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DISCUSSION PAPER

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PRODUCTION UNITS IN **VET SCHOOLS**:

Interactions between training, working & learning, and their relations
with supplementary funding and market competition?

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1. Education, Training and Work Interactions – a Universal and Evolving Issue

The interactions between Education (E), Training (T) and Work (W) have been on the agenda of philosophers, politicians, pedagogics, economists... and most obviously parents and youth, for hundreds of years. The names of Plato, Zhu Xi (1130-1200), Ibn Khaldoun (1332-1402), Thomas Moore (1478-1535), J.A. Komenski (1592-1670), R. Owen (1771-1858), J. Marti (1853-1895), J. Dewey (1859, 1952), A. Makarenko (1888-1939), J.K. Nyerere (1901-1999) are but a few who have reflected and acted on the topic. The fact that these reflections and actions are continuous, suggests that E, T and W are by nature in complimentary and contradictory relations with each other, evolving constantly according to time, space and socio-economic stakeholders. In other words E, T and W are more or less dependent on the given state of the learning and production environs of the day.

In this workshop we are considering why and how to develop productive units in VET schools, in a way that would foster entrepreneurial learning and enable them to become self-financing. Consequently, when considering the workshop it is vital that this perspective, namely that E, T and W are interacting products of their environment, be applied. A quick retrospective look at the different shapes these interactions have taken over the ages will provide meaningful lessons, which can support us in assessing the relevance, feasibility and sustainability of these objectives.

2. Two mind-sets – Education vs. Training

Despite education not being the focus of this paper, one important consideration concerning the relations between E and T must be taken into account at the outset. It is important to be cognizant of today's rigid borders between the two worlds of E and T. E is seen as ideological (E is a human right), functional (E aims at transmitting knowledge and values) and institutional (schools are supposed to be autonomous from the world of W). Yet, T stakeholders tend to overlook, undermine, ignore/criticize the world of E. They often complain about the bad quality of education, which makes it necessary for them to compensate for weaknesses, particularly at the level of basic education. Conversely, educationists consider that T leads to drastic limitations of individual autonomy.

¹ NORRAG is the Network for international policies and cooperation in education and training – Geneva.

Such a situation underlines the necessity to reflect on the topic of the workshop in terms of the continuum, which should exist not only between E and T but also with W, taking their interactions into account more than their contradictions – for the sake of the users.

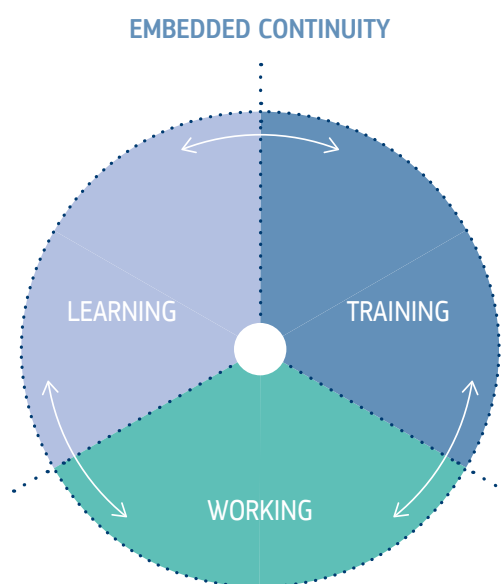
This is why T is in an ambiguous – and at the same time fascinating – situation. It sits at the intersection between E and W, as illustrated by many theoretical and institutional combinations. For instance, today different governmental approaches are utilised to govern relations between E, T and W: Some governments (as was the case in the UK for a time) have integrated the three fields in a super-Department of E + T + Labour/Employment: In other governments meanwhile, T is a part of a Department of E, Economy or Youth; or is governed on its own in a tripartite-like organisation.

These different settings reflect the constantly evolving relations between the concerned stakeholders (businesses, states, CSOs, E+T institutions and organisations, teachers and parents...). Reflecting on “Transforming VET schools into goods and services production units” (Concept Note) or embedding “income generating activities within VET schools (Title of the workshop) cannot be comprehensively achieved without considering the consequences of these partly divergent objectives in terms of the aforementioned framework.

3. The Historical Evolution of the Education, Training and Work Continuum

The three following schemes summarize the historical evolution of E-T-W interactions in “developed” countries.

Scheme 1: “Embedded continuity” – E, T and W have no formal limits because of the fluid practices involved in each of the fields.

