Position paper on European Union policy after 2020 on Vocational and Educational Training

by the European VET providers associations cooperating in VET4EU2
The most certain about the future is its uncertainty.
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Executive summary

Guide for reading

» If you have no time to read: only read the bold printed sentences in this summary
» If you have only little time: read the bold print and the points under ‘advice’
» If you have enough time for a more comprehensive overview: please read the entire executive summary.
» If you are interested in more detailed information: skip the executive summary and read the full text starting at page 15.

Introduction

Many of the VET policy initiatives have 2020 as a policy horizon. The European Commission is forward looking in developing both an evaluation and a new direction for VET policy at the European level. As VET providers associations cooperating in VET4EU2 we outline our contribution to this policy development process.

A. Fundamental developments

1. Alignment of policies is of paramount importance

Many policy initiatives that are produced at the European level never reach the level of provision of vocational education. Alignment of EU, national and institutional policies are necessary to provide a higher effectiveness and ensure less counter productivity in policy. A stronger involvement of VET providers in policy development can contribute to better policy implementation. The imbalance of involvement of VET providers from different European Union member countries should be countered by stimulating measures to create a broader involvement and thus acceptance and effectiveness at the providers’ level.

2. System instruments will become less effective in the future

The speed of change will make traditional policy instruments obsolete. Against this background traditional policy instruments will not work as is needed to solve the problems at hand. They will become less effective and need to be replaced by more flexible ones. For the future policy initiative, a FFFF test on Fit For Future Flexibility will have to be applied to assess present and future systems proposals.

1 VET4EU2 refers to the 4 networks that are mainly working in secondary VET (EVBB, EfVET, EUproVET and EVTA) and the two networks that work primarily in higher professional education and academic education (EURASHE, EUCEN).
3. Hybrid integrated professional education (HIPE) the new hope for professional education

21st century education will mostly not look like as it was offered in the 18th or 19th or 20th century education. We can now see that through experimentation people are searching for a new kind of educational systems using networking, pop up education, MOOCs and digital learning and hybrid teaching. To develop this further we would need to think away from traditional approaches. The following points are a starting point for developing a new approach. This is based upon the four pillars of education and the reality that all education (general, vocational and professional) will be focused on fulfilling a profession that will continuously change in its requirements. It also bases itself in education that is equitable and allows people to rise to the best of their abilities and talents.

- Integration of general and vocational education from an early age. This will not only erase the distinction between vocational, general and professional education but also help students to develop more perceptions and attitudes that are more realistically aligned with the future of work. Combined with positive role models from working life and intensive guidance for students and parents it will lead to realistic and beneficial educational and vocational career paths for both, students and society.

- Open access and free permeability to all education levels. Skip the distinction between lower and higher education into shorter and longer professional education. Some professions take longer to master than others but that does not make them 'higher' or 'better'.

- Integration of this cooperation into hybrid education involving companies and educational providers at all phases of education.

- Focus initial education on the most durable of competencies and knowledge. Modularize continued (i.e. lifelong) education in easily changeable bits and pieces. Specifically integrate adult education with the development of a new educational system. Ensure easy access to modules of continued studies and cumulative learning to reach the changing requirements for professional qualification.

- All education should show outcome-based results that can blend (with additions from continued and lifelong learning) into a validated portfolio of abilities, instead of only being deducted from diplomas.

- Develop new more personalised didactical methodologies to ensure that everybody can get along in education for employability and personal development and adaptability.

- Make more use of innovation that is based on research not only about VET, but with VET and the extensive experience VET providers have from directly working with the one's that should be our all priority – the students and (adult) learners, taking their real needs, wants and abilities into account.

The term hybrid refers to the networked and two-way co-creation by student’s, VET providers, companies and government. The term integrated refers to the fact that all pillars of education (learning to know, learning to do, learning to live together and learning to be) are represented in all education and training. The term professional refers to acquiring integrated competences that allows someone to fulfil a task in society that creates added value and thus income. Education refers to a process by which competences are acquired in a way that could not be done as effectively and efficient without that process.

4. Breaking the barriers for European excellence in education

It has been said often that education and training provide something that increases when they are shared. At least for government funded education the norm should be that the development of new educational approaches is actively shared through cooperation rather than competition.

To handle and manage future challenges we will need variety in solutions and flexible approaches. However, the distribution of the differentiation is mostly between countries. In terms of cooperation the amount of active sharing and implementing educational solutions is lacking. New technological possibilities could help break the barriers in this. Cooperation does of course not mean the elimination of all differentiation.

It means that the fundamental idea of freedom of education can be realised and at the same time raising all countries and individuals to levels of global excellence. Instead of trying to find one best way to organise or
to choose one scenario to meet the future challenges we should allow for a variety of solutions. We should respect and promote a diversity of roles, missions, objectives and types of provisions of professional and vocational education, based on jointly agreed values, principles and instruments as the most effective response to emerging challenges and further development, while providing opportunity to education for all.

