



Asia-Europe Meeting

the ASEM Education Secretariat

Report
TVET Seminar Riga

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Summary

Labor market challenges in Europe and Asia

The TVET seminar in Riga brought together common views and ideas on the challenges that both the Asian as the European regions are facing linked to the development of the labor market and in the society as a whole. Digital transformation, automatization and robotization are at the basis of **rapid technological development** on the labor markets in European and Asian countries. Therefore current and future generations in both regions should adapt in all stages of their life and should be equipped with skills and competences to cope with these rapid changes. It goes without saying that education in general but especially TVET and Lifelong Learning play an important role in **developing and transforming skills that help individuals to adapt constantly** in a person's life for better employability and access to decent work: vocational and technical skills but also skills and competences to adapt more easily to changing labor markets, such as Lifelong Learning Skills, Life Skills and Key Competences.

Building Blocks of TVET

Throughout the seminar, some crucial building blocks were emphasized by different speakers from both policy level as at the level of TVET in practice. First of all, countries should focus on a vocational pathway approach or **a Lifelong Learning approach**, meaning that a TVET system should be developed on different educational levels starting from an initial TVET system (in Compulsory Education), a TVET system in higher education and TVET courses or programmes for adults (for reskilling or upskilling). In order to increase the coherence between different TVET systems, **modularization of TVET courses** is crucial as well as a decent **validation and recognition system**. Furthermore, TVET requires high **flexibility in learning provision**: classroom learning, distance learning, work placements and flexible transfers between different pathways. The needs of the **learner** should however always be **central** in developing flexible TVET approaches.

To realize a flexible and adapted TVET system, sustainable **collaboration with enterprises and industries** are crucial for different reasons. Employers sectors should assist in matching curricula with requirements of industries and sectors, enterprises should provide expertise and support in infrastructure and equipment, and should provide practical learning experiences and work placements and support TVET in anticipating technical developments. However, it is a challenge in most countries to get companies committed to provide this support. Often collaboration works well in projects and if additional financial support is provided, while sustainable partnerships and collaboration between companies and the TVET sector remains difficult.

Throughout the presentations it became clear that both in Asia as in Europe there is still a long way to go in improving the **reputation of TVET**. Too often, TVET is considered as a negative choice of students, often linked with social classes and learning abilities. Stronger investment in both the TVET systems itself as in the promotion of TVET is needed. The ASEM Education Process could play an important role in changing attitudes towards TVET.

TVET collaboration in ASEM Education

To conclude, all participants agreed that the ASEM Education Process can **strengthen mutual learning and exchange regarding TVET** in order to strengthen TVET systems both in Europe as in Asia. Exchange and collaboration should be achieved both at policy level and by sharing experiences from practice.

Some concrete suggestions have been made for further collaboration for TVET and Lifelong Learning within the ASEM Education Process. Teacher Training has been mentioned as an important aspect within TVET development, for which ASEM collaboration could provide a good platform to develop an international programme for TVET teacher training. Furthermore, ASEM will propose a new capacity building programme in which all ASEM countries can participate with a focus on practical skills development, lifelong learning as well as science and technology advancement to advance sustainable growth.

The ASEM community could also serve as an interesting platform to bring TVET policy makers, practitioners and businesses together to shape the TVET of the future by anticipating to the skills needed in the future.

All participants were convinced that this seminar brought together like-minded expertise and motivated people to develop and start new initiatives on TVET within the ASEM Education process

Content of the presentations

VET in Europe

(by **Dana Bachmann**, Head of Unit, Vocational training, Apprenticeships and Adult Learning, DG for Employment, Social Affairs and Inclusion, European Commission)

Dana Bachmann provided us more insights in the future debate of VET systems and the messages that the European Commission received from the member states and their social partners and VET providers.

