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The changing nature and role of European vocational education and training – implications for European policy cooperation post 2020(1)

The adoption of the Copenhagen declaration in 2002 triggered an extensive European cooperation in the area of vocational education and training (VET). This cooperation - now firmly embedded in the Education and Training 2020 framework - has contributed to the modernisation of VET systems and provisions across Europe and made it possible for policy makers and practitioners to systematically share experiences and jointly develop solutions. The question now, with the existing policy framework entering into its final stage, is how to take this cooperation forward into the next decade. A (possible) Education and Training 2030 policy framework must build on an in-depth understanding of the changing nature and role of vocational education and training in Europe today. This note aims to support policy discussions and developments in the coming years. The note is divided into the following parts:

- The first part outlines an analytical model which can be used to better understand developments in VET.
- The second part presents the outcomes of a Cedefop survey on how VET is defined and conceptualised in European countries. This survey (covering the EU 28 + Iceland and Norway), provides an insight into the diversity and dynamics of European VET systems.
- The third part, based on the findings of the survey, points to some of the main developmental trends in European VET
- The final part of the note reflects on the implications of these observed trends for future European policy cooperation in vocational education and training.

The research underpinning this note forms part of the Cedefop project 'The Changing nature and role of vocational education and training in Europe' (2016-2018) (i).

⁽¹⁾ This note is based on two working papers written by Jorg Markowitch, Philippe Grollman, Gunther Heffler and Victor Fleicher as part of the first work assignment of the Cedefop project 'The Changing nature and role of VET':

1. How can we better understand vocational education and training?

Vocational education and training takes many forms and it is certainly the most heterogeneous of the main education and training sectors in Europe today. It is difficult to grasp VET as a single institutional entity and in many cases it overlaps with other parts of the education and training system. Billet (2) states that "...its diversity in terms of its purposes, institutions, participants and programmes is one of its key-characteristics. It serves a broad set of interests in quite distinct ways across a range of nation states. However, this diversity makes a unitary description or singular account difficult." Cedefop takes this diversity into account and defines VET as "...education and training which aims to equip people with knowledge, know how, skills and/or competences required in particular occupations or more broadly in the labour market".(3) While sufficiently broad to be accepted by most stakeholders, these definitions are helpful only to a limited extent when trying to identify the key characteristics of vocational education and training. To overcome this problem we therefore suggest a multi-faceted approach combining three partly overlapping perspectives. This approach combines an epistemological and pedagogical perspective (4), a system and institutional perspective and a socio-economic and labour market perspective. These perspectives can clarify discussions and help to identify the appropriate learning approaches, institutional solutions and forms of cooperation to work towards.

1.1 VET from an epistemological and pedagogical perspective

Perspective: VET fundamentally operates from a 'tacit knowing perspective'; emphasising how knowledge, skills and competences develop through experience and is rooted in practise. This perspective partly contrasts a 'cognitive' approach where knowledge is seen as abstract, theoretical and standardised. The distinction between and combination of these perspectives is fundamental to VET policies.

To be able to understand the characteristics of VET, and how these are changing, we need to appreciate the distinctive forms of teaching and learning underpinning activities in this area. Captured by the term 'tacit knowing', knowledge, skills and competences are fundamentally seen as developing through experience and as rooted in practice (know-how). Learning according to this perspective means making practical experiences (learning by doing) and is seen as a social process that happens through socialisation in communities of practice. Teaching (including instruction and mentoring) mainly means to create the learning environment in which students can gain experiences. Successful completion of education and training can be judged on the basis of the competences acquired by the students and their ability to use these in a self-directed ways in unpredictable situations. This perspective is contrasted by a 'cognitive' perspective where knowledge takes the form of abstract, theoretical, standardised and impersonal information. In this perspective knowledge is mainly produced by scientific disciplines and delivered by teachers in a structured way to be processed and potentially applied by students. Assessment of this knowledge will typically take the form of written tests, only rarely using assessment forms rooted in practice. The distinction between the 'two perspectives is of critical importance for understanding the orientation of education and training in general and VET in particular. We can, for example,

⁽²⁾ Billet, S. (2011), Vocational Education – Purposes, Traditions and Prospects. Dordrecht. Springer

⁽³⁾ Cedefop(2014), Terminology of European Education and Training Policy. Publication Office of the EU, Luxembourg

⁽⁴⁾ Epistemology refers to the study or a theory of the nature and grounds of knowledge especially with reference to its methods, limits, validity and scope

observe VET institutions with a weak practice focus operating more in line with the cognitive perspective outlined above. We can, furthermore, observe institutions outside the formal VET system, for example universities, using elements of tacit knowing in their approach (medicine, arts). Finally, it is clear that a combination of these two perspectives will be increasingly required; for example in higher VET programmes seeking to integrate research oriented teaching with work practice in companies.