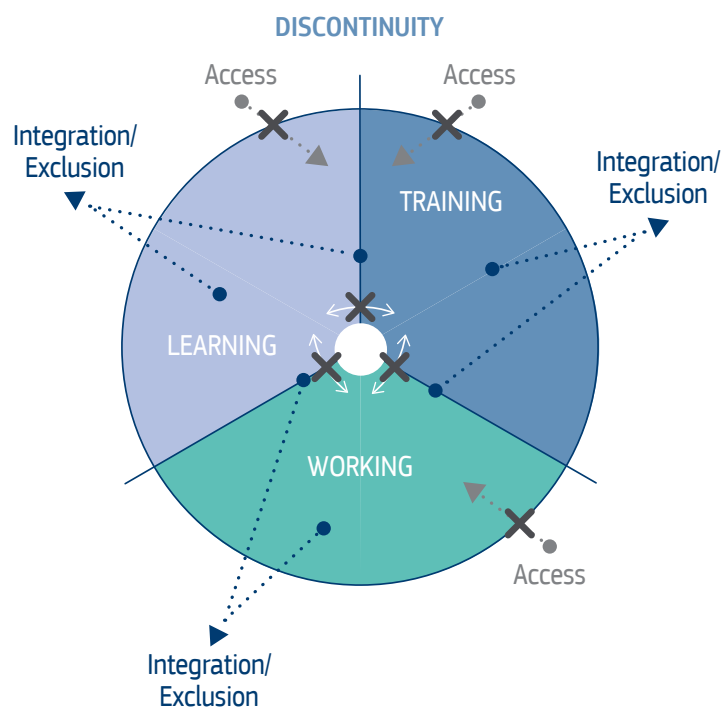


This scheme reflects the life of an urban artisan workshop during the European Middle Ages (as an “informal sector”/micro enterprise in today’s “South”)². Socialisation, informal education (values, attitudes) and skills acquisitions via learning by doing are interrelated under the authority of a master – the skills of whom have been acquired the same way as for a youth/apprentice.

E, T and W are thus highly integrated. In this situation, production fulfils skills training and revenue creation as well as “entrepreneurship” training. But, while integration in the society is relatively easy at the beginning of E-T-W’s relations “development stage”, entrepreneurship becomes more and more difficult following the establishment of guilds or corporations, controlling the skills and products markets. This “Embedded E-T-W continuity” begins to evolve when they are treated as separate entities by stakeholders and policy makers, leading to the development of a new scheme.

² We shall use the expressions N and S, being fully aware that they are no longer reflecting the complexity of a globalised world. The expected changes stemming from the use of robots both « N and S » (as presented below) is an illustration of this issue.

Scheme 2: “Discontinuity” - Policies evolve to reflect a tangible disconnect between the three fields, with the global community treating them as three discontinuous and separate entities.



The development of formal E (i.e. the development of schools and public policies) as an instrument of youth protection and social emancipation, combined with the industrial revolution, lead to a progressive segmentation between the 3 fields of E, T and W. This translates in practice to the development of dedicated public and private E and T organisations as well as to a progressive disconnection between the 3 fields, in which the T dimension takes place in autonomous environments (training centres, W places). This evolution is accompanied by the development of public policies and regulations concerning the provision of T and its financing.

This situation prevailed in the “North” up until the mid-1970s with an evolving situation in terms of socio-economic outcomes. It passed at that time from T’s easy integration in W, reflecting a linear vision of the E-T continuum, accompanying flourishing economic development, to a set of increasingly exclusionary processes (Scheme 2, outer circle). This trend was more serious in the “South” where school dropouts increased at an alarming rate. In response, the vocationalisation of E aimed at reconnecting T and E, mostly in the curriculum, was proposed in the early 1980’s by the WB and UNICEF. Accordingly, different policies and experiments were launched (Tanzania, Benin, India, Kenya, Botswana, Indonesia, Cuba).

This trend did not wait for the WB policy reversal about vocationalisation, and for the discovery of the “Vocational School Fallacy” (Foster, 1966), to appear as ineffective for E and T, unproductive in terms of revenue creation and counterproductive in terms of T’s overall image in the population. It is worth noting that some attempts were made at the same time to overcome the drawbacks of this evolution, with “Life Long Learning” (OECD, UNESCO) or “Knowledge Society” (WB) perspectives that advocated for a permanent continuity between E, T and W. The passing from an (“ideal”?) inner E-T-W continuity (Scheme 1) to progressive institutional/ideological discontinuities between the 3 fields up to the 1970’s has followed different shapes and paces in the “North” and the “South”, while at the same time some transformative long-term continuity perspectives were proposed. The crossing between these two opposite perspectives characterises today’s situation.

