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Realising the human development promise in dual VET

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ABSTRACT

Despite growing consensus around the need for a more holistic vision of development, realising the human development potential of educational interventions has proven a challenging task. This Forum grapples with how these tensions manifest in the international transfer of dual models of Vocational Education and Training (dVET) to low- and middle-income countries. While dVET has gained global currency, its developmental potential has been primarily framed in economic terms. Conversely, its alignment with human development remains an abstract possibility and is often not reflected in the policy design of dVET transfer attempts.

Each contribution to this Forum probes a different facet of these tensions, exploring how dVET can be calibrated in different contexts to realise its human development potential. Taking a practice-led approach and featuring representatives from cooperation agencies, consultancy groups, and research organisations, this piece contributes to ongoing debates about the possibility of effectively integrating human development thinking into education policy.

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Introduction

It is increasingly acknowledged that, in seeking developmental outcomes from educational interventions, it is beneficial, if not necessary, to pursue a more expansive, holistic, and human vision of development ‘success’ than that offered by historically dominant economic models. Dual models of Vocational Education and Training (dVET), which combine school-based education with vocational training at the workplace and are inspired by those found in German-speaking European countries, have been gaining international prominence as a global education policy for development in recent decades (Gonon 2014; Langthaler 2015; Li and Pilz 2021; Valiente and Scandurra 2017). However, the developmental potential of dVET has been framed in primarily economic terms, with purported benefits for growth, competitiveness, productivity, and employment. By

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contrast, a Human Development (HD) perspective on the potential and shortcomings of dVET has often been poorly articulated or remained at the level of abstraction and rhetoric.

Taking seriously the commitment to integrate HD thinking into education policy formation and re-centring the well-being and experiences of young people, this Forum piece explores how dVET policy and practice might be calibrated in different contexts to fulfil such HD promise, and with what tangible implications. The contributions to this Compare Forum reflect ongoing discussions between a heterogeneous network of actors from academia, international organisations, cooperation and development agencies, research centres, consultancy groups, and national governments. This diverse group was brought together by a workshop held at the Austrian Foundation for Development Research (ÖFSE) in Vienna in September 2022, co-convened by ÖFSE and the University of Glasgow and intended to facilitate in-depth discussion about the HD potential of dVET, taking a practice- and implementation-led approach.

The opening contribution is authored by the conveners of the workshop (Vanderhoven, Fontdevila, Langthaler, and Valiente) and it outlines what the adoption of an HD lens reveals about the state of research on dVET and its international policy transfer. The contribution highlights different shortcomings in this literature – namely: i) the predominance of a productivist vision of dVET; ii) the prevalence of a deficit view of dVET-adopting contexts; iii) a neglect of equity concerns; and iv) an absence of youth voice.

Ralf Hermann, Head of the German Office for International Cooperation in VET (GOVET), engages with the first of these shortcomings by reflecting on the competing agendas that guide German cooperation efforts in the field of dVET, critiquing still-prevalent notions of ‘transfer’ and advocating for greater and more nuanced attention to the institutional complexities and expansive principles that dVET implies. This, Hermann argues, will be foundational in working towards the HD potential of dVET in low- and middle-income (LMIC) contexts.

Considering the prevalence of a deficit-view of dVET-adopting contexts, Jasminka Marković, Director of the Centre for Education Policy, reflects on what happens when, as in the case of Serbia, this results in top-down reforms that do not prioritise policy ownership and local contextual relevance. She highlights not only the weaknesses this produces within dVET itself, but the spillover effects that are felt in other parts of the VET system. Marković suggests alternative approaches more likely to foster success in HD terms.

Sadaf Sethwala and Saikat Maitra, researchers at the Indian Institute of Management Calcutta, consider the neglect of equity concerns in dVET transfer. Drawing on research conducted with trainees in a dual programme in India, they reveal how gender emerges as a fundamental mediating factor in dVET access, experiences, and outcomes, and suggest concrete policy steps to counteract current gender-blind approaches.

Finally, Eduardo Calderón, International Consultant with the GOPA Consulting Group and former senior official at the Mexican Ministry of Public Education, responds to the absence of youth voice in dVET transfer efforts. Writing with reference to dVET in Mexico, Calderón highlights the limited role typically afforded to young people in evaluating and shaping dual training programmes, and proposes mechanisms that

could incorporate youth perspectives in more equitable, meaningful, and constructive ways and foster human development.

We close with a further final contribution from the conveners of the workshop where they suggest four ways of mobilising dVET as an emancipatory tool that serves the interests and life projects of young people and their broader societies.

A human development critique of the dVET policy transfer literature

Ellen Vanderhoven, Clara Fontdevila, Margarita Langthaler, Oscar Valiente

The Human Development paradigm posits that societal progress can and should be understood in terms of human flourishing, captured in much broader terms than economic outputs or growth. Now a prominent narrative within development circles, the Human Development approach was particularly inspired by the work of Sen (1980, 1999, 2005) on human capabilities and further developed by Nussbaum (2000, 2011). The notion was brought to global policy prominence in the 1990s with the launch of the Human Development Index (HDI) by the United Nations Development Programme (UNDP 2020). This consolidated the notion that, from a Human Development perspective, the aim of development is to expand people's freedom to advance their own well-being. This incorporates both the breadth of opportunities available to an individual and their agency to choose and pursue a valued life of their own definition, without undue constraint from structural forces.

Unsurprisingly, education comes into view as a central tool for pursuing Human Development (UNDP 2010; Unterhalter 2005b). It offers a powerful means of fostering opportunities, building reflexivity and agency, and increasing human flourishing.¹ The HD approach, in turn, offers new evaluative questions for appraising educational interventions (McGrath 2018; Walker 2003; Walker and Unterhalter 2007), firmly centring learners' voices and life-projects as critical foci of research (McGrath et al. 2020; Walker and Unterhalter 2007).