1.2 VET from an educational system perspective

Perspective: VET is commonly defined with reference to the institutions explicitly and formally populating the sector. The composition of institutions is currently changing To what extent should European cooperation in this area be limited to those institutions explicitly and officially defined as 'vocational'; to what extent should we broaden our focus and look at the vocational functions addressed by institutions operating outside a narrow definition of VET?

This is for example the approach of statistics where the International standard classification of education (ISCED) since 1997 has made an effort to distinguish vocational education and training from general and academic education. Looking at the development of VET over time, we can observe that the composition of institutions with an explicit vocational mandate is evolving and changing. We can also observe that institutions without an explicit VET mandate, for example in general and higher education, take on important vocational functions. Overall the institutional composition of the VET sector seems to change over time, underlining the need to continuously observe how the institutional landscape is evolving and, consequently, how the division of labour within education and training is changing. VET programmes are traditionally seen as operating at the middle level of the education and training system (EQF 3-4). Either in the form of apprenticeships or "technical schools", these provisions have been directly related to the labour market and have traditionally not allowed for progression into higher education. While the majority of VET provisions (and VET students) can still be found at this (middle) level, the position of this traditional part of VET in relation to other parts of the education and training system has changed. As a part of lifelong learning oriented policies, and reflecting a focus on permeability, a vast majority of European countries have abolished dead ends and support progression into higher levels. Importantly we can now observe the expansion of VET oriented programmes at all levels of education and training. In a number of countries we can observe the emergence of basic education programmes with clear vocational components. These can be classified as operating at lower levels (EQF 1-2), addressing the needs (for example) of adults with special needs, groups of unemployed, migrants etc. We can also observe an increasing number of vocationally oriented programmes at higher levels (5-8). These higher level provisions seem to be increasing in importance and consist of different types. Higher VET covers a number of different provisions, ranging from specialised training provided by companies to specialised vocational colleges and schools and vocationally oriented university programmes. Developments in higher education are particularly important as we can observe an increased focus on practice-oriented learning and an emphasis on dual solutions involving close cooperation with companies and the labour market. Our understanding of the VET sector will necessarily be influenced by this institutional perspective. A changing institutional composition of the system raises questions regarding the focus of policies; to what extent should European cooperation in this area be limited to those institutions explicitly and officially defined as 'vocational'; to what extent should we broaden our focus

and look at the vocational functions addressed by institutions operating outside a narrow definition of VET?

1.3. VET from a socio-economic and labour market perspective

Perspective: VET can serve the labour market and society both in a broad and in a narrow sense. A key question is whether VET prepares for limited job or occupationally specific skills or whether it addresses broader requirements, for example including transversal skills and competences.

To be able to capture the essence of VET, we need to understand the different ways in which the sector prepares learners for future jobs and careers and the way it interacts and cooperates with labour market stakeholders, notably companies. VET can be understood as addressing a range of functions within social and economic processes, summarised by Billett (5) as follows:

- cultural reproduction, remaking and transformation of occupational practices (e.g. the continuity, maintenance and transformation of culturally derived occupational practices that are essential to countries, communities and individuals);
- economic efficiency (e.g. meeting particular occupational requirements);
- societal continuity (e.g. reproducing societal norms and values),
- individuals' fitness for particular occupations and readiness to engage in work life (e.g. meeting students' needs and readiness to work and learn) and
- individual progression and continuity (e.g. supporting development throughout the working life of the individual).