In practice this means that more authority should go to Colleges and Training Centres if they meet broad quality criteria as are outlined in this paper and they use quality assurance systems to ensure a learning culture and attitude. It is shown that in countries with a high level of quality in education there is a relatively large subsidiarity which means that the decision authority is low in the decision tree. To be effective it needs a close involvement of VET/HIPE providers in the development of these broad principles.

B. Specific issues and recommendations

Below we will go into some specific issues that are on the policy tables and we will advise on these issues from our perspective.

1. Joint excellence in quality of education

Comparability of educational attainment across member states is important. For as long as general and vocational education are not yet integrated, it will give VET education an edge, promoting its attractiveness. We support the European proposal for automatic mutual recognition of diplomas and qualifications that has recently been launched. However, the number of instruments and the alignment of them can greatly be increased.

**✓ Advice**

1. Stimulate the acceptance of an EU wide quality assurance system for (VET) education like EQAVET or EFQM that should be implemented at the level of VET providers
2. Evaluate the cost benefit and alignment of the existing instruments like ECTS, ECVET, EQAVET, EQF and EUROPASS developed for comparison and recognition and better align them, respectively create a flexible system of inherently consistent tools
3. Promote the creation of Joint European (VET) qualifications being developed by the cooperation of VET providers of many European countries.
4. Due to the speed of change and the long period of participating in working life a stronger focus should be on lifelong learning opportunities.

2. Integrating the world of work and (VET) education

The interaction between the world of work and education should be reassessed. It should develop into a hybrid co-creation of education. This will include a profile of a hybrid teacher who works in part-time or for certain periods both at the company and at the school or training centre. On the other hand, VET providers could be more involved in re-skilling and upskilling employees from companies, for instance about internationalization, thus creating partnerships with mutual benefit.

**✓ Advice**

1. For the good of education, students being informed about the educational choices and the competitiveness of education, a strong connection between (vocational) education, training and the world of work is essential.
2. Several methods (apprenticeship, WBL, job shadowing, experiential learning peer to peer learning and digital tools like MOOC’s, Flipped learning and virtual reality or serious gaming) must be used to reach the best results. Also, the history and culture of a country must be taken in consideration when these instruments must be developed.
3. **Balanced education for human competences to apply new technologies**

In the face of the new technological developments education, teaching methods and curricula must be evaluated, not only regarding innovative and digitally based learning/teaching methods, but also with an even stronger focus on lifelong learning competences and transversal skills, even if this means a reduction of professional knowledge and skills. Regarding the speed of change, the latter will be obsolete in a few years. The capability to self-regulation, to acquire new skills and competences, to further develop existing knowledge is more important than static knowledge. Entrepreneurship, creativity and innovation as well as responsibility and ethical behavior must be fostered by vocational education and training, thus not only reacting to technological change but shaping it for the benefit of humankind.

4. **Stronger investment in internationalization for both staff and students**

True European identity and full mobility on the European Single Market can only be achieved if people perceive themselves as Europeans and gain European experiences. This is in particular true for students in VET and their role models – teachers/trainers in VET, but also for adults in work life, following the LLL approach. Thus, the existing Erasmus+ programme must be even further strengthened and extended. Bureaucratic administration in the application and accountability should be diminished. Employers need to be made more aware of the benefits they will gain when...
opening such opportunities for their staff. There must be put more effort in gaining the companies support when employees want to participate in mobility, for instance by fostering real work exchange programmes.

**Advice**

1. The increase in Erasmus plus funding is fully supported. However, we advise that the increase will be speeded up, so the results will be there earlier than 2027.
2. The number of company staff involved and extended triple helix exchanges should be facilitated more. Since this is relevant for all educational sectors in vocational education and training a cross sectoral facility for this could be considered.
3. Language barriers should be eliminated by promoting and enhancing foreign language training.

**Advice**

1. The European Union should support member states to create easy access from VET to Higher (Professional) Education.
2. The European Union should introduce a Union wide guarantee to equal and equitable access from general and vocational education to continued vocational or professional education.
3. The European Union should make available an inventory of barriers in educational systems that prevent permeability and promote a discussion on the validity of these barriers for equal and equitable access to continued education for everyone.
4. The European Union should promote the introduction and recognition of EQF 5 short cycle higher education and other qualifications at level 5 like Higher VET as a bridge to further enhancement of access to higher education, upskilling and reskilling within this life-long learning concept.