Despite the advances in bringing an HD perspective to bear on VET, research applying this approach to the international policy transfer of dVET is only nascent (Maitra et al. 2021; Vanderhoven et al. 2022). Indeed, even the most broad-brush principle of an expanded view of development that looks beyond economic concerns of growth, productivity, competitiveness, and employment is not strongly established across literature on dVET and its transfer (Langthaler 2015; Valiente, Capsada-Munsech, and G de Otero 2020; Vanderhoven 2023). In the following paragraphs, we look in greater depth at the dVET transfer research literature and identify four main shortcomings from an HD perspective.

Firstly, a productivist vision of dVET and its aims is often dominant within the literature, mirroring a broader phenomenon of the economisation of education (Jabbar and Menashy 2022; Lingard 2010) and a reliance on educational solutions to youth unemployment (Valiente, Capsada-Munsech, and G de Otero 2020). Indeed, following the Global Financial Crisis of 2007–9, German-speaking European countries were identified as examples of contexts that had emerged from the crisis with relatively low levels of youth unemployment and relatively high levels of economic competitiveness, in no small part thanks to their strong dVET systems (Cedefop 2014; ILO 2019b). Despite a lack of

evidence supporting the claim that dual apprenticeships are any more effective in tackling youth unemployment than school-based VET (e.g. Valiente, Capsada-Munsech, and G de Otero 2020; Wolter and Ryan 2011), this idea persists as a justification for promoting dVET (Lassnigg 2016). Indeed, resilience to economic crisis, alleviation of youth unemployment and economic marginalisation, and improvements to productivity, growth, and competitiveness are framed as primary aims of dVET (Axmann and Hofmann 2013; Euler 2013; Vanderhoven 2023). Such a narrow conception of dVET neglects other goals envisaged by a holistic vision of human flourishing, including the fostering of expanded capabilities, opportunities for agency, and poverty alleviation beyond economic metrics (Langthaler 2015; Tikly 2013; Tur Porres, Wildemeersch, and Simons 2014). This is perhaps due to the conceptual restriction of dVET to being an economic/labour market intervention (Langthaler 2015); therefore, greater attention to its educational role and nature might help connect dVET to the broader conceptions of HD present in education debates (Gale and Molla 2015; Walker and Fongwa 2017).

A second feature of dVET literatures thrown into relief by an HD lens is the prevalence of a deficit view of dVET-adopting contexts. Such a ‘deficit approach’ within dVET transfer frames contextual deviation from ‘donor’ models as a barrier or impediment (Stockmann 1999) to the potential of dVET programmes in any other context (e.g. Kenzhaliyeva 2018; Zhang 2018). This is in fact consistent with prevailing (orthodox) approaches to policy transfer, which portray divergence as deviation and reinforce a dichotomic, restrictive view of transfer success (Fawcett and Marsh 2012; Stone 2017). Although not always explicitly acknowledged, such a perspective is pervasively embedded in dVET transfer discourses and has its origins in the reification of German-speaking systems as transfer commodities (Deissinger 2015; Gonon 2014; Lewis 2007). This deficit view implies that there is a particular ‘correct’ or desirable endpoint for development efforts, the contours of which are best represented by modern European models of progress and success (Mayer 2001). It also implies that any challenges faced by dVET programmes in ‘recipient’ contexts can be addressed using ‘donor’ policy solutions (Vanderhoven et al. 2022). Instead of looking to German-speaking models as standard-setters, we propose seeking to better understand and valorise localised iterations of dVET that are emerging in new contexts, and thus find relevant solutions to local challenges and build local capacity.

A third notable feature of the dVET literatures is the relative absence of discussions about the equity impacts of dVET programmes. Despite evidence that dVET systems in German-speaking countries can perpetuate, and even exacerbate, structural inequalities related to gender, class, race, and ethnicity (Beicht and Walden 2015; Chadderton and Wischmann 2014; Haasler and Gottschall 2015), consideration of equity effects is rarely a feature of research evaluating dVET in other contexts. Among international organisations, there has been some discussion of equity and inclusion in dVET programmes (European Commission 2015; ILO 2018, 2019a), however, inequality is primarily conceived as an access issue, and processes of social reproduction and discrimination during and beyond dVET remain largely unaddressed (Vanderhoven 2023). This echoes the narrow treatment of equity issues in education and development initiatives beyond TVET (Jolley et al. 2018; Unterhalter 2005a), but also highlights the particularly limited attention paid to equity in post-

compulsory education – in stark contrast with the prominence (however narrowly realised) of equality and inclusion concerns within basic education debates. Importantly, equity concerns are more readily side-lined when dVET is understood in purely economic terms, but emerge as a fundamental concern when considering whether dVET can contribute to HD outcomes.

Finally, knowledge about dVET is characterised by a marked absence of youth voice and experience. Very little research evaluating dVET programmes asks for learners' views on interventions, instead positioning firms and intra-institutional governance structures as primary strata of inquiry (e.g. Gessler, Fuchs, and Pilz 2019; Wiemann and Fuchs 2018). Neither is there meaningful evidence that young people have been involved in the design of dVET interventions. This speaks to wider issues of youth involvement and the limited advancement of participatory approaches to policy design and policy analysis (Geurts and Joldersma 2001; Saguin and Cashore 2022). Further efforts are needed to develop and refine collaborative engagement methods in education policy design and evaluation. Drawing on an HD concern for the motivations, aspirations, and life-projects of learners, the authors coordinated and contributed to an international comparative research project – Dual Apprenticeship (2019–21) – that positioned young policy participants as the primary sources of evaluative data about dVET programmes (Vanderhoven et al. 2022), and used these data to advocate for and facilitate the inclusion of young people in policy processes.

Having opened the conversation based on the research literature, we now turn to the viewpoints of four of our collaborators in dVET knowledge exchange. Each draw on their distinct experience and specific contexts to consider how one shortcoming of dVET research knowledge identified above translates in practice, and make suggestions as to how these might be counteracted or overcome to facilitate progress towards the HD potential of dVET programmes, particularly in LMIC contexts.