Definitions offered by international organisations (UNESCO, ILO, Cedefop etc.) typically adopt a functional view of VET, in particular by emphasising 'reproduction' ('preparing youth for the labour market') and 'economic efficiency'. However, a too narrow functional understanding of VET can be harmful. While it is important to provide VET candidates with the technical and occupational skills required to carry out a job, their ability to go beyond the specificities of a given job and contribute to change, knowledge creation and innovation in the workplace (6) is clearly of significant importance. VET contributes to workers' capabilities to promote continuing innovation and improvement in the workplace and may build the backbone of a country's innovation system ('). For some countries, vocational education and training and skilled work requiring skills on the intermediate, non-tertiary level is perceived as integral to the respective national innovation system. The fact that workers not only adapt to the organisations they work in, but also exert an influence on the way the organisation changes, is captured through many surveys also at transnational level, such as the European company survey or the European Survey on Working conditions. Our

^{(&}lt;sup>5</sup>) Billett 2011, p. 137

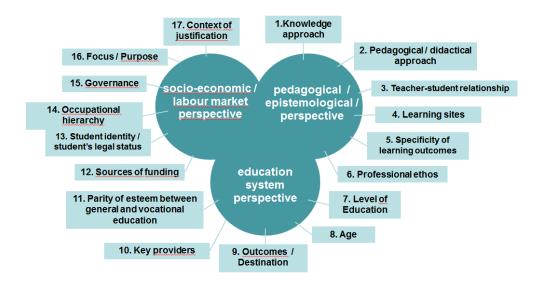
^(°) Nonaka, Ikujirō , & Takeuchi, Hirotaka. (1995). The knowledge-creating company: how Japanese companies create the dynamics of innovation. New York: Oxford Univ. Press; Høyrup, Steen (Ed.) (2012). Employee-driven innovation: a new approach. New York, NY: Palgrave Macmillan.

⁽⁷⁾ Streeck, Wolfgang. (1991). On the institutional conditions of diversified quality production. In: Egon Matzner & Wolfgang Streeck (Eds.), Beyond Keynesianism - The Socio-Economics of Production and Employment (pp. 21-61). London: Elgar.

understanding of VET, and the way we set policy objectives, is directly influenced by the way we understand the relationship to the labour market (and society in general). This implies that we can define VET provisions both in a broad and in a narrow sense, deciding whether to give priority to skills and competence relevant in a narrow job context or whether we address skills and competences relevant in a broader context.

1.4 A multi-faceted approach to understanding vocational education and training

The three perspectives outlined above are presented in Figure 1. A simple but important lesson to be drawn from this model is that VET looks different according to the perspective applied. While the epistemological/pedagogical perspective draws attention to the ability of the sector to facilitate learning and actual development of competences, the education and training system perspective focuses on the providers and how they are organised. The socio-economic perspective, finally, draws attention to the (narrow and broad) functions of VET in society and the labour-market.



As indicated by the figure, these three perspectives overlap in important ways and can also be further detailed (see examples listed in points 1-17 in the figure). Section 3 of this note will return to this model.

2. Conceptions of vocational education and training in Europe

Between September and November 2016, Cedefop invited VET experts in all EU Member States as well as Iceland and Norway to respond to a questionnaire regarding the way national VET systems are understood (in the form of official definitions and overall conceptions). The outcomes of the survey demonstrate the significant diversity of European VET systems, in essence showing that all national VET systems have their particular characteristics and that we can speak of 30 (or more) genuinely national approaches to VET. Nevertheless, in almost all European countries VET in terms of its dominant conception is perceived by the national VET experts consulted as occupations-specific education and training geared towards securing supply of skilled labour and inferior to general or academic education. Furthermore, in most countries VET is predominantly addressing young people

(IVET), providing qualifications at the middle level of education (ISCED11 levels 3-4), financed from education budgets and coordinated by central governments. Reflecting this combination of diversity and convergence, four patterns became visible (which are summarised in Table 1 below): VET understood as (1) work-based or dual initial *training*, (2) initial vocational *education*, (3) further training, and (4) as (part of) lifelong learning. We have tentatively, based on the responses to the survey, linked countries to these patterns.