All countries in Europe are facing the same challenges caused by the speed of change being triggered by trends such as **digitalization, automatization and robotization**, also starting to appear in the service sector. Digital transformation is not only affecting the economy but also the way that people live, work and learn. Therefore **VET-systems have to adapt and innovate constantly** in the future. We also see more changes in the typical employer-employee relationship with the **increase of the sharing economy**. In terms of robotics, the picture is mixed in Europe, but 90% of robotics is used in manufacturing industries.

In the past few years, we see that the discussion on how to cope with this, is moving beyond education and training systems and into the labor market. Education and training shouldn't only prepare the ones who are going to the labor market but also the ones in the labor market as the World Economic Forum predicts that **35% of the core skills will change over 5 years time** with different degrees of intensity across sectors.

Within the EU but also in other parts of the world, we have to take into account certain **challenges related to population**. We are affected by **migration, aging** (in 2050 for every inactive person there will only be 2 active people) and **globalization**. Therefore we need adapted training to keep people (longer) on the labor market with different forms of more flexible work but also with flexible and adapted training. We also need to think how to develop our migration policies to attract people from outside Europe. We as a EU should not only look inside, but we are the biggest trade block, we have trade agreements with over 140 partners. These trade agreements are beneficial to growth and job creation. For example 1 to 7 jobs is depending on export to the rest of the world.

This leads us to 2 sets of conclusions.:

- 1** Firstly, we need to **strengthen our initial education and training system**: to make sure that our labor markets are properly equipped with the skills knowledge and attitudes of the future.
- 2** At the same time we are also aware that we need to invest in our policies to reach the people who are already on the labor market, by focusing more on **Lifelong Learning**.



Therefore the European Commission started policy dialogues with member countries how these challenges are affecting the VET systems and what we need to do to go one step further beyond the current policy set-up. Some of the conclusions were:

- ❖ Need for a more **result oriented system**: finding ways on how to track graduates and how they evolve in further education or how evolving on labor market
- ❖ The need to develop **cost sharing arrangements** between individuals, employers and governments for Continuous Education and Training (CVET) to achieve a real Lifelong Learning approach.
- ❖ Most countries invest mainly in initial VET: the policy **investment in initial and continuous VET** has to be reconsidered in this lifelong learning approach.

Skills anticipation is already embedded in most VET systems but the changes are more rapid and new technologies need to be faster integrated in VET policies and practice. Therefore, more focus is needed on stakeholders: **closer business-education cooperation**, more structural collaboration between different education sectors (for example between VET and HE) and between countries and regions. Within the EU there is an increasing awareness that we should open up to the world for VET cooperation. It is not enough to learn from the most advanced VET systems in the EU.

How do VET systems need to adapt?

- ❖ We need to **invest more in general education**: people need to be equipped to adapt in all stages in their life and therefore everyone should be equipped with **Lifelong Learning Skills** when they leave initial education. Therefore there should be more focus on transversal skills, digital skills and key competences.
- ❖ **Creating educational pathways**: from vocational to higher education, integrating general education in vocational education and vice versa, work place learning and practice (a pathway approach)
- ❖ **Modularization**: modules with learning outcomes, allow people to achieve units, collecting small pieces of the puzzle,...
- ❖ **Flexibility**: transfers between learning pathways but also ways of delivery (classroom, distance learning, work place...)
- ❖ Focus on **validation of skills and competences**: legal frameworks are needed on how learning could formal be validated
- ❖ Taking advantage of **different learning technologies and environments**

Renewed energy and commitment at the highest political level in Europe to invest in Education and Training:

Last year, the council, the European Parliament and the European Commission proclaimed jointly the European pillar of Social Rights. The first principle is the right to education, training and Lifelong Learning, which reflects the political commitment at highest level.

Furthermore, the EU works with policy and financial cycles within Erasmus+, ESF, ... In the new calls for proposals there will be a strong focus on investing in skills. For Erasmus+ we will also open the cooperation in VET with 3rd countries which is very good news for the ASEM Education process.

These Financial investments of the European Commission are matching with policy vision such as the Riga Conclusions (5 priorities of VET from 2015-2020) and the New Skills Agenda for Europe.