4. A new continuum? – VET today and what we must consider

Reflections on *Transforming VET schools into income generating goods and services production units (or adding such units to schools) aimed at ensuring self-financing and entrepreneurship learning*, cannot be made independently of the above mentioned evolutions. Indeed, we must also consider emerging trends, both in the “North” and the “South”, and how this is coming to shape a third scheme. These trends are as follows:

- The expanding duality of the socio-economic structures of societies reflecting increasing inequalities, evidenced through employment and wage structures (i.e. growing differences in wages according to age and qualification);
- The broadening of the so-called jobs-skills mismatch which, when applied in the context of globalisation, leads to an emphasis on transversal, transferable and social skills at the expenses of highly specialised technical skills (ILO conf. May 2017);
- The technological revolution (virtualization, robotization, simulation) leading to drastic changes in the value, organisation and location of work;

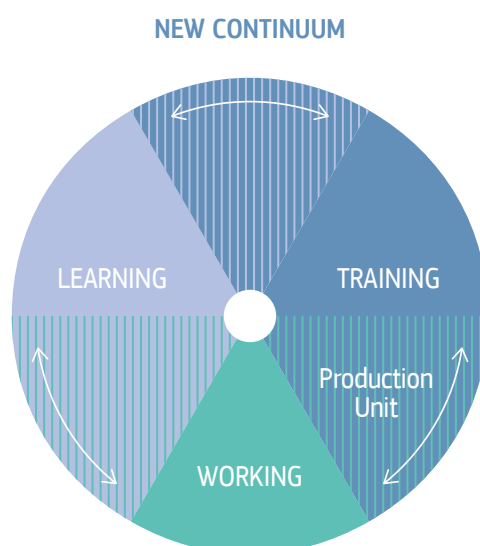
- The declining role of states from the “South” in the regulation and financing of E and T, leading to the rapid expansion of private providers in the two fields and the call for T self-financing.

Considering all these emerging trends, we know for example, that training for today’s garment industry in Bangladesh will soon be faced with declining or new skills requirements following the industry’s relocation to the “North” and the shift to robotization, across the globe. In such a situation, the decision to create production units aimed at revenue creation and entrepreneurship learning in garment training schools would make sense only if activities are defined according to the upcoming technological and marketing transformations – not forgetting that these transformations will take place in countries with high social inequalities, a low quality educational system and a high skills-jobs mismatch.

At the opposite end of the qualification/social stratification continuum, many organisations and programmes in India develop T related production activities for illiterate women. These programs are developing basic skills in a specific sector (toilet building, solar power, etc.) using ICT’s, as well as entrepreneurship learning, allowing the women to co-finance their T and enabling them to become progressively autonomous.

In other words, the debate on developing revenue creation and entrepreneurship learning in VET schools cannot make the assumption that this development will occur in stable technological, political, social environments, both in the “North” and “South”. Prospective thinking is essential to avoid developing initiatives that might be rapidly out-dated, or even counter-productive, for preparing youth for the rapidly transforming world of work. In such a context, revisiting the E-T-W interactions is thus essential, to enable us to utilise them as instruments for a forward-looking inclusive and sustainable socio-economic development. Which leads us to Scheme 3.

Scheme 3: “New Continuum” – Today, the disconnect has shrunk significantly and policies must develop to reflect the inter-sectionality of E, T and W. This indicates that discontinuities are no longer efficient or sustainable for the concerned stakeholders. Thus, this upcoming stage might be viewed as “A new continuum” between E, T and W.



Scheme 3 takes inspiration from Scheme 1 and reflects how the “borders” between E, T and W could progressively become porous again. The first stage of this process could consist of three scenarios developing overlapping situations between E, T and W with the expanded presence of:

1. E in W (further professional education) and T (transversal competencies and knowledge based curriculum);
2. T in W (apprenticeship, on the job training) and E (entrepreneurship education, vocationalisation/professionalisation);
3. W in T (Training centres production units) and E (school production units)

Consequently, reorienting VET schools and *transforming (them) into goods and services production units* (Concept Note), corresponds to number 2 above (T in productive W). At the same time, embedding Income generating activities in VET school’s structures (title of the workshop) corresponds to number 3 above (productive W in T). This semantic swing from Production and Training (Concept Note) to Training and Production (Title) reflects the multifaceted dimensions of the self-financing learning objectives that are proposed as “new” perspectives for the sustainability of VET schools.