A normative model of international cooperation in VET: dialogue, co-creation, and appropriation

Ralf Hermann

As an inter-departmental government agency, the German Office for International Cooperation in VET (GOVET) provides expertise to all German ministries and other stakeholders of VET cooperation, and collaborates with the 'social partners' and implementing organisations of development cooperation. GOVET's mandate thus reflects the complexity of diverse rationales and objectives pursued in various policy and work areas and by a multitude of state and non-state agents that form part of the German international TVET cooperation portfolio (see Bundesregierung 2019; Deutscher Bundestag 2013). As a slight simplification, these can be described as:

- An education agenda: Contributing, through international cooperation, to the systemic advancement of quality TVET as an attractive and viable pathway, based on partner countries' reform agendas;
- An economic agenda: Contributing to the provision of skilled labour to German companies abroad and their local partners along pertinent value chains;

- A development agenda: Contributing to human ‘development’ (education biographies, decent and dignified work, individuals’ participation in society) and societal cohesion by supporting national reforms in TVET, work-based learning, and labour market transition;
- A diplomatic agenda: Contributing to international relations in a soft policy area of high demand (part of foreign cultural and educational policy, and a specific moulding of ‘science and education diplomacy’).

It is obvious that these dimensions are not inherently congruent. However, better internal coherence has been achieved thanks to a decade of continuous, institutionalised exchange between government entities, and the inclusion of non-state partners. The question of which rationale predominates in bilateral cooperation agendas varies largely, depending on country-specific contexts.

Yet, fundamental misconceptions such as ‘transfer’ – in the narrow sense of systemic replication – or even the branding of the ‘German export hit “dual VET”’ seem to be ineradicable revenants in public and political discourse, despite their conceptual fallacy, their instrumental inadequacy, and manifold critiques (see Euler and Wieland 2015; Gessler 2017; Langthaler 2015). Indeed, the idea of system export is inappropriate for international cooperation in general, and even more so for systemic development in education. The export of a commodity – in this context: price-tagged educational services in a global ‘education market’ – is fundamentally different from cooperation on a systemic level with negotiated policy and practice objectives. The misconception and its underlying binary donor/recipient relationship is harmful to a mutual and collaborative understanding of cooperation, on both sides. It pitches expectations unrealistically high on the German side, and insinuates a passively receiving role at the other end that impedes genuine solutions based on actual ownership.

Regardless of the ultimate rationale shaping development efforts, for a viable concept of cooperation with realistic roles, we (‘dual’ countries) must acknowledge that we are ‘the other’. The dVET system established in a handful of mainly German-speaking countries is steeped in a specific industrial history and in stakeholder roles established over centuries. This is not simply ‘transferable’, particularly not to LMICs.

Adopting a critical, reflexive understanding of cooperation not only requires changing cooperation efforts within ‘recipient’ countries, but also has important implications for the normative and policy labour conducted on the ‘donor’ side. From a German perspective, the frequently and sometimes thoughtlessly quoted concept of German dual VET as a ‘reference system’ should be taken seriously, and literally. First, policy dialogue aims at impact, i.e. systemic effects beyond short-term projects and an input–output ratio. It takes patience for partner countries to develop context-adequate solutions. While ‘the reference system’ is the background and origin of German (dual) experience and know-how, it cannot be the target or objective – because replication in essentially different economic, social, developmental, institutional and, not least, cultural, and human environments is not feasible. Putting the reference system into creative dialogue means explaining, contextualising, and advocating for its core principles, rather than specific policy designs or features. These include co-responsibility of the state and private economy, work-based learning and learning venue cooperation, the use and acceptance of training standards, the continuous professional development of trainers and lecturers,

institutionalised research as an evidence basis for policy decisions and, not least, the ‘vocational principle’, i.e. aiming at fully-fledged competence profiles, thus enabling learners to cope and adapt to changing demands, to improve their perspectives for decent gainful employment, and empowering them to pursue personal growth and career pathways. These essentials combine very well with HD centred cooperation agendas, as outlined in the preceding contribution.

This approach has been gaining ground in Germany, crystallising in practices and models of education cooperation based on joint, demand-oriented agenda setting which are distinctly different from broad-based commercial institutional exports strategically deployed by other countries. These principles have been consistently applied to bi-national Higher Education collaboration for many decades. They should also be unambiguously at the core of VET cooperation. It is worth noting that this position has gained the consent of a vast majority of German cooperation agents in the wake of the last ten years of intensified international VET cooperation.

There is indeed growing recognition that there is no reason to leave the emphatic notion of education as a holistic process of human development (‘Bildung’) to academia only: Learning and self-development, the human values of autonomy, agency, and global citizenship relate to vocational learners alike. In fact, the concept of ‘fully developed occupational competences’ (subject-related, social, and self-related) as advocated by the German Federal Institute BIBB, provides an orientation that reconciles the interests of employers and employees and transcends skills required for the workplace towards a broader vision of personal development and maturation. Beyond the necessary technical expertise, the work of the future will increasingly demand generic competences, such as problem solving, understanding processes and systems, teamwork, and ambiguity tolerance. As we together face megatrends and global challenges (digitalisation, sustainability/climate change adaptation, migration etc.), linear models of cooperation (‘transfer’) become even more questionable, and joint and mutual learning are increasingly needed in the global laboratory.

Ultimately, the idea of transfer fails to address the complexity of education systems and their reform, and the intricacies of government-to-government cooperation. More appropriately, the cooperation model should be described (and sustained!) by active, performative categories such as adoption, contextualisation, appropriation, or co-creation, signifying a genuinely dialogic and open process of bidirectional exchange and learning. Particularly in low- and middle-income countries, inclusive human and societal development should be at the centre of VET advancement, and should direct the compass of German international cooperation.