Some examples on how all this had been translated into concrete work:

- ❖ **A new working group ET2020:** looking at the impact of digitalization in education and training, what skills should be delivered, but also how the learning process and methodological approach should adapt to take advantage of these new technologies
- ❖ A new initiative: **Upskilling Pathways** to following up the worrying PIAAC results and reduce the number of low skilled adults in Europe
- ❖ Through **Erasmus+** there is a bottom up approach of VET Cooperation to develop joint Qualifications in VET

Currently the EC is conducting a process bringing together governments, trade unions and employers from member states and they are preparing a **common vision on VET for post 2020**.

One initiative related to VET worth to mention in the European Union is the **European Vocational Skills Week** in which we try to empower Education and Training stakeholders to promote VET as an excellent pathway. Unfortunately, VET has still a low-esteem image and is often a 2nd choice for parents and learners. You can't fight this with legislation but only fight it by changing mindsets. Stakeholders all over the EU are mobilized to organize local events on the benefits of VET.

Questions and Discussion

What is the feeling of the European Commission on systemic developments regarding TVET? How much things have changed at system level?

To give an illustration, when discussion on TVET started, it was mainly about apprenticeships. Most countries considered the implementation of apprenticeships as something that was being imposed top down following a model from certain member states. Discussions at that time were difficult but in the last years many countries are implementing work place learning, but adapted the model to their own national context. The Baltic countries are a good example: they worked together on apprenticeships but each country followed its own objectives and to bring work place learning in their own system with different methods.

The systemic evolution in work place learning can be divided in 2 levels of discussion: some countries have business connections, others have more centralized systems with less input from industries and still have to convince employers how to invest in VET. The role of the European Commission is to balance between these 2 levels

Comments on the perception and attitude to TVET

The perception of the TVET-sector is crucial part to work on, in Asia perception of sector is even more negative, as it is strongly linked to the social class and salary. How to improve the reputation of TVET could be the topic of future collaboration within ASEM.

Also in Europe the fight against negative perception is never-ending. In some countries, such as Malta, there is strong collaboration between VET and HE. In Malta you can proceed from VET to Higher Education. If you obtain a vocational qualification you can proceed to Higher Education.

There are wonderful campaigns to sell VET as a 'cool thing to do', as in Germany, using language of youngsters, targeting parents and learners by showing benefits, having good evidence, providing career guidance etc. Skills competitions are an important driving force for changing the perception.

What about future jobs that don't exist yet? We promote working place learning (using existing technology) but companies can train for today but not for tomorrow....

The key message is that you need to have a balanced approach: you have to combine general education with workplace learning. Quality Apprenticeships include key competences and transversal competences development. You have to ensure that the students develop core set of skills (Lifelong Learning skills) and technical skills (WP), you have to focus on use of technology, but also providing students with soft skills (problem solving, collaboration, etc.).



VET REFORMS in Latvia

(by **Jānis Gaigals**, director of the Department of Vocational Education and Training of the National Centre for Education in Latvia)

From many small VET schools to 17 Competence Centers

The reforms started from a VET system with many small schools with outdated infrastructure and outdated teaching and training equipment. Furthermore, the collaboration and linkages with the industry was weak.

The **objectives of the reforms** were to optimize the VET School network and to increase social partner and labor market involvement in VET. Additionally the curriculum had to be reformed and the legal framework for VET revised. The reform had led to the modernization of the VET school network by reducing fragmentation and overlap, the development of strong sectoral players such as the VET competence centers that serve different target groups from students in the initial systems to adults, with modern equipment and new buildings. After the reforms, the VET school network comprises with 17 competence centers while in the initial system there were 67 schools

Curriculum Reforms

The curriculum reforms started with 14 selected professions. For the development of the occupational standards, over 500 experts from different industries were involved in order to meet the labour market needs. Scanning and mapping of these 14 sector professions took place as well as determining up-to-date skills needs which resulted in the development of new occupational standards. A **modular curriculum** has been introduced based on **learning outcomes** and a **sectoral approach**. The modular system allows learners to exchange modules between different educational levels (cf. from the school system and adult education). The curriculum is more flexible and ensures the correspondence with the labour market needs. A modular curriculum consists of compulsory modules for all (sectoral core or common skills); optional modules (with specific skills for a particular qualification and free choice modules (to provide sector specific or local requirements and individual in-depth vocational competences.

