanding of these dynamics and interdependencies.

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Notes

1. However, we leave out all forms of education that primarily serve the purpose of personal perfection, such as related courses at adult education centres.
2. https://www.oecd.org/education/Flyer%20for%20Education%20Policy%20Advice%20and%20Implementation%202014%20(2).pdf
3. https://www.oecd.org/skills/(25.05.2021)

4. Examples are listed in alphabetical order.

5. See, for example, Mertens on core qualifications (Schlüsselqualifikationen, Mertens, 1974) or the OECD initiative DeSeCo – Developing and Selecting Competences (Oates, 2003).

6. Norton and Moser (2013).

7. O*Net is a free online database that consists of a large collection of occupational definitions (currently more than 900 occupations). It started in the 90s and inspired the European Commission to develop ESCO (European Skills, Competences, Qualifications and Occupations), which exists since 2010, https://www.onetonline.org/

8. The earliest qualifications framework was established as a qualification register in France in 1969 (Hart, 2014).

9. For an overview see, for example, Bohlinger (2017).

10. Jacobs, 2003, This approach is basically competing with training approaches promoted by Germany or Switzerland and is spread across the middle East and South East Asia.

11. There were German efforts to implement a vocational PISA, the so-called VET-LSA (Vocational Education and Training – Large Scale Assessment) which, eventually, was not realized (Baethge and Arends, 2009a). Instead, the OECD realised PIAAC (Programme for the International Assessment of Adult Competencies), a large-scale assessment that covering a much wider target group (all adults) and their cognitive and workplace-related skills and competences. Sellar and Lingard (2014: 917) have pointed out that PISA 'and the OECD's education work more broadly, has facilitated new epistemological and infrastructural modes of global governance for the OECD in education'. While one might argue that this is the reason why the VET-LSA was never realized we would rather argue that any concept of VET is too narrow too span what PIAAC spans with its focus on competences of adults.

12. There are actually many more models describing the process of policy formation (three-into-one tributary model; three streams – two phases model; four stream model; and […] a five-stream confluence model Howlett et al., 2015: 420). We refer to one of the oldest and presumably best-known ones by Kingdon (1995).

13. This is a training course based on an instructional step-by-step training manual (Wiemann, 2004: 137) and with an underlying pedagogical-didactical concept of technical education and training.

14. It is a method how to teach work processes accompanied by theory (Pahl, 2016).

15. German original: "(…) 2. Ein wesentliches Hemmnis für das weitere Fortschreiten des Industrialisierungsprozesses ist das Fehlen einer gut ausgebildeten Facharbeiterschaft. Die technische Berufsausbildung ist deswegen die Grundvoraussetzung eines jeden Industrialisierungsprozesses. 3. Der Bedarf an diesen Fachkräften ist schier unbegrenzt. 4. Die Ausbildung von Fachkräften hat nach dem modernsten Stand zu erfolgen. Dies kann entweder in entsprechend eingerichteten Ausbildungszentren geschehen oder in kooperativer Form mit Betrieben (duales System)."

16. Serviço Nacional de Aprendizagem Industrial https://de.wikipedia.org/wiki/Servi%C3%A7o_Nacional_de_Aprendizagem_Industrial (31.5.2021)

17. German Original: "Zielstrebig hat man in Korea seit Mitte der 70er Jahre, (…) Elemente eines Berufsbildungs-Systems aufgebaut, die ihr Vorbild in der Employment Promotion Corporation (EPC) des japanischen Systems haben"

18. German Original: "zu stark in der deutschen 'dualen System-Ideologie' befangen und somit nicht fähig, flexibel genug auf Partnerwünsche (..) zu reagieren"

19. One of the authors has been involved in an extensive review of these policy documents in preparation of a new toolkit. At this stage very little information is available on how education for transversal competences in occupational training may look like.

20. O*Net Workshops have been held around the work and governments have examined to what extent the database can be used in their country or adapted to one's country (e.g. Hillage and Cross, 2015). Since its

establishment O*Net has also been the source for research on occupations across nations (e.g. Baethge and Arends, 2009b)

21. ESCO—Europäische Kommission (europa.eu) (24.5.2021)
22. European Union Labour Force Survey - Access to microdata - Eurostat (europa.eu) (24.5.2021)
23. Employers' surveys | Cedefop (europa.eu) (24.5.2021)
24. European e-Competence Framework (ecompetences.eu) (24.5.2021)
25. Skills intelligence | ETF (europa.eu) (24.5.2021)
26. ReferNet | Cedefop (europa.eu) (24.5.2021)

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