LEARNING OUTCOMES AS A SOCIAL CONSTRUCT AND EXAMPLE OF BOUNDARY CROSSING BETWEEN SOCIETAL SECTORS

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Abstract

The article looks for signs of Learning Outcomes transforming or modifying vocational and occupational practices in a manner that facilitates boundary crossing between education and the labour market. This topic is approached by analysing 22 projects from three strands of EU programmes. The partnerships responded to call for proposals with a varying degree of obligation to outline Learning Outcomes, yet this variation is not systematically mirrored in how the projects were designed. Another finding is a tendency to hint at Learning Outcomes by handling them as an obligatory reference at the planning phase. When this reference is not followed up in later stages of project implementation, particularly in the design of training courses or materials, - Learning Outcomes tend to be used for increasing the policy relevance of the projects but leaving fewer traces in their outputs and outcomes. We conclude that boundary crossing is particularly manifest in projects where the partners jointly analyse skills gaps at the beginning of a project, for example by means of the descriptors Knowledge-Skills-Competence. In this way, Learning Outcomes are being aligned with training needs in the labour markets constituting the trade or occupation under scrutiny. After these initial analyses, the projects clearly addressing Learning Outcomes are able to utilise this framework for assessing the produced training materials and their benefits for the learners.

Keywords

school/work interactions, education and training projects, skills needs, learning outcomes, EU policy

1. Context

In European and national policy-making, Learning Outcomes are considered a useful tool for designing policies that link the educational sector to the labour market. With academic lenses, Learning Outcomes can in this process be analysed as a social construct and an example of boundary crossing between these two societal sectors. Compared with the situation three or four decades ago, vocational education and training is today closer aligned with the public policy discourse accruing from other sectors, notably on the topics competitiveness and social inclusion (Cedefop 2018: 77).

The boundary crossing between education and labour market (with the ensuing school-to-work transition for vocational students or apprentices) is expected to differ from what found in other educational sectors (cf. Halász 2017). When these boundaries are crossed, actors engaged in vocational practices mediated through institutions (including firms) are executing vocational agency. The crossing of boundaries between education and labour market in all institutional constellations of the vocational education and training (VET) system, allows the same actors to transform or modify vocational and occupational practices. Seen from this perspective, boundary crossing refers to several theoretical strands that address knowledge

and epistemology, with clear implications for pedagogy, sociology and political sciences (cf. Nordin & Sundberg 2018, van Merriënboer & de Bruin 2014, Hickman, et al. 2009, Young 2008).

2. Purpose

Our paper aims to analyse how the definition, processing and dissemination of Learning Outcomes contribute to interchanges between education and the labour market. This aim is operationalised in a list of key words used for searching online information about how Learning Outcomes are addressed by EU projects working in the field of education and training. These EU projects were chosen as our empirical basis with a view to amplify previous analyses of how Learning Outcomes are processed and disseminated by means of governance instruments (see for example Souto-Otero 2012, Stanley 2015, Ure 2019).

When European Commission services launch calls for proposals that directly or indirectly promote Learning Outcomes, this adds to the governance instruments already being used in the field of vocational education and training (VET). Our empirical material could also shed light on how coordinators and partners make use of Learning Outcomes for designing their education and training projects. This could reveal the transformative effects of Learning Outcomes when the EU instigates such projects, as well as the utility of Learning Outcomes for the project promoters when engaging in projects that should meet European and national expectations. Our main research question is whether there are signs that Learning Outcomes contribute to transforming or modifying vocational and occupational practices in a manner that could facilitate boundary crossing between education and the labour market.

3. Methodological approach

Our empirical material comprises publicly available information on the following strands of EU programmes: *Knowledge Alliances* and *Sector Skills Alliances* of the Erasmus+ programme, alongside projects submitted to the programme *Leonardo da Vinci.* Altogether, 22 projects that explicitly address Learning Outcomes were selected for scrutiny. More precisely, we investigated ten projects under the strand *Knowledge Alliances* retained in 2014 and 2016. Likewise, ten projects under *Sector Skills Alliances* from the same years were investigated. By concentrating on the selection years 2014 and 2016, the projects – normally lasting three years – were definitely terminated, in spite of any delays during the implementation period. In addition to these twenty Erasmus+ projects, 2 of 19 projects from other calls for proposals were scrutinised. These calls were organised in 2008 and 2011 by the Leonardo da Vinci programme with the aim to test and develop the *European Credit System for Vocational Education and Training* (ECVET).