The piloting and implementation of the modular vocational education system has started from 2016-2017 and the finalisation of the VET curriculum reforms is planned for 2020. Part of the reforms is also the dual systems and work place learning which goes hand in hand with the modular system. In a modular system, work placement can be integrated in a more flexible way and modules can be exchanged between different school systems. It is an advantage to have the same system for all educational levels. This approach fits in the objective to develop a more coherent system in which all types of education (non-formal, private,...) is part of the modularised system. In conclusion, you need a well-developed VET system that is modularised with good collaboration between all sectors to implement work place learning.

Discussion and feedback from participants

From the feedback of the participants, it can be concluded that in most countries it is a **challenge to find companies who want to engage in work place learning.**

Also in Latvia, instructors often do not have the right competences to be an instructor. Therefore, trainings are provided to instructors. In countries where there is no tradition of work place learning it is very difficult to change paradigms. Young students need more attention and support and it is difficult to find companies who want to provide this. To introduce workplace learning in the school system you need a VET system that is very well established. However there are companies who understand the added value of this approach: the number of students in WBL is growing. Providing incentives to companies helps (for example financial incentive for instructor, support of insurance for student, etc.).

While most countries embrace the modular system, Germany however decided not to introduce modular learning. They apply a holistic approach from the concept of the action oriented possibility to work professionally: the DUAL system.

In the discussion of the advantages and disadvantages of a dual system, it was concluded that a mix of different systems (apprenticeships, work place learning, and dual system) is best to serve different needs of learners and the different economic needs within a country. The discussions should **not focus on the benefits of the systems but on the needs of the learners.**

The Validation of the Professional Competences acquired outside the formal Education System of Latvia

(by **Līva Šmaukstele**, Senior Officer, Quality Assessment Department, State Education Quality Service)

Since 2011 the State Education Quality Service coordinates the validation of professional competences acquired outside the formal education systems which are carried out by institutions that are accredited by the State education Quality Service. These competences could be acquired through non-formal or informal learning and/or practical experience. The minimal age to engage in the validation process is 18 years and no prior education is acquired.

The validation procedure takes place in 3 steps:

- ❖ Consultations (for free)
- ❖ Examination (with a fee) of a theoretical and a practical part (EQF 2-4)
- ❖ Qualification (state recognized vocational qualification certificate)

The following actors are involved in the validation process:

- ❖ **State Education Quality service:** they provide both consultations for candidates and consultations for educational institutions.
- ❖ **Examination institutions:** providing two consultations according to the requirements that are set in the occupational standards following the procedure of professional qualification exams.
- ❖ **Sectoral experts' council:** they also provide consultations to both the candidates and educational institutions. Furthermore they participate in the vocational qualification examinations.

Since 2011, 5462 people have obtained their professional qualification certificate through a validation process. Applicants have the opportunity to validate their professional competence in more than 170 professional qualifications. The most popular qualifications are: Welder (EQF 2), Firefighter rescuer (EQF 3), Social Worker (EQF 2), House Manager (EQF 3), State Police Junior Inspector (EQF 2).

Conceptually, this process should be linked to the modular system: theory and practice are linked and the content of the exams is harmonized. Only institutions with an accredited programme in the field of the qualification can take the exams.

Recent Developments in secondary TVET in Russia

(by **Professor Olga Oleynikova**, Director of the Centre for VET Studies in Russia)

Technical Education and Training is well developed in Russia with nearly 500 occupations of training in place. The most-spread occupations of training in 2017 are 'technology of land transport', 'Economics and management' and 'ICT'.