Table 1. Overview on different VET conceptions prevalent in Europe

1. VET understood as work-based/dual initial training

identified in Germany, Austria (apprenticeship), Denmark, Slovakia (apprenticeship) and Hungary

and to some degree in Iceland and England (apprenticeship)

2. VET understood as initial vocational education

2a. Vocationally oriented school education

identified in Austria (school), Bulgaria, Malta, Romania, Slovenia and Spain,

and to some degree in Czech Republic, Estonia, Flanders, Latvia, Lithuania, Slovakia (school), Sweden (school)

2b. Varied occupationoriented upper- and postsecondary education

identified in Croatia, Cyprus (IVET), Luxembourg, Nether-lands, Poland and Portugal

and to some degree in Greece, Norway, Sweden (post-sec.), Ireland (VE)

VET is considered to be based on practical knowledge and 'learning by doing' for young people (recognised as apprentices) to become members of an occupation/profession (initiation) with distinct occupational or professional ethos and occupational rights. Substantial contribution by companies (financially and as place of learning equal or more important than the school) and strong coordination between employers (and trade unions) are presupposed in this conception of VET. VET is clearly associated with middle level of education (ISCED11 levels 3-4) without or with restricted access rights to higher education. An employer perspective is dominant in so far as VET's main purpose is to secure the supply of skilled labour and to foster business innovation and growth.

- 2. VET is understood as a particular part of initial education, where schools financed and governed by the state are the main place of learning and learners are regarded as students. Despite the large variations within this type two patterns can be distinguished.
- 2a. 'Vocationally oriented school education' which is discipline-based, mainly takes place in classrooms (although there are work-based elements as well) and teacher-student relations are the normal case. VET is not necessarily occupation-specific, but can also aim at broader vocational fields, is targeted at middle and higher levels (i.e. ISCED11 levels 3-5), addresses young people (15-19), and provides access to higher education. Individual or societal perspectives are more evident, for instance individual progression and personal growth is rated more import than securing supply of skilled labour.
- 2b. A broad range of more occupation-specific education, addressing also young adults (18-24) for which securing the supply of skilled labour and entry into working life is rated higher. It is more diverse than type 2a in many other aspects: levels of education span from low to high, and so do skill levels (semi-skilled workers and skilled-workers); types of providers, instructions and learning approaches can be diverse. School-based and work-based options may form part of one system.

3. VET understood as further training

identified in England, Ireland (VT) and Cyprus (CVET)

VET is understood as mainly on-the-job further training for all age groups (but with high shares of older learners) at various levels (including lower levels, such as ISCED11 level 2) to become semi-skilled, skilled workers or professionals (with no specific occupational rights) offered by a wider range of further and higher education providers. Progammes for unemployed or second-chance programmes form part of this understanding. Entry into working life or employability is seen more important than occupational identity. Employers' views dominate and VET is regard as a means to secure supply of skilled labour and promote innovation and economic growth.

4. VET understood as (part of) lifelong learning

identified in France and Finland

and to some degree in Croatia, Ireland (VT), Italy, Greece and Luxembourg VET is understood as the (organised) co-existence of a diverse set of learning approaches (disciplinary or experienced based), learning sites, education and skill levels addressed (semi-skilled, skilled and professional), age groups, status of learners (apprentices or students), types of providers (school, companies, higher education), types of instructors (teachers, trainers, masters), as regards the learning outcomes (both occupation-specific and broader-vocational field oriented, but also pre-vocational) and types of qualifications (occupational, educational). Consequently, VET is associated with various (also more balanced) purposes including equity and inclusion and IVET and CVET form part of one conception of VET – respectively LLL.

Source: Markowitsch, Grollmann and Fleischer (2017b, draft).

It should be noted that the 2016 survey addresses the dominating <u>conceptions</u> of VET in the different countries. The extent to which these conceptions are reflected 'on the ground' through the practices of authorities, providers and teachers will obviously vary. The survey, however, provides an important reference point for the empirical research to be carried out by the 'Changing role of VET' project.

3. Changing concepts, changing VET?

Various developments reported by the survey have the potential to alter the conception of VET both at national level and internationally. Many of these trends are familiar and have been discussed under headings such as vocational drift, academic drift, individualisation, diversification, pluralisation and hybridisation. Some of the main observations are listed in the following.