5. Augmenting funding for training in public VET schools via production units, without competing with “The Market” and securing a relevant and quality learning process – old wine in new bottles?

The following two tables summarise the different financing flows in fragmented training markets, and alternative sources of funding³:

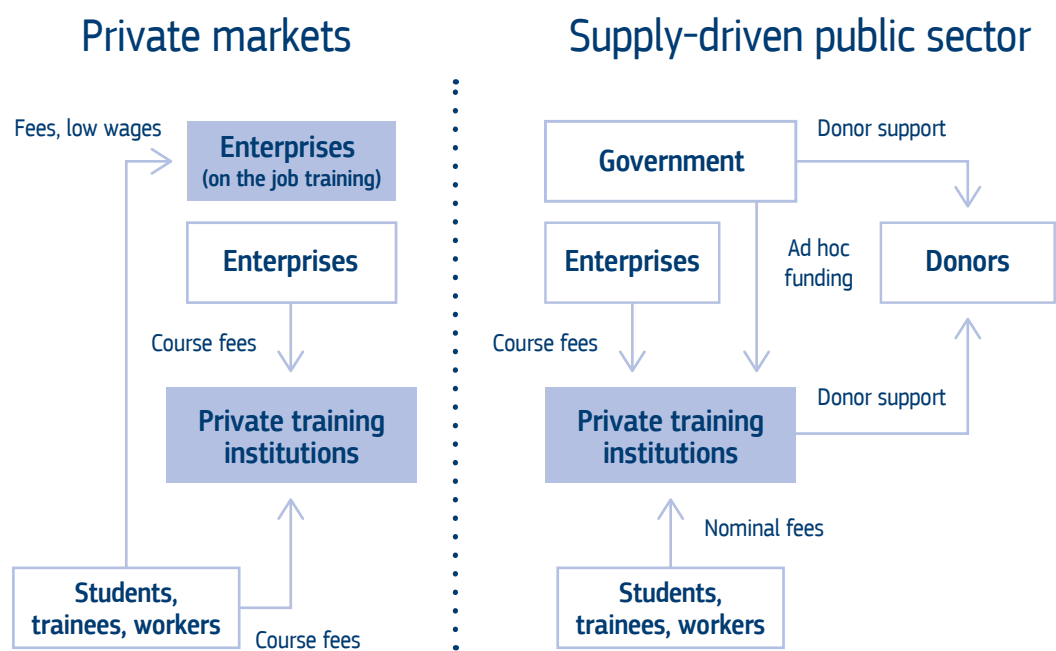


Table 1: Finance flows: fragmented training markets
 Shaded boxes represent training providers, blue arrows indicate funding flows

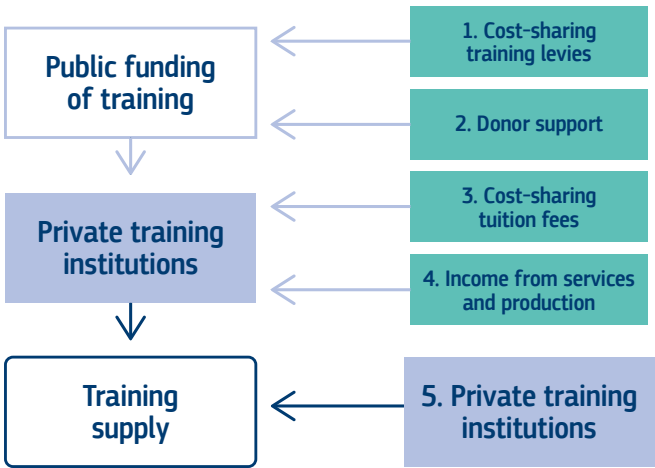


Table 2: Funding mobilisation: alternative sources
 blue arrows indicate funding flows

³ Source: Adrian Ziderman, 2016, Funding Mechanisms for Financing Vocational Training: An Analytical Framework, Policy Paper No 110, IZA, Bonn.

As demonstrated in the previous sections, the debate around production being embedded in VET Schools is far from being new. Considering the “Global South” situation in the case of the Tanzanian Education for Self-Reliance policy (implemented during the 1970’s), a 1979 research report concluded, “the extent to which VET Schools can offset its running costs using income raised from productive work is a debatable issue... It has been found that the pressure for economic returns can easily exceed the demand for quality in training, and training objectives may be difficult to reconcile with those of economic well being”⁴.