**5. Permeability to continued professional education with flexible pathways**

With the challenges we are facing, it is important to ensure that everybody will be able to reach the top level of their individual talents and developmental possibilities. In history sometimes, educational barriers functioned as conscious or concealed method of social stratification and selection. Evidently seen from recognized values as equality and equity these barriers in education should be broken down. Also, for economic reasons we will need the best of the best but also the best out of each individual to meet the challenges in the future. This means that countries should break down barriers and facilitate permeability to continued professional education.

**Advice**

1. Citizens and member states should be informed about successful integrative activities for all people that are in a disadvantaged situation of social exclusion.
2. The already effective cooperation between providers of integration programs and VET and adult education should be facilitated. The formal recognition of prior or learning should be promoted stronger and instruments in place used better (for instance VAE in France). This could

**6. Immigration and social inclusion**

In the history of Europe migration has been a regular condition and often the drive for innovation and change. According to results of a recent survey of Bertelsmann Stiftung – cultural diversity has a stronger impact on innovation than other diversity indicators. It would help if the issue of social inclusion would be taken into account as an issue that would be addressed for all inhabitants irrespective of where they come from and is being dealt with in the context of everybody’s individual situation.

For many adults in Europe a stronger focus on the validation of prior learning could be helpful in attaining diplomas that still function as essential for entering a profession or even the labor market. The recognition of prior learning and the assessment of prior knowledge and skills is essential for the inclusion of all EU citizens. The link between initial and adult VET learning should be strengthened and preferably integrated. The comparison and acknowledgement of foreign diplomas should be realigned more across member countries. There is a strong link with the general recognition of EU diploma’s and qualifications across member states.
C. Promoting excellence in VET provision

Excellence can be promoted and hampered. The situation in which VET provision is done within Europe delivers large differences in quality. Not only between but also within member countries. This indicates that we can rise to even higher levels of Excellence as a continent. To do this we can contribute by the following developments.

1. Subsidiarity and decentralization of authority in VET provision

It is evident and has also been shown in a background study in the PISA report 2010 that there is a correlation between decentralisation of authority in education and the quality of education. There is need for highlighting this especially at EU level. In our society and even more in our future society, top down policies will get less and less effective. For the quality of vocational education in particular, a decentralised and non-fragmented policy responsibility has a positive effect on overall quality.

2. Enhanced cooperation and sharing of effective practices

The strong development of communities of practice across Europe can improve the accessibility of effective vocational educational practices and innovations. This does, not only but specifically, apply to best practices dealing with the technological revolution as described above. The European Union should invest in the development of an easy access IT framework for the development of effective vocational educational practices.

3. The undisputed value of teachers and trainers

Especially in the light of (increasing) uncertainty in our future, students and (adult) learners need the power and expertise of teachers and trainers, who are role models and can convey and foster the emotional intelligence that is needed to (rationally) deal with uncertainty. These tasks can never be fulfilled by digital means. The final recommendation “Teachers and trainers matter” of the ET2020 working group on VET has provided a cohesive and structured summary how this can be achieved. Some years ago the commission supported the initiative for a network called “Teachers2” (teachers-squared) which however focussed mostly on general education. This network indicated that teachers’ education was a strong driver and, in most countries, underestimated factor in the development of the quality in education. We think there is a need to highlight the quality in teachers and trainers’ education more and put this more in the focus of a drive towards higher innovation and productivity in VET education.

4. Let Students participate more: “Discover your talents”

One of the best results of our improved vocational education is that students have even more options than in the 1968 revolution period, to take responsibility for their own education. Of course, here are individual differences but the fundamental position should be that students are co-creators of their own education. VET providers in many countries are practicing this in education and in student councils. This should also be the case at the different policy levels. We urge that the effective representation of students in VET from all member states will be stimulated. In a very practical way we could state that the post 2020 ACVT would consist of member state representatives from students, VET providers, unions, employers and ministries.
Based on the current developments and the challenges the VET sector is facing, it is necessary after 25 years to have an ACTV that reflects the interests of all parties within the sector.

✓ **Advice**

1. At the European Union level promote and monitor subsidiarity of authority for VET providers in member states.
2. Help member states to learn from other countries that have achieved this subsidiarity.
3. Develop bottom up accountability systems for financial and quality of vocational educational provision based on quality frameworks and instruments, ideally harmonised throughout Europe.
4. Ensure a solid investment in the development of European Union wide communities of practice in VET.
5. Facilitate the participation of VET providers from all European Union countries to participate in policy development at the EU level.
6. Give specific attention to teachers and trainers in VET education as drivers for innovation and quality in education. Develop a specific network comparable to the “teacher squared” initiative for teacher unions, teacher educators and VET providers.
7. Stimulate a better use of technology for teaching/training stronger and research-oriented learning in order to raise flexibility effectiveness and productivity in education and training involving for instance peer-to-peer learning, experiential learning.
8. Start initiatives at European Union level, connected to national initiatives, to close the gap between vocational educational research and practice by not only including VET providers in the process but also start research initiatives at the VET providers’ level.
9. Realize a stronger representation of VET students from all member states to have a stronger representative participation in EU VET policy development.
10. Change the ACVT in an advisory committee in which next to the present members member state representatives form VET providers and VET student have the same representative position.
The most certain about the future is its uncertainty.
1. Introduction