- Increased emphasis on practical knowledge: Many countries have experienced and also expect for the future an increased emphasis on practical knowledge in curricula and learning approaches. This is closely linked to a strengthening of the work-based aspect of VET. This is the case in particular in countries with a school-based conception of VET. This changing emphasis into practice through the implementation of apprenticeship programmes (reported by quite a number of countries) and (notably) the expansion of apprenticeship programmes to higher levels of education (e.g. France, Italy, Germany). At a governance level this includes a more prominent role given to employers' and/or industry representatives (e.g. England, Hungary), very often in the framework of social partnership (e.g. Lithuania, Croatia, Malta), or the attempt to encourage stronger participation of enterprises in the financing of vocational education and training.
- Diversification of VET: Examples were also provided for an expansion of VET at lower ages. Portugal reported the introduction of training offers allowing people younger than 16 to choose a VET path. We can also observe an expansion of VET, traditionally focused on middle skill levels, to higher and lower levels. This exemplifies a diversification and expansion of VET provisions and target groups (e.g. in terms of age, skill levels, special needs).
- New pathways into higher education: Another particular form of diversification can be
 observed when it comes to access to higher education ('vertical permeability'). New
 pathways into higher education were frequently reported as major changes that took
 place in the last two decades. Interestingly, issues of access to higher education through

vocational qualifications are specifically addressed in countries that have long-standing traditions of VET: Austria, Denmark, England, Germany, and France. Most prominently, the German VET now gives access to higher education to vocationally qualified applicants like 'Meister', 'Techniker' or 'Fachwirt', if they have proof of relevant occupational experience, pass an aptitude test or successfully complete a probationary year of studies. In many other countries higher education institutions are already now major providers of vocational education and training anyway. Some of these trends may well be described as **academic drift**.

- New VET-pathways for adults: Many countries report about new VET pathways for adults, e.g. in Denmark (EUV), in Croatia (post-academic employment preparation at universities) or in Malta (on post-compulsory secondary level) or simply an increase in adult learners in existing VET programmes (e.g. Estonia, Finland, Ireland). This often goes hand-in-hand with an increased emphasis on the accreditation of prior learning (e.g. in France, Finland, Norway) and is frequently related to the implementation of European LLL policy. Some country experts reported and anticipated an increase of targeted VET programmes for labour market retraining (e.g. in Lithuania where new programmes for unemployed adults have been established). Overall, VET as a means to combat unemployment was quoted quite often. Other examples for the widening of VET include new options for disadvantaged and disabled persons (for instance the 'integrative apprenticeship' in Austria).
- Parity of esteem: Interestingly enough, in respect of the parity of esteem between VET and general education changes also seem to have happened (reported by 16 countries). Countries with a traditionally dominant position of general education have tried to raise the comparably low esteem of VET. In contrast, countries with traditionally well-established dual VET conceptions have tried to stop the ongoing decline of esteem (e.g. Austria, Denmark). However, none of these attempts is reported to have been successful with a few exceptions, such as Spain. Yet, the most impressive example in this respect is Finland, which has shown a steady increase in VET enrolments over the last 10 years.
- Learning outcomes: While almost all countries now define and describe their VET qualifications using learning outcomes, there is no unitary trend as regards the specificity of learning outcomes (see also section 1.3 above). There are countries where the number of qualifications is being reduced, potentially reducing the specificity of learning outcomes (e.g. England, Norway). In other countries an increase in the degree of detail and specificity was reported. On the one hand this could lead to a convergence across countries (generic programmes become more specific while at the same time occupation-specific programmes become broader), on the other it could just be interpreted as an increased pluralism in VET (i.e. coexistence and increasing variety of specific and generic programmes).

Cedefop's changing role of VET project seeks to build an understanding of how current challenges can be understood as a reflection of developments over time. The 2016 survey therefore asked contributing national experts to indicate how the conception of VET had changed over the last two decades. To summarize these changes, we can on the one hand refer to an **expansion and diversification** of VET and on the other hand to a

strengthening or intensification of VET taking place simultaneously. The three perspectives introduced and discussed in section 1 of this paper helps us to clarify these trends:

Table 2: Changes in VET reported for the last 20 years

	Expansion & Diversification	Strengthening & Intensification	
Epistemological / Pedagogical Perspective on VET	 increasing pluralism of forms of VET (unified, dual, trial) increase of third learning sites individualisation (e.g. individualised pathways, heterogenous groups) 	 increasing work-based elements (e.g. internships) in school-based VET more practice-oriented curricula 	
Education System Perspective on VET	 expanding apprenticeships to lower and higher levels increase of higher VET new VET providers (e.g. liberal education institutions) modularisation 	 re-emphasis on apprenticeship decrease in number of profiles / broadening profiles (⁸) merging of IVET/CVET 	
Socio-Economic / Labour Market Perspective on VET	 VET spreading to lower and higher skill levels Various new/additional purposes of VET (e.g. equity, combat youth unemployment) 	- Fostering employer engagement - strengthening role of social partners	

Source: Authors.