“Incomes may be derived as a by product of the training activity itself. But it is possible, more purposefully, to utilize available skills and facilities to produce output for sale on the local market... Training institutions may also generate income from the sale of services, including the renting of underused facilities and providing consulting services to enterprises. Here the issue is one of maintaining a healthy balance between the two activities (Production and Training)”⁵.

In Latin America, “some VET Schools sell complete training packages to enterprises. Some firms may even buy services for setting up training units in their companies”⁶. “The proportion of recurrent expenses that can be covered by production sales may vary considerably from case to case; but while there is some exceptions pointing to the contrary, the scope for cost recovery here is fairly limited, usually accounting for only a few per cent of recurrent expenditures.... J. Franz’ assesses this to be in the range of 25-35 per cent of total costs (the Botswana Brigades, 60’s and early 70’s). But a major objection, often voiced in relation to the latter is that training institutions may be competing with the local companies, because of their low labour-inputs costs”⁸.

Competition with the market is therefore the second issue to be considered by the Workshop. Market competition needs to be assessed, especially when considering the above recommendation of maintaining a healthy balance between W and T. We have noted in the previous section that the Workshop is focused on W in T and not on T in W. Consequently, the learning perspective should come first for W in T, keeping the supposedly competition-based market perspective in the foreground.

This can be illustrated by the concept of competition in a VET School with a production unit that looks primarily for markets where competition and coordination are relevant working instruments for enterprises. For example, in a dual apprenticeship programme (i.e. T in W) a competition approach should be used, as apprentices are fully instrumental for production in markets that are more and more competitive.

Finally, all these considerations relate to what are the main components of students’ learning processes in vocational schools and workplaces, where the former have to develop professional competences by building meaningful relations between knowledge, skills and attitude. A review-study of 24 journal articles on that topic pinpoints six main themes relating to student’s learning processes: “student’s expertise development, student’s learning styles, student’s integration of knowledge acquired in school and workplace, process of knowledge development, student’s motivations for learning and student’s professional identity development”⁹.

Introducing productive W in T should be based on an assessment of the presence and quality of these six dimensions, in order to secure the efficiency of the student’s learning process, which should remain the priority when adding productive work into the training perspective of any VET School.

We shall review, based on the above-mentioned considerations, some of the issues that could be raised during the Workshop.

4 A.Athunani, 1990, Project Finding on Productive Work in VTIs in Tanzania, Education with Production, Vol 7 No 1, Gaborone, Botswana

5 A.Ziderman, *ibid*.

6 M.A.Ducci, 1991, Financing of VET in Latin America, Discussion Paper No 71, ILO Training policies Branch, ILO, Geneva.

7 J.Franz, 2000, Financing Training ; Evidence from Other Countries

8 A.Ziderman, 2001, Financing VT to meet Policy Objectives : Sub-Saharan Africa, Paper for the WB, Washington

9 H.Schaap e.a. 2012, Student’s Learning Processes during School based Learning and Workplace Learning in Vocational Education: A review, Vocation and Learning, Vol 5, Springer

6. Main Issues Under Debate

- **What are the “best practices” in balancing the following 4 main objectives:**
 1. Improved learning outputs and employability via learning-by-doing-earning;
 2. Improved employability via fair (or unfair?) competition/competition in real labour and goods markets;
 3. Contribution of work embedded in the learning process to reducing costs and in self-financing schools;
 4. Contribution to socio-economic development at the local level through better employability and goods production for sustainable development.
- **What are the positive trade-offs between:**
 1. Costs recovery and human capital development: graduates’ higher employability and productivity as outcomes?
 2. “Theory and practice”: better learning outputs in both fields, leading to improved internal efficiency? Fewer repetitions?
 3. Work as an individual and social value and new forms of work and livelihood: creativity in the fields of education, training and production?
- **What are the relations with and between the market stakeholders (state, public bodies, local authorities, social economy, firms, SMEs...), when the latter interacts with a VET school production unit (vested support, ignorance, opposition)?**
- **What are the relations with and between “school production” and political authorities, from central to local levels (tax systems, rules and regulations concerning work organisation, security, etc.)?**
- **Are there specific governance arrangements for a production unit? If yes, what is it and what’s its place within the overall governance of a centre?**
- **What are the consequences in terms of governance of up-scaling a VET school’s production unit to a system level?**
- **What are the potential evaluation and impact analysis instruments of the W-T interactions in VET Schools, especially from a youth perspective?**