Many of the VET policy initiatives have 2020 as a policy horizon. The European Commission is forward looking in developing both an evaluation and a new direction for VET policy at the European level. For this they have commissioned Cedefop for a series of studies and are organizing several meetings addressing the post 2020 policy issues. The European Commission’s intention is to have a joint statement on the future VET policy in December 2018 in the ACVT where employers, unions and ministries jointly give policy advice to the Commission. At the same time other stakeholders are invited to contribute to this process. The VET providers’ associations at the European level have laid down their contribution in this position paper.

We must realize that this policy process is an ongoing process. When starting to work on our joint contribution not all the studies had been finalized. During this process the European Commission is launching new education initiatives and has already been making proposals in the framework of the 2021-2027 budget proposals. This indicates the complexity of this policy process. However, it is understandable that there is a strong risk at losing commitment over time and getting a result at which hardly anyone can follow who decided what, at what point in the process.

In the same vein we appreciate that the policy process is ongoing, and any agreement reached will of course influence and be influenced by the new European parliamentary elections and the new European Commission to be appointed.

As VET providers’ associations we urge to pay attention to the risk of too great a distance between policy decision at the European Union level and the knowledge, commitment and effective implementation at national, institutional, company level, in particular with regards to teachers and trainers and the students themselves. This is already the case now and it requires an effort to bridge this policy gap for the future.

In our contribution we will try and make suggestions on how to contribute to bridging this gap. VET4EU2 refers to the 4 networks that are mainly working in secondary VET (EVBB, EfVET, EUproVET and EVTA) and the two networks that work primarily in higher professional education and academic education (EURASHE, EUCEN). These associations work together based on a memorandum debate through conferences and individual policy contributions. This position statement does not cover all subjects but does reflect the common denominator of the associations in the ideas for policy initiatives in the future.
Policy development for any issue in the European Union must be seen in the context of the present political developments towards the European Union. Skepticism and criticism towards the European agenda have been a usual part of the European Union development since the treaty of Rome. The much praised 21st century competence “critical thinking” has earmarked European Union developments. However, ignited by a long economic crisis and shifting (economic) power at a global level, this can no longer be taken as the usual saying “the dogs may bark but the caravan moves on”. It is positive that the European Commission has taken up this challenge and through a discussion on several scenarios for Europe, is trying to create a new perspective on the future of Europe.

**VET and affecting issues**

Although the main criticized issues in the European Union do not seem to be on (vocational) educational policy, the other issues directly affect (vocational) education and how people look at the EU level policies. Issues like migration, unemployment, social inclusion, trade issues and financial issues, and so on, have this direct and indirect impact on education. The dilemma of education in general and vocational education and training in particular is that there is often a tendency to see education as the cause of all troubles. At the same time, it is also seen as the solution to the same problems. This is a simplification that loses sight of other issues and decisions that form the developments in our society.

**Gothenburg declaration**

Of course, investments in (vocational) education in history and the future have an impact on the wealth and social stability of countries. The appreciation and recognition of this at the EU level in the recent Gothenburg Declaration gives hope. However, its implementation needs a strong action plan and financial investment and a strong alignment of policies from European, national, regional and institutional level.

**Technical, other developments and effects**

Another important contextual factor is the technological development. Historically technological development has been a strong driver for economic growth and social development. At the same time, we now inevitably realize that our technological advancement can create long term problems. Examples are the effects of our industrial production on climate change and the social problems that result both within countries as between them. Technological developments are a strong push force in our society and are addictive in its projected possibilities. Robotics, artificial intelligence, internet of things. If parts of our societies are left behind, excluded from possible benefits and if this technological revolution is not embedded in a bigger scheme of social responsibility and inclusion, technology will shape our future instead of mankind. This is evident in the further digital revolution and the already existing digital divide.

**Vet and the role in the digital future**

For (vocational) education the biggest challenge currently is to accommodate to the speed of change in technology. At the same time, we should realize that technology is not a natural phenomenon we can do nothing about. There is a human-made circle in that education and resulting research creates the technological developments we must adjust to. Education may benefit extensively from technological development by using different tools i.e. e-learning, virtual reality, etc. However, we do not only need to learn using the new technology but also need to control and shape this technological development by strengthening uniquely human skills and competences like emotional intelligence and creativity. Where the European Union formulates all kinds of common criteria