The 2016 survey illustrates that that patterns of national VET conceptions have been rather stable despite considerable reforms that took place in the last two decades. Many country experts reported major reforms in this period, but at the same time underlined that they have not (yet) changed the overall conception of VET. This makes it difficult to arrive at a consistent European picture of VET development. However, related to the four patterns of conceptions of VET described in section 2 (table 1), European conceptions of VET seem to follow two trends:

- The strengthening of VET points in the direction of VET as work-based training as illustrated by Austria, Denmark or Germany, but expanding to 'new\ parts of the education and training system, in particular higher education.
- The diversification of VET points in the direction of VET as (part of) lifelong learning as illustrated by France or Finland.

These are not exclusive developments and countries do not move either in the one or the other direction. On the contrary, both developments can be observed simultaneously. Consequently, convergence of conceptions (and systems) may take place, but only modestly. We can illustrate the trend towards understanding VET as LLL with the example of Lithuania: 'The biggest change in the conception of VET in Lithuania is related to the introduction of the concept of lifelong learning and implementation of the corresponding

⁽⁸⁾This could be regarded either as expansion (making programmes more general) or strengthening (re-shaping the profile of programmes e.g. caused by hybridisation of occupations).

reforms: This reform is currently changing the concept of VET in several directions: a) strengthening the understanding that VET has a lifelong learning dimension; b) intensifying relationships between VET and the world of work; and c) increasing 'user-friendliness of VET to learners (expanding choice of VET programmes and pathways through introduction of apprenticeship and modularisation). (9) Other countries such as Portugal, Greece, Cyprus, Latvia or Romania could equally well illustrate this trend. These reforms may point towards a significantly different conception of VET emerging in these countries.

4. Future challenges

Based on the information provided by the 2016 survey, some indications of future challenges can be identified (see Table 3). Some European countries, but not yet all, have bid farewell to vocational education and training conceived as 'dead-end' initial training for skilled workers, clearly separated from general education. In the last two decades, we have witnessed a remarkable diversification of VET in terms of providers, levels and target groups, increased horizontal and vertical permeability, a re-emphasis of work-based elements, a combination of IVET and CVET, a hybridization of systems and programmes, and the emergence of a new discourse of VET as a means of helping tackle youth unemployment in addition to its traditional purpose of securing the supply of skilled labour. The future of European VET may become even more pluralistic than it currently already is. We might experience a future VET in which a multitude of different learning approaches exists, in which VET is provided at all levels of the education and training system by a variety of different providers and in which VET serves multiple functions. This ongoing transformation of VET, however, may be accompanied by an impending risk of fragmentation and polarization (in terms of conflicting approaches to VET) due to the increased diversity.

Table 3: The Changing Role of VET

	PAST (before 1995)	PRESENT (1995-2015)	FUTURE (after 2015)
Epistemological / Pedagogical Perspective on VET	On the job; job-specific; behaviourist; separating general from vocational	Increased WBL; crossing boundaries (general – vocational; school – workplace)	Multitude of learning approaches; co-existence of occupation-specific and broader learning outcomes, increased WBL
Education System Perspective on VET	Dead-end programmes, restricted to medium levels; VET provided by schools and companies; 'VET as IVET'	Increased permeability; VET also at higher levels; diversification of providers and programmes; geared for work AND education; 'IVET and CVET'	VET at all levels, but risk of polarisation; variety of providers; 'VET as LLL', risk of fragmentation

⁽⁹⁾ From the Lithuanian questionnaire.

Socio-Economic / LabourMarket Perspective on VET Preparing for job entry; serving employer interest; securing skilled labour Securing skilled labour and promoting innovation and growth; employability / avoiding unemployment

Multi-purpose / pluralist VET (including equity and equality issues)

Source: Authors.

The aim of this note has been to scrutinize existing definitions and conceptions of VET and their changes over time, in order to guide our hypothesis for further analysis. Some note of caution is needed at this stage. We cannot automatically extrapolate from changes of conceptions to changes of systems and practices. The research activities will look into the link between conceptual discourse and system change. Detailed research, for example, will be carried out in relation to the expansion of VET into higher levels and the orientation of VET towards lifelong learning.