Currently the field of TVET is being reformed by a federal project called "**50 TOP**" in order to upgrade the TVET occupational standards and modernize the curricula. Therefore, the curricula of the 50 important occupations with the highest demand are being modernized. The objective of the programme is **to train graduates to international standards and advanced technologies** in order to create a competitive TVET-system and to provide training sites to train students for the Worldskills Competition. Particular learning outcomes for every profession have been defined according to occupational standards developed by sectors and employers. The educational standards integrate the most important competences of the occupational standards in order to meet the requirements of the industries. In addition to the modernization of curricula for these 50 profession, training facilities are modernized and upgraded as well. These 50

professions are piloted in 7 regions and are the flagship of the VET system. The idea is to invest in these specific regions so that they become the resource centres for the whole country.

Another project that contributes to creating a competitive TVET system is called “**Workers for advanced Technologies**”. Under this project, TVET is being promoted to increase the number of graduates by 50 000 by 2020. Professional development opportunities are created to 5000 teachers and 2800 instructors of practical training. In addition Russia will organise Worldskills Russia Championship and other Hi-tech Skills competitions for young workers. A National Worldskills training center will be established and Russia will host the International Worldskills Championship in 2019. The Worldskills championship plays an important role in promotion of TVET and upgrading its image.

In addition to the current TVET developments, Russia is also looking ahead by responding to key development trends such as the growth of global competition for markets and resources, the growth of international cooperation in the area of Research, Development and Production, growing complexity and pace of development processes, demographic changes, digitalisation and automatization and the growing importance of environmental issues and green economy. In order to prepare Russia for these global changes, **a register of new occupations is being developed** with a specific focus of overarching skills: Systems thinking, Cross-sectoral communication, Process management, Project management, Programming, Customer perspective, Cross-cultural skills, Operation in a context of uncertainty, Creativity, Lean management. According to these skills the following challenges in TVET have to be tackled:

- ❖ Transition to digital economy, spread of robotics in production systems
- ❖ Technological developments that outpace the development of the TVET system
- ❖ New occupations in the high-tech and IT fields
- ❖ Internationalization in TVET

TVET policy and approach in Brunei: inspiring Bruneians towards Excellence

(by **Dr. Chin Weih Keh** , Director of the Institute of Brunei for Technical Education (IBTE))

Brunei is a small country in South East Asia, with less than half a million inhabitants. 4 years ago, reforms started in the TVET system as part of the WAWASAN Brunei 2035 framework (= Vision Brunei 2035) which is a national strategy towards developing into a nation which will be widely recognised for the accomplishment of its educated and highly skilled people measured by the highest international standards; quality of life that is among the Top 10 nations in the world and a dynamic and sustainable economy with income per capita within the Top 10 countries in the world.



One of the many initiatives is to reduce Brunei's dependence on oil and gas industry, diversify its economy and develop public service sectors such as health, education, infrastructure, recreation, financial sector and tourism.

As part of these reforms, all small TVET schools were merged into one institute with different campuses focusing on different areas aligning with the initiatives within the WAWASAN Brunei 2035 framework, of which technical education is one of the key pillars. The aim was to develop a first class post-secondary education institution where TVET allows social and career mobility. The focus on skills development has been increased in order to align with the national manpower needs. Therefore a new system of governance to stay relevant and responsive was needed.

In response to this need, a new system of technical and vocational education and training was established to better align with the social and economic needs of the country. The IBTE (The Institute of Brunei for Technical Education) was established in 2014.

6 areas of change have taken place and the main focus will be placed on course restructuring:

- ❖ Course restructuring: competence based training and assessment, authentic learning and teaching, relating with companies, life skills and entrepreneurship
- ❖ Aligning to international accreditation and certification
- ❖ Curriculum cycle: evidence based planning, analysis on programmes (cost, popularity, success rate,...) and employment rates

An example of an 'Industry Competency Framework': the case of Gaz and Oil Industry:

The Industry Competency Framework reflects a strong collaboration between the Department of Energy and Industry, at the Prime Minister's Office, the Institute of Brunei Technical Education, Ministry of Education and industries.