When the rubber hits the road: the limits of top-down approaches to the implementation of dual training in Serbia

Jasminka Marković

Formerly, Yugoslavia’s (1945–1992) economy was dominated by state-owned enterprises, supported by a large and growing secondary VET system that exposed students to real working conditions. Despite significant changes in the social context and size of the country, Serbia continued the tradition of a large VET system with curricula containing mandatory work-based learning.² Despite substantial reform, the Serbian VET

system is still characterised as struggling to provide labour market responsiveness (European Training Foundation 2020), and youth unemployment remains high (Statistical Office of the Republic of Serbia 2022). In an effort to tackle these challenges, encourage foreign investment, and boost economic development, in 2017, the President and Government of Serbia established the National Model of Dual Education (NMDE) (Ministry of Education, Science and Technological Development 2020); a clear example of politically led, top-down reform. The NMDE is clearly distinguished from other parts of the VET system through rules and procedures for participation stipulated in the 2019 Law on Dual Education (LDE).

The stipulations contained in the LDE have delivered some favourable outcomes. The mandatory accreditation of companies and licencing of company trainers has produced positive effects on educational quality. Equally, the provision of financial support for students has made the programme more attractive to young people, helping to grow the dual VET offer over time.³ In addition, as part of adaptation to the national context, craft occupations and specialist education have been incorporated into the dual model, state institutions responsible for internal affairs and defence have been recognised as employers, and the enrolment timetable has been changed to attract the most motivated students. During the first year of implementation, satisfaction among students, parents, and companies with dual VET participation was notable (Renold et al. 2020).

Nevertheless, the foundations of dual education in Serbia remain weak. In particular, core principles remain unclear and a local sense of policy ownership is limited. Most national education experts view dual VET as a replication of foreign systems that exclusively serves the interests of employers, rather than a contextually rooted model developed in consultation with all stakeholders (e.g. trade unions, civil society organisations, the academic community, etc.). Concerns have also been raised about the exploitation of students and the future quality of work in Serbia (Pesikan and Ivic 2021). Students from low socio-economic status families more often attend vocational schools and more than 80% of graduates from 3-year VET do not reach a basic level of literacy (Videnović and Čaprić 2020). Therefore, any degradation of learning opportunities produced by exploitative dual VET conditions have profound and pertinent equity implications. Such concerns became more pronounced following publication of research demonstrating that not all host companies were providing contracts and remuneration to students, not all company instructors were licenced, and school-company cooperation continued outside of dual VET (Renold et al. 2020). Furthermore, this research confirmed that the Serbian economy remains transitional, with predominantly small and micro enterprises struggling to fulfil LDE requirements, and that misconceptions persist about the meaning of dual education. In response, the LDE was amended in early 2020 using an ‘urgent procedure’ to circumvent public debate. These amendments favoured dual education but negatively impacted the rest of the VET system. Indeed, by capping the provision of work-based learning in non-dual VET programmes to 25% of learning time, the LDE amendments have substantially reduced work-based learning opportunities for over 95% of students in the VET system, and undermined school-company cooperation built over decades.

Despite significant effort, the proportion of students enrolled in dual education has not meaningfully increased since the 2020 amendments.⁴ There are also open concerns

from companies about their ability to remunerate students and participate in a highly regulated system that requires immediate investment for long-term benefit. In response, a further set of legal changes was initiated in 2022. Although these changes are still under development, they currently entail a reduction in financial support for students and the provision of state subsidies to host companies. The first of these changes has significant ramifications for equity and quality, the latter for governance and cooperation in dual VET and the wider vocational system. Indeed, if these amendments find their place in the LDE, the essence of the NMDE – mutual benefit – will no longer exist.

It is arguable, therefore, that such a top-down reform, characterised by continuous legislative change, exclusion of some stakeholders, and disregard for contextual specificity and the wider VET ecosystem, has produced more collateral damage than positive outcomes. As such, it seems necessary to take stock and consider an alternative future pathway for dual education. Instead of treating dual as an isolated educational programme, it could be viewed holistically, understood and planned for in relation to the wider VET system and the systemic availability of capacities and resources that contribute to ‘producing’ a competent labour force after schooling. Such a strategic approach would demand more reliable assessment of the Serbian business landscape, including the existing and prospective needs of employers, their organisational structures, and their capacity to receive dual education students for work-based learning and post-dual employment. Only after such analysis and meaningful consultation with all relevant stakeholders can effective strategic decisions be formulated and implemented. Indeed, such steps will be vital if dual VET is to deliver positive effects on the VET system as a whole and further the socio-economic development of Serbia.

Gendered trajectories: labour market transitions under the dual system of training in India

Sadaf Sethwala, Saikat Maitra

Governments around the world are increasingly recognising the potential of VET as a way to support women’s participation in the workforce, and as a means to promote social inclusion (Bhatta 2017). However, the experiences of young people (and especially of women) in VET continue to be impacted by existing social disparities (Maitra and Maitra 2018) that play a significant role in determining their transitions to the labour market. In India, like many other countries, the acquisition of skills and their use for upward mobility are conditioned by socio-economic stratifications and unequal power relations, which include exclusionary gendered roles within the family (Gooptu and Chakravarty 2018). Interviews with 56 students enrolled under the Dual System of Training (DST) in the western state of Gujarat in India have allowed us to identify the many ways in which gender continues to influence young peoples’ educational and labour market outcomes.

Loosely based on the German dual apprenticeship model, the DST was adopted in a limited number of industrial training institutes (ITIs) in India in 2016, with the objective of equipping individuals with skills for employment and better integration into the labour market. Our study revealed the heterogeneous effects of the programme across gender, as well as variations in the experiences of men

and women participants with respect to training access and labour market participation. The gendered nature of DST experiences was apparent in the very motivations young people expressed for entering the DST programme. For example, computer-related courses were largely dominated by women participants as these courses offered the potential for desk-based jobs, which were perceived as providing safer working environments. By contrast, automobile and manufacturing related courses were restricted entirely to male participants. Our research also showed that women were significantly more constrained within their families while making decisions about their studies or career. It was not uncommon for women to readjust their career expectations in gender conforming ways. Many women self-reported ‘marriage’ and ‘family responsibilities’ as factors that limited the likelihood of pursuing careers. Even in situations where the women participants had an opportunity to work, the final decision was usually taken by the family.