5. Some implications for European cooperation in VET

The following key messages, to stimulate the debate on future European cooperation in vocational education and training, can be taken from the note:

- While traditional VET at upper secondary level is under pressure in some European countries, the relative position of role of VET in the overall education and training system is strong (ii) although changing.
- Operating on the basis of a too narrow conception of VET, only focusing on those parts
 of the education and training system currently being defined as VET-oriented, can
 reduce the relevance and impact of policies in this area.
- The traditional distinction between sub-sectors of education and training (general, vocational and higher education, as well as initial and continuing VET) are not always appropriate to identify and respond to new challenges. In some cases these distinctions strengthens rather than weakens fragmentation.
- Future policy cooperation requires a focus on how education and training systems as a
 whole can promote and facilitate vocationally oriented learning. This implies a stronger
 focus on the learning forms typical to VET (how to expand practice-based learning;
 reflecting the 'tacit learning' perspective introduced in section 1) and on the cooperation
 mechanisms ensuring a dialogue with labour market and society.
- The expansion of VET oriented programmes at all levels, and in particular at higher level, may not always be fully captured in statistics (e.g. ISCED) and it is therefore necessary to make this development more visible. In this regard the EQF, and its focus on learning outcomes based levels, has an important transparency function to play.
- The expansion and diversification of VET as described in this note can be seen as a response to new challenges posed by technology, the labour-market and society in general. These tendencies, however, also increase the risk of fragmentation and lack of transparency.

- The trends towards a more diverse and less clear-cut VET 'system' can, if fragmentation and lack of transparency is allowed to grow, make it more difficult for groups at risk to benefit.
- The increased attention to lifelong learning will require policies allowing for progression between different types and levels of education and training, and for more flexible movements between education and training and work.
- The trends identified in this note will play out differently in different European countries. There is a need to consider how these developments will reduce and/or accentuate existing differences across Europe.
- An open discussion is needed at all levels, not only from an <u>education system</u> perspective, but also on what kind of <u>cooperation</u> and which <u>learning approaches</u> should be developed for future VET.

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This note forms part of the Cedefop project 'The changing nature and role of vocational education and training (VET) in Europe'. The purpose of the project is to improve our understanding of how VET is changing in the countries belonging to the European Union (as well as Iceland and Norway). The project will, over a 3-year period (2016-2018) analyse how vocationally oriented education and training has developed and changed in the last two decades (1995-2015) and on this basis point to the main challenges and opportunities facing the sector today and in the future. Work is divided into six separate but interlinked assignments:

- The changing definition and conceptualisation of VET.
- The external drivers influencing VET developments.
- The role of traditional VET at upper secondary level.
- VET from a lifelong learning perspective.
- The role of VET at higher education levels.
- Scenarios outlining alternative development paths for European VET in the 21st century.

The study takes as its starting point that vocationally oriented education and training is something more than the traditional VET delivered at upper secondary level (in the form of school based education or training, apprenticeships, or combinations of these). Due to the requirements of lifelong learning we can in many countries observe a diversification of VET where new institutions and stakeholders become involved. We furthermore observe an expansion of VET to higher education areas, partly through a reform of existing institutions, partly through the emergence of new institutions. Caused by factors internal to the education and training system as well as by external pressures linked to demographic, technological

and economic changes. The 'Changing role of VET in Europe' project is coordinated by Jens Bjornavold and Hanne Christensen, Cedefop.

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The project is currently (Spring 2017) looking the role of traditional VET at upper secondary level and is in particular trying to clarify the extent to which enrolment and completion rates, relatively to demographic trends, are increasing or decreasing. An initial analysis of national data covering the period 1995-2015 shows no sign of a general decline in VET's share of upper secondary enrolments. This analysis, however, points to considerable challenges in interpreting the orientation of programmes (as general, vocational - or mixed). The decision to categorise a programme as one of these types of programmes (in order to fit to the categories of ISCED) has significant impact on the statistical picture presented and may in some cases have led to over as well as underestimations of the role of VET. Besides having implications for the quantitative analysis of data, this interpretation issue may support the notion that the concept of VET is changing; not only in the sense that each country has its own conceptualisation of VET but in the sense that that pathways through education are in the process of being increasingly diversified and specialised. A first note presenting the results of this part of the project (work assignment 3) is expected to be published early Autumn 2017.