The applicants who submitted the 22 projects were responding to call for proposals with a varying degree of obligation to outline Learning Outcomes. This led to variations in how this concept was handled and operationalised by the project partners. More specifically, projects addressing ECVET by default have to ponder on Learning Outcomes in one way or the other. As will be explained below, this automatism has to do with the very idea behind ECVET (cf. EC 2019) and the investigated ECVET projects therefore serve as a contrast to the other ones. Second, project partners applying to set up a Sector Skills Alliance were specifically asked to "*explain the approaches that are or will be used for the validation and recognition of learning outcomes, in line with the European transparency and recognition tools and principles*". This request figured in the application form that the partners had to fill in. The

fact that the same request did not apply to Knowledge Alliances, could imply that fewer such alliances made use of Learning Outcomes descriptors for designing and carrying out their projects. And this bias could potentially weaken the methodology of our study. Yet this risk was accepted because of the method's potential to shed light on how important clear instructions and clearly formulated policy objectives are for the ability of EU projects to apply Learning Outcomes. It seems important to add this methodological consideration, given that the processing and implementation of Learning Outcomes depend on wider policy objectives than those affecting interchanges between education and labour market in a strict sense.

Once the 22 projects from 3 programme strands identified, we collected information available on the internet via each project's web pages or on the website of EU programmes. After retrieving these data, we searched for the appearance of 'Learning Outcomes', combined with the key words 'learning objectives, 'qualifications (frameworks)' and 'competences'. This additional research strategy aimed to identify projects close to our thematic focus, though not using the exact term.

Our selection of projects is not representative of the total population in each programme strand. We therefore refrain from counting how many projects that can be subsumed under each observation. Our point of interest is instead how Learning Outcomes are thematised in the projects that actually provide information on this topic; and what distinguishes projects doing this in a systematic manner as compared with those only referring to Learning Outcomes in a loose sense. We did not search for *best practices*, because a project that back to 2008 seems excellent or promising may appear hesitant ten years later. Such a change of perception could partly stem from the evolving definition of Learning Outcomes over the 2008-2020 period, during which the selected projects were carried out.

4. Learning Outcomes in three strands of European programmes
Our proposed methodology leads to one section per strand of the EU programmes under scrutiny.

4.1. Knowledge Alliances
These alliances embrace higher education institutions and enterprises that jointly develop training, often with a view to tackle multi-disciplinary challenges. Among the Knowledge Alliances that systematically address Learning Outcomes, the conceptual framework for doing this might be solid but there are fewer references to the interplay with the labour market. The definition and operationalisation of Learning Outcomes sometimes differ from the proposed EU policy framework. One example of this is that 'competences' are pragmatically used as a conceptual umbrella over Learning Outcomes descriptors (knowledge and skills etc.) instead of 'qualifications'.

Several projects make use of Learning Outcomes by nuancing the notion by *intended, expected, aspired* or *agreed*. This is sometimes done in order to link such sub-groups of Learning Outcomes to teaching and learning methods, which certainly is positive from a pedagogical point of view. Likewise, the foreseen assessment methods will sometimes test the intended learning outcomes.

Moreover, Learning Outcomes are primarily addressed by positioning them to professional practices that will benefit from the training courses or modules produced by the partners. Exchanges between education and labour market seem postponed to the last stages

of the project implementation, even to the post-project efforts for sustaining the partnership after the contractual period. The project partnerships planning to delve into Learning Outcomes at an early stage, often envisage to do this during a preparatory needs analysis aiming to define skill gaps in the labour market. For example, "industry representatives will take part in defining the depth of knowledge and learning outcomes on the basis of their practical and operational needs and experiences". The plan is then to develop modularised training programmes "that will reinforce the learning outcomes with skills that are lacking in the labour market".

Only a systematic analysis of the final project outputs would reveal whether this promising approach to Learning Outcomes was successfully implemented. The available reports from the project partnerships are not sufficiently detailed to allow for such an appreciation. There is however some evidence that the conceptual framework of Learning Outcomes instigates the project partners to set up training programmes that in a pragmatic way refer to this notion.

4.2. Sector Skills Alliances

Such alliances tend to have broader partnerships than Knowledge Alliances. The purpose of a Sector Skills Alliance is to align vocational training to labour market needs in specific economic or societal sectors. Learning Outcomes are in some Sector Skills Alliances interchanged with learning objectives, which does not necessarily dilute the meaning of the notion. We found Sector Skills Alliances where the notion Learning Outcomes was used for the curriculum as such, while learning objectives seem confined to more fine-grained training modules. In some Sector Skills Alliances, 'learning objectives' are sustained by clearly defined Knowledge-Skills-Competences, operationalised in training modules addressing qualifications for specific trades or occupations. This conceptualisation complies with how learning objectives or outcomes are inscribed in qualification frameworks at a national and European level.