The framework was developed with the following objectives:

- ❖ **Defines the competencies required** to perform jobs and roles in the workplace based on industry manpower demand
- ❖ **Close the gaps between training and industry:** alignment between training providers and industry requirements
- ❖ **Increase employability** by up-scaling the skills obtained (by locals) to increase the number of Bruneians to work in the various industries.

The development of the Energy Industry Competency Framework is based on a national Brunei Darussalam Qualifications Framework which provides a platform for all levels in education and training: from school education, to technical and vocational training, to higher education.

A competency based system for critical occupations was developed to allow employers to determine the skills required as part of a qualification directly linked to jobs in their companies, initially for the oil and gas industry. Furthermore, national standards were set for Registered Training Providers to ensure that this training is nationally recognized of a high standard and leads to employment. Furthermore, national standards for technical teachers and trainers to ensure that their skills are up to date and that they are experts in their field.

Characteristics of the ICF programmes are defined as follow:

- ❖ Selection of students by industries and the Ministry of Education
- ❖ Strong ownership and support from industries, with a dual certification system for some programs
- ❖ Conditional offer of employment: industry provides teachers, 70% hands on 30% theory
- ❖ Students can choose if they want to go to the next level or if they want to work
- ❖ Competency based assessment

ICF Programmes have also been set up with other sectors, but this appears to be more difficult as it concerns small and medium companies that can't give that much support as the oil and gas sector. Therefore international cooperation and benchmarking is being engaged for more cost efficiency.

Legislation, administration and institutional arrangements for involvement of industry and employers in VET in LATVIA

(by **Ruta Porniece**, Representative of the Employers Confederation of Latvia)

The Latvian Employers Confederation (LDDK) is, together with the Free Trade Union, the social partner to the government. Together, the 3 parties form the national tripartite cooperation council in order to improve the business environment in different sub councils (such as: 'vocational education and employment', 'Labour Issues', 'Transport, communications and information', 'Public Safety', 'Regional Development', 'Social Security', 'Health Care industry', 'environmental protection' and 'Budget and Tax policy'.

Since 2004, the population in Latvia has decreased by 14% mainly due to free movement of workers within the EU as a result of the low salaries in Latvia. In addition, the participation in

Lifelong Learning in Latvia is low and there is a high proportion of general educated graduates without a professional qualification. Labour shortages exist especially for low-paid jobs and jobs with specific skills (ICT specialists, engineers, top managers, etc.)

In order to improve the availability of skilled labour force in Latvia, the VET system was reformed by involving employers both in content and by practical training.

Therefore, the VET system was reformed in order to raise the prestige of VET in 5 steps:

- ❖ Investing in infrastructure and materials for VET programs
- ❖ Involving sectoral representatives
- ❖ Reforming content by new occupational standards and qualification exams
- ❖ Integrating Work based learning
- ❖ Training of teachers

The sectoral involvement was organised by sector skills councils (SEC) and one of their tasks is to support employers in Workplace Learning.

Workplace Learning

In 2016 the new legislation was approved on Workplace Learning, after discussions, researches and pilot projects. The commitment of the sectors however stays a challenge as companies find it difficult to invest in training and education of students. Therefore, the Employers confederation is implementing a **project to strengthen the cooperation between vocational education institutions, schools and enterprises**. Within this project, representatives of enterprises have been trained in pedagogical knowledge in order to support and train students in workplace learning. However the commitment of the sectors stays a challenge to keep companies and employers involved. Employers are in the first place businessmen, and it will stay difficult to keep them committed in educational support for workplace learning. There is also a challenge to finance the Sector's Skills Council. It will be important in the future to allocate government funding for structural support of employers to engage them in workplace learning.

In the discussion amongst participants, not all countries agree with the need for government subsidies or other financial support to companies to get them committed in workplace learning. In Germany for example, the chamber organisations provide these services. Companies also consider it as their social task to provide training. It is not considered as charity but to increase productivity by providing workforce that they need for their competitiveness.