Women also tend to opt out more readily from the labour market than men when facing adverse conditions. For example, while DST training for both men and women was interrupted due to the COVID-19 pandemic, more women dropped out of their DST programmes. Furthermore, when compared to male participants, fewer women were actively looking for jobs. We observed that as job opportunities in the market reduced, women took on additional responsibilities in the household which further prevented them from actively seeking employment. Among those who did engage in job-seeking, considerations such as distance from the home, working hours, and gender makeup at the workplace were deciding factors.

It is thus particularly striking that, against such a background, the DST policy adopted a ‘gender-blind’ approach. While the DST may have the potential to expand women’s economic and learning opportunities, no explicit efforts were made to accommodate the unique needs and experiences of women. Nevertheless, it did offer women access to training in VET institutional spaces that are largely dominated by men. By providing women with information and networks, the DST programme did create aspirations among women for economic mobility and provided them with a certain degree of capacity to navigate their future pathway. However, the programme left unaddressed deeply entrenched gender norms that restrict women’s entry into labour markets. As a result, the incongruence between the DST’s potential and its policy design created an impasse for female apprentices, limiting their ability to fully participate and benefit from DST training.

Gender equity is fundamental to the success of the programme. If VET is to become a truly inclusive space, it would be important to explore policy options that facilitate women’s labour market participation. The government must strengthen institutional linkages with industries to promote better employment outcomes for women trainees. Furthermore, counselling services could be offered at ITIs, providing prospective women participants with information on market demands, training programmes, and careers advice to help them make informed decisions about their trades. Finally, regular counselling for the parents of female students would help to bring forth the economic and social advantages of the DST programme.

The role of youth voice in dVET policy and practice

Eduardo Calderón

Putting the voice of young people at the centre of dVET policy is the best way to ensure that such a policy operates at the service of a Human Development agenda. Unfortunately, there are very few cases where decision-makers are willing to listen to young people and recognise their role, not only as recipients of an education policy, but also as protagonists in its design, implementation, and evaluation. Although in some cases policy actors appear to listen to the perspectives of young people, for example by inviting students to speak at key events, youth are still not put at the centre of policy making.

In my experience, in the two roles I have held in relation to dVET policy; first in the Ministry of Public Education as Sectoral Coordinator of Planning and Liaison, and then as an International Consultant for GOPA Consulting Group as part of a project commissioned by the German Cooperation Agency for Sustainable Development (GIZ Mexico) in collaboration with the Ministry of Public Education; I have seen that dVET policy decision-makers need more and better tools to genuinely centre young people and work with them under peer-to-peer principles, co-design activities, and offer them more opportunities to have a voice and vote in decision-making.

2023 marked 10 years since the effort to build and implement a national dVET policy in Mexico began. This has mainly been driven and regulated by the education sector.⁵ Initially, I was responsible for coordinating this policy with the different business organisations and international cooperation partners in the Ministry of Public Education. At that time, efforts were focused on building the institutional framework that would regulate dual education as a new educational model and on training all the actors so that they could deliver at the local level. During this period, emphasis was placed on identifying testimonials from young people that evidenced the success of training in companies and in their entry to the labour market. Opportunities to hear from young people were isolated to speeches at political events. Very often, it was noticeable that young people were not given the chance to offer a fresh and genuine voice, and instead their contributions were somewhat orchestrated and the invitation disingenuous. In short, there was, and unfortunately, I see that in many cases it still persists, a generational blindness, viewing young people as passive subjects and not as individuals responsible for their learning. This denies them the opportunity to contribute and be active protagonists in the successes and failures of dVET policy implementation.

Today, I am fortunate enough to be able to participate in and contribute to dVET policy as an international consultant, which has allowed me to have greater flexibility to innovate and find new ways to scale and consolidate the dual education option in Mexico. In this new role as a consultant, I have been able to gain a much broader perspective on the interests and needs of all the stakeholders involved in dual education, but, above all, I have been able to interact with and listen more effectively to young dual students. Although there is still very little research from a youth perspective, I have been able to promote and contribute to this being carried out in Mexico with very interesting results for the continuous improvement of dVET policy. Important insights generated by this research include the value that young people afford not only to professional competences, but also basic, transferrable lifelong learning competences and the difficulties they

face in acquiring them through online self-study platforms. This reveals how, when you work with young people, value their voice, and really listen to them, only then can you see the flaws in the operation of education policy. Young people's knowledge, documented using scientific criteria, has to be mobilised for better design, implementation, and effectiveness in achieving education policy objectives.

Therefore, the challenge for dVET policy in Mexico lies in getting education policy makers to look at the benefits in terms of efficiency, social justice, and the balance of interests between stakeholders that comes from actively listening to the voices of young people and working with them. For this to happen, it will be necessary to finance more research from the perspective of young people; to encourage organisation and network cooperation among young people to carry out activities that are prioritised and led by them. Above all, to open up spaces for participation, for example in the recently created Steering Committee for Dual Education at the upper secondary level.⁶ Decisions about dVET policy are taken at the national level by this Committee, with the participation of companies, business organisations, and educational authorities. It would also be good to open a permanent space for young people to hear directly about the problems they are experiencing in their training and their proposals for solutions. Currently, there is an open process to build a network of young graduates and students active in dual education, which we hope will expand to the different states in Mexico and consolidate itself as a permanent space for participation and governance.

If we really want to continue promoting the scaling up and consolidation of dual education, we must demonstrate that this policy produces positive results for young people not only in terms of entry into the labour market, but also because young people are in control of their learning; they develop life skills and grow emotionally and professionally as individuals. The best way to corroborate this is by engaging and listening directly to the perspectives of young people themselves.

Wrapping up: putting dVET at the service of a human development agenda

Ellen Vanderhoven, Clara Fontdevila, Margarita Langthaler, Oscar Valiente

As evidenced across the different contributions to this Forum piece, for all the talk of potential alignment between dVET and an HD agenda, this currently represents more of a theoretical possibility than an observable reality. We must acknowledge that putting dVET at the service of a Human Development agenda is not a straight-forward or self-evident task. Indeed, the policy design of many recent attempts at dVET transfer within LMICs is in tension with the principles of HD. Nonetheless, the contributions to this Forum piece have highlighted four important and tangible ways in which such reconciliation can be sought and progressed:

- Firstly, rearticulating and recentring the educational character and pedagogical advantages of dVET can challenge the prevailing employment-centric approach and expand the ultimate purposes of dual training beyond effects on youth unemployment.
- Secondly, the tendency in dVET transfer efforts towards top-down political reforms that produce unintended and spill over effects must be disrupted, instead directing attention towards local contextual conditions and policy ownership.

- Thirdly, greater and more nuanced consideration of, and action on, equity issues is required – not only as relates to access to dVET programmes, but also learners’ training experiences and outcomes.
- Finally, exploring genuine and systemic means of incorporating youth perspectives into the design and development of dVET programmes will be necessary, such that the protection of their interests and the realisation of their life projects become primary organising principles of dual training interventions.

Notes

1. Although it is equally capable of the opposite (e.g. by reproducing structural inequalities and even contributing to their justification and naturalisation).
2. VET students represent approximately 73% of the total secondary education population.
3. In the school year 2020/21, 48 dual specialisms were available to first-grade students in 120 schools collaborating with 295 accredited companies. By contrast, in the school year 2021/22, there were 54 dual profiles available in 150 schools collaborating with 357 companies.
4. Dual VET still comprises less than 5% of all VET students.
5. Reference to the start of the pilot project: Mexican Dual Training Model (MMFD) from the 2013–2014 school year. https://educacionmediasuperior.sep.gob.mx/es_mx/sems/autoridades_educativas_empresariales_acuerdan_impulsar_proyecto_piloto_formacion_dual
6. Reference to the ordinary meeting held in December 2022 of the Dual Education Steering Committee. https://educacionmediasuperior.sep.gob.mx/es_mx/sems/Colaboracion_con_sector_empresarial_para_ampliar_el_Sistema_de_Educacion_Dual_en_nivel_Media_Superior_SEP

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References

- Axmann, M., and C. Hofmann. 2013. *Overcoming the Work Inexperience Gap Through Quality Apprenticeships – the Ilo’s Contribution*. Geneva, Switzerland: ILO.
- Beicht, U., and G. Walden. 2015. “How Socially Selective is the German System of Initial Vocational Education and Training?: Transitions into Initial Vocational Training and the Influence of Social Background.” *Journal of Vocational Education & Training* 67 (2): 235–255. <https://doi.org/10.1080/13636820.2014.983955>.
- Bhatta, K. 2017. “Gender Equality and Social Inclusion in Vocational Education and Training.” *Journal of Advanced Academic Research* 3 (2): 29–39. <https://doi.org/10.3126/jaar.v3i2.16753>.
- Bundesregierung. 2019. *Strategie der Bundesregierung zur internationalen Berufsbildungszusammenarbeit*. Bonn, Germany: BMBF.
- Cedefop. 2014. *Developing Apprenticeships: Briefing Note*. Thessaloniki, Greece: Cedefop.

- Chadderton, C., and A. Wischmann. 2014. "Racialised Norms in Apprenticeship Systems in England and Germany." *Journal of Vocational Education & Training* 66 (3): 330–47. <https://doi.org/10.1080/13636820.2014.917693>.
- Deissinger, T. 2015. "The German Dual Vocational Education and Training System as 'Good Practice'?" *Local Economy: The Journal of the Local Economy Policy Unit* 30 (5): 557–67. <https://doi.org/10.1177/0269094215589311>.
- Deutscher Bundestag. 2013. *Unterrichtung durch die Bundesregierung: Strategiepapier der Bundesregierung zur internationalen Berufsbildungszusammenarbeit aus einer Hand*. Bonn, Germany: BMBF.
- Euler, D. 2013. *Germany's Dual Vocational Training System: A Model for Other Countries?*. Gütersloh, Germany: Bertelsmann Stiftung.
- Euler, D., and C. Wieland. 2015. *The German VET System: Exportable Blueprint or Food for Thought?* Germany: Bertelsmann Stiftung.
- European Commission. 2015. *High-Performance Apprenticeships and Work-Based Learning: 20 Guiding Principles*. Brussels, Belgium: European Commission.
- European Training Foundation. 2020. *Developments in Vocational Education Policy in Serbia: Progress Towards the Medium-Term Deliverables of the Riga Conclusions in the Period 2015–2019*. Turin, Italy: ETF.
- Fawcett, P., and D. Marsh. 2012. "Policy Transfer and Policy Success: The Case of the Gateway Review Process (2001–10)." *Government and Opposition* 47 (2): 162–185. <https://doi.org/10.1111/j.1477-7053.2011.01358.x>.
- Gale, T., and T. Molla. 2015. "Social Justice Intents in Policy: An Analysis of Capability for and Through Education." *Journal of Education Policy* 30 (6): 810–30. <https://doi.org/10.1080/02680939.2014.987828>.
- Gessler, M. 2017. "Educational Transfer as Transformation: A Case Study About the Emergence and Implementation of Dual Apprenticeship Structures in a German Automotive Transplant in the United States." *Vocations and Learning* 10 (1): 71–99. <https://doi.org/10.1007/s12186-016-9161-8>.
- Gessler, M., M. Fuchs, and M. Pilz. 2019. "Der internationale Berufsbildungstransfer im Lichte der deutschen Berufsbildungsforschung: Wie der Geist aus der Flasche." In *Konzepte und Wirkungen des Transfer Dualer Berufsausbildung*, edited by M. Gessler, M. Fuchs, and M. Pilz, 3–10. Wiesbaden, Germany: Springer Fachmedien.
- Geurts, J. L. A., and C. Joldersma. 2001. "Methodology for Participatory Policy Analysis." *European Journal of Operational Research* 128 (2): 300–310. [https://doi.org/10.1016/S0377-2217\(00\)00073-4](https://doi.org/10.1016/S0377-2217(00)00073-4).
- Gonon, P. 2014. "Development Cooperation in the Field of Vocational Education and Training – the Dual System as a Global Role Model?" In *The Challenges of Policy Transfer in Vocational Skills Development: National Qualifications Frameworks and the Dual Model of Vocational Training in International Cooperation*, edited by M. Maurer and P. Gonon, 241–259. New York, NY: Peter Lang AG.
- Gooptu, N., and R. Chakravarty. 2018. "Skill, Work and Gendered Identity in Contemporary India: The Business of Delivering Home-Cooked Food for Domestic Consumption." *Journal of South Asian Development* 13 (3): 293–314. <https://doi.org/10.1177/0973174118804448>.
- Haasler, S. R., and K. Gottschall. 2015. "Still a Perfect Model? The Gender Impact of Vocational Training in Germany." *Journal of Vocational Education & Training* 67 (1): 78–92. <https://doi.org/10.1080/13636820.2014.922118>.
- ILO. 2018. *Making Apprenticeships and Workplace Learning Inclusive of Persons with Disabilities*. Geneva, Switzerland: ILO.
- ILO. 2019a. *Measuring the Costs and Benefits of Apprenticeship Training*. Geneva, Switzerland: ILO.
- ILO. 2019b. *Quality Apprenticeships: Addressing Skills Mismatch and Youth Unemployment*. Geneva, Switzerland: ILO.
- Jabbar, H., and F. Menashy. 2022. "Economic Imperialism in Education Research: A Conceptual Review." *Educational Researcher* 51 (4): 279–288. <https://doi.org/10.3102/0013189X211066114>.

- Jolley, E., P. Lynch, B. Virendrakumar, S. Rowe, and E. Schmidt. 2018. "Education and Social Inclusion of People with Disabilities in Five Countries in West Africa: A Literature Review." *Disability and Rehabilitation* 40 (22): 2704–2712. <https://doi.org/10.1080/09638288.2017.1353649>.
- Kenzhegaliyeva, M. 2018. "German Dual System: A Model for Kazakhstan?" In *Bulgarian Comparative Education Society Conference*, 80–84. Sofia, Bulgaria: BCES Conference Books.
- Langthaler, M. 2015. *The Transfer of the Austrian Dual System of Vocational Education to Transition and Developing Countries: An Analysis from a Developmental Perspective*. Vienna, Austria: Austrian Foundation for Development Research (ÖFSE).
- Lassnigg, L. 2016. "Apprenticeship Policies in Comparative Perspective. ET-Structures, Employment Relationship, Export." In *IHS Sociological Series, Working Paper No. 114*. Vienna, Austria: Institute for Advanced Studies, Department of Sociology.
- Lewis, T. 2007. "The Problem of Cultural Fit — What Can We Learn from Borrowing the German Dual System?" *Compare* 37 (4): 463–477. <https://doi.org/10.1080/03057920701366408>.
- Li, J., and M. Pilz. 2021. "International Transfer of Vocational Education and Training: A Literature Review." *Journal of Vocational Education & Training* 75 (2): 1–34. <https://doi.org/10.1080/13636820.2020.1847566>.
- Lingard, B. 2010. "Policy Borrowing, Policy Learning: Testing Times in Australian Schooling." *Critical Studies in Education* 51 (2): 129–147. <https://doi.org/10.1080/17508481003731026>.
- Maitra, S., and S. Maitra. 2018. "Producing the Aesthetic Self: An Analysis of Aesthetic Skill and Labour in the Organized Retail Industries in India." *Journal of South Asian Development* 13 (3): 337–357. <https://doi.org/10.1177/0973174118808129>.
- Maitra, S., O. Valiente, J. Jacovkis, S. Maitra, H. Fuentes, M. Kumar, V. Aramburu, A. Roy, and J. Antonio Cervantes. 2021. *WP3. Policy Implementation and Impact. Research Design*. Glasgow, UK: Dual Apprenticeship Project.
- Mayer, C. 2001. "Transfer of Concepts and Practices of Vocational Education and Training from the Center to the Peripheries: The Case of Germany." *Journal of Education & Work* 14 (2): 189–208. <https://doi.org/10.1080/13639080125646>.
- McGrath, S. 2018. *Education and Development*. Abingdon, UK: Routledge.
- McGrath, S., L. Powell, J. Alla-Mensah, R. Hilal, and R. Suart. 2020. "New VET Theories for New Times: The Critical Capabilities Approach to Vocational Education and Training and Its Potential for Theorising a Transformed and Transformational VET." *Journal of Vocational Education & Training* 74 (4): 1–22. <https://doi.org/10.1080/13636820.2020.1786440>.
- Ministry of Education, Science and Technological Development. 2020. *Национални модел дуалног образовања: пут у будућност србије [National Model of Dual Education: The Path to the Future of Serbia]*. Belgrade, Serbia: Serbian Ministry of Education, Science and Technological Development.
- Nussbaum, M. C. 2000. *Women and Human Development: The Capabilities Approach*. Vol. 3. Cambridge, UK: Cambridge University Press.
- Nussbaum, M. C. 2011. *Creating Capabilities: The Human Development Approach*. Cambridge, MT: Harvard University Press.
- Pesikan, A., and I. Ivic. 2021. "The Impact of Specific Factors on Changes in Education in Serbia." *Centre for Educational Policy Studies Journal* 11 (2): 59–76. <https://doi.org/10.26529/cepsj.1152>.
- Renold, U., K. M. Caves, M. Esther Oswald-Egg, J. Markovic, Z. Veselinovic, and M. Todorovic. 2020. *Implementation of the Serbian Law on Dual Education – Second Report on Drivers and Barriers in the Pre-Implementation Phase*. Zurich, Switzerland: ETH Zurich, Chair of Education Systems.
- Saguin, K., and B. Cashore. 2022. "Two Logics of Participation in Policy Design." *Policy Design and Practice* 5 (1): 1–11. <https://doi.org/10.1080/25741292.2022.2038978>.
- Sen, A. 1980. "Equality of What?" In *The Tanner Lectures on Human Values*, edited by S. M. MacMurrin, 195–220. Salt Lake City, UT: University of Utah Press.
- Sen, A. 1999. *Development as Freedom*. Oxford, UK: Oxford University Press.
- Sen, A. 2005. "Human Rights and Capabilities." *Journal of Human Development* 6 (2): 151–66. <https://doi.org/10.1080/14649880500120491>.

- Statistical Office of the Republic of Serbia. 2022. *Labour Force Survey*. Belgrade, Serbia: SORS.
- Stockmann, R. 1999. "The Implementation of Dual Vocational Training Structures in Developing Countries: An Evaluation of 'Dual Projects' Assisted by the German Agency for Technical Cooperation." *International Journal of Sociology* 29 (2): 29–65. <https://doi.org/10.1080/15579336.1999.11770194>.
- Stone, D. 2017. "Understanding the Transfer of Policy Failure: Bricolage, Experimentalism and Translation." *Policy & Politics* 45 (1): 55–70. <https://doi.org/10.1332/030557316X14748914098041>.
- Tikly, L. 2013. "Reconceptualizing TVET and Development: A Human Capability and Social Justice Approach." In *Revisiting Global Trends in TVET: Reflections on Theory and Practice*, 1–39. Bonn, Germany: UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.
- Tur Porres, G., D. Wildemeersch, and M. Simons. 2014. "Reflections on the Emancipatory Potential of Vocational Education and Training Practices: Freire and Rancière in Dialogue." *Studies in Continuing Education* 36 (3): 275–289. <https://doi.org/10.1080/0158037X.2014.904783>.
- UNDP. 2010. *The Real Wealth of Nations: Pathways to Human Development, Human Development Report 2010: 20th Anniversary Edition*. Basingstoke, UK: Palgrave Macmillan.
- UNDP. 2020. *The Next Frontier: Human Development and the Anthropocene, Human Development Report 2020*. New York, NY: United National Development Programme.
- Unterhalter, E. 2005a. "Fragmented Frameworks? Researching Women, Gender, Education and Development." In *Beyond Access: Transforming Policy and Practice for Gender Equality in Education*, edited by S. Aikman and E. Unterhalter, 15–35. Oxford, UK: Oxfam GB.
- Unterhalter, E. 2005b. "Global Inequality, Capabilities, Social Justice: The Millennium Development Goal for Gender Equality in Education." *International Journal of Educational Development* 25 (2): 111–122. <https://doi.org/10.1016/j.ijedudev.2004.11.015>.
- Valiente, O., Q. Capsada-Munsech, and J. P. G de Otero. 2020. "Educationalisation of Youth Unemployment Through Lifelong Learning Policies in Europe." *European Educational Research Journal* 19 (6): 525–543. <https://doi.org/10.1177/1474904120908751>.
- Valiente, O., and R. Scandurra. 2017. "Challenges to the Implementation of Dual Apprenticeships in OECD Countries: A Literature Review." In *Vocational Education and Training in Times of Economic Crisis*, edited by M. Pilz, 41–57. New York, NY: Springer.
- Vanderhoven, E. 2023. "Unpacking the Global Apprenticeship Agenda: A Comparative Synthesis of Literature from International Organisations in the Education Policy Field." *Globalisation, Societies & Education*. <https://doi.org/10.1080/14767724.2023.2252358>.
- Vanderhoven, E., C. Fontdevila, O. Valiente, and S. Maitra. 2022. *Human Development Perspectives on the Transfer of Dual Training: Challenges and Implications*. Glasgow, UK: University of Glasgow.
- Videnović, M. Č., and G. Čaprić. 2020. "PISA 2018, Report for the Republic of Serbia." <http://www.mpn.gov.rs/wp-content/uploads/2020/02/PISA-2018-IZVE%C5%A0TAJ.pdf>
- Walker, M. 2003. "Framing Social Justice in Education: What Does the 'Capabilities' Approach Offer?" *British Journal of Educational Studies* 51 (2): 168–187. <https://doi.org/10.1111/1467-8527.t01-2-00232>.
- Walker, M., and S. Fongwa. 2017. *Universities, Employability and Human Development*. London, UK: Palgrave Macmillan.
- Walker, M., and E. Unterhalter. 2007. *Amartya Sen's Capability Approach and Social Justice in Education*. London, UK: Palgrave Macmillan.
- Wiemann, J., and M. Fuchs. 2018. "The Export of Germany's 'Secret of Success' Dual Technical VET: MNCs and Multiscalar Stakeholders Changing the Skill Formation System in Mexico." *Cambridge Journal of Regions, Economy & Society* 11 (2): 373–386. <https://doi.org/10.1093/cjres/rsy008>.
- Wolter, S. C., and P. Ryan. 2011. "Apprenticeship." In Vol. 3 of the *Handbook of the Economics of Education*, edited by E. A. Hanushek, S. Machin, and L. Woessmann, 521–576. Amsterdam, The Netherlands: Elsevier.
- Zhang, P. 2018. "The Vicissitude of German Vocational Education Law and Its Enlightenment to China." In Vol. 195 of *Advances in Social Science, Education and Humanities Research*, 293–295. Dordrecht, The Netherlands: Atlantis Press.