Like for Knowledge Alliances, the definition of Learning Outcomes in Sector Skills Alliance is sometimes preceded by an initial analysis of skills gaps in the targeted sector. Yet the Sector Skills Alliances tend to be more preoccupied with learning or competence units than the often university-dominated Knowledge Alliances. Such units are aligned with the European Credit System for Vocational Education and Training (ECVET). This is a sign that VET partnerships reflect on and try to make use of the overall conceptual framework of Learning Outcomes, including the links to other EU policy tools. One example was a Sector Skills Alliance awarding 30 ECVET points (at level 5 of the European Qualification Framework) to learners who successfully completed a specialisation course. This was a recognition of having achieved the Learning Outcomes associated with that course. Another example was a project trying to develop common occupational standards for the European fish-farming industries. These standards should build on knowledge and skills, including a 'framework of shared learning outcomes' that could be updated annually and 'inform future revisions of national qualification frameworks'. It should however be noted that an evaluation of Knowledge Alliance reveals that ECTS credits do not always guarantee full validation of learning outcomes at the end of a mobility period. Instead, students occasionally receive informal recognition for their participation in the form of proprietary certificates (PMI & AIT).

Contrary to some Sector Skills Alliances only referring to Learning Outcomes in a sweeping movement of listing the major ingredients of EU policies, other projects of this

programme strand make use of Learning Outcomes for assessing the Knowledge-Skills-Competence acquired during a training module or course. Hence, one project efficiently aligned assessment with intended learning outcomes, unfolding in one self-assessment and four peer assessments (group assignments) performed for each training module. As recommended in EU handbooks for writing Learning Outcomes (cf. European Commission 2017), Sector Skills Alliances taking Learning Outcomes seriously utilise active verbs (like 'know', 'understand', 'be able to') for describing training modules. We found that such modules were sometimes specified in didactic needs, learning hours and ECVET points.

4.3. Other EU projects supporting Learning Outcomes

In the early years of the European Credit System for Vocational Education and Training (ECVET), two calls for proposals were launched, one in 2008 and the second in 2011. The aim was to set up ECVET pilot projects financed from the EU programme Leonardo da Vinci. ECVET has recently been somewhat modified, meaning that the purpose is not to develop a credit system for VET similar to ECTS in higher education. Therefore, a study published by the European Commission (EC 2019:116) underscores that ECVET primarily is a mobility tool:

> "ECVET is widely used across EU member states for VET mobility, with most countries reporting that their VET providers use the instrument to record, describe and plan learners' mobility experience. In some countries this has created a shift where learning outcomes undertaken abroad can now contribute to a learner's VET qualification".

From the 2008 Call for Proposals to "Test and Develop the Credit System for Vocational Education and Training", we investigated two projects demonstrating clear reflections on Learning Outcomes. One project dealt with the chemical sector and had a double aim, of which the first was to develop a model that facilitated mobility by enabling learners to have their Learning Outcomes achieved abroad, recognised at home in the context of a qualification. The second aim was to investigate whether the ECVET instrument was suitable for improving and consolidating European mobility phases in the long term. The knowledge, skills and competences of significance to the completion of a work task was the basis for defining units of learning outcomes. One conclusion (Eberhardt, ed. 2013) from the project reads:

> "Using work tasks as a vehicle for describing learning outcomes and using the former as an object of mobility measures (… by the host or home institution, AA), were successfully embraced by the partnership countries. The transparency created in respect of the representation of the unit of learning outcomes (…..) is proving to be effective, and the allocation of credits (credit points; AA) was deemed less important".

The second ECVET project we investigated differs from the abovementioned Sector Skills Alliance, which should develop common occupational standards in a rather dispersed European fish-farming industry. This second project dealt with the aviation industry that already exhibited common work tasks of all aircraft construction professionals across Europe. Hence, the countries involved in the aviation project had introduced specific training regulations, and the project in question resulted in a repertory of 'Typical Professional Tasks'. Based on these TPTs, learning outcomes and units of learning outcomes were developed according to the ECVET framework. One conclusion (Eberhardt ed. 2013) was that "…a

differentiation needs to be made between learning units (as a structuring element) and qualification units (as examined elements of a qualification)".

Learning units as a structuring element were deemed useful in "advancing the goals of transparency, mobility and permeability within a VET system", - while the qualification units were reported to cause potential problems in this system. This is part of the explanation why the ambitions behind ECVET have been somewhat reduced, particularly the idea of awarding credits to units of qualifications. Moreover, the cited European Commission study from 2019 summarised that ECVET has "to some extent contributed to supporting flexible vocational pathways and the accumulation of learning outcomes" achieved in formal and informal/non-formal learning. Hence, looking ahead and considering the large variations in the share of VET mobility across countries, national and EU participants at a ECVET Network Meeting (2019) discussed the development of an integrated (digital) VET mobility tool supporting the new Erasmus+ programme launched in 2021. The participants found that the new programme could increasingly facilitate mobility through cross-border exchanges. Accordingly, one could presume that boundary crossing between education and the labour market would also be facilitated by the mobility tool ECVET.

5. Discussion and conclusions

At least back to the start of our investigated period in 2008, much weight has been put on Learning Outcomes in EU policy-making and programme design. We found that projects addressing the European Credit system for Vocational Education and Training (ECVET) explicitly made use of Learning Outcomes for designing training materials. Evidence of the structuring effects of Learning Outcomes was also traced in Sector Skills and Knowledge Alliances, of which some deliberately outline Learning Outcomes in a general manner, because the projects thereby could suit various professional fields to which Learning Outcomes may be adjusted. Moreover, an adjustment to shifting target groups while carrying out the projects, figured as a justification of why general Learning Outcomes were formulated. This elasticity complies with advice from EU agencies to refrain from using Learning Outcomes in a restrictive manner (cf. European Commission 2018, Bjørnåvold 2019). The elasticity also exemplifies a tendency to hint at Learning Outcomes by handling them (and the ensuing Knowledge-Skills-Competence framework) as an obligatory reference at the planning phase. Yet when this initial step is not followed up in later stages of project implementation, particularly in the design of training courses or materials, - Learning Outcomes tend to be used for increasing the policy relevance of the projects but leaving fewer traces in their outputs and outcomes.

Our investigation suggests a rather indirect contribution of Learning Outcomes to the interface between education and labour market. Yet making use of Learning Outcomes for the purpose of boundary crossing between education and the labour market is more ambitious than utilising Learning Outcomes in the design of training projects. In a European VET project, such boundary crossing becomes manifest when stakeholders who cross the boundary jointly analyse skills gaps at the beginning of a project, for example by means of the descriptors Knowledge-Skills-Competence. In this way, Learning Outcomes are being aligned with training needs in the labour markets constituting the trade or occupation under scrutiny. After these initial analyses, the projects clearly addressing Learning Outcomes are able to utilise this framework for assessing the produced training materials and their benefits for the learners. The definition, processing and dissemination of Learning Outcomes may therefore characterise the entire contractual period of a project.

Our material indicates that project partners' ability to respond to the proclaimed shift towards Learning Outcomes increases when clear practical instructions and policy objectives are formulated. Yet the probability of presenting a crystal-clear framework for and around Learning Outcomes has to be judged with hindsight to the many purposes that Learning Outcomes are meant to serve (cf. Garcia-Molina 2011, Ure 2015). Clarity therefore has to be balanced with project partners' need to adjust Learning Outcomes to the specific disciplinary and organisational context in which Learning Outcomes should play out. This observation concurs with previous research pointing at the elasticity of Learning Outcomes according to the national reform context in each country (cf. Michelsen et al. 2017). In this way, EU projects responding to policy objectives and conceptual frameworks may twist Learning Outcomes as part of an adaptation to a national or local context. Moreover, it is presumably legitimate to respond to Call for Proposals and advancing own ideas by adapting them to an EU policy framework, - although this adaptation appear in some of the projects under scrutiny somewhat constrained or forced.

This landscape of certain ambiguity complicates project partners' ability to embrace the many policy objectives behind the discourse on Learning Outcomes. The processing of Learning Outcomes may therefore appear as an act of balancing between treating them as a doxa and – on the other hand - a non-binding reference point in applications for European or national funding (cf. also Prøitz 2015). The empirical material sustaining our paper indicates that when Learning Outcomes are used in a loose sense, for example by interchanging the notion with competences and skills, - the clarity of the overall conceptual framework and the ambitions to spur 'a shift' may be reduced, particularly in comparison with what was outlined in the first EU policy documents on this topic (cf. Cedefop 2009, European Commission 2011). Hence, if Learning Outcomes are applied in a way only reproducing the official definition without purposefully intervening in educational practices, - the ambition of the conceptual framework around Learning Outcomes is weakened.

Yet a pragmatical stance to Learning Outcomes during a local implementation process should not be compared to a displacement of the policy objectives and conceptual framework that sustain the EU discourse. In other words, goal displacement - in line with sociological concepts of a dysfunctional policy process - is not apt for summarizing our empirical material. Still, and when considering that the discourse on Learning Outcomes partly mirrors to which extent EU education policy is being implemented, one could point at certain limits to the pragmatism in a policy 'shift', - before it simply describes past and contemporary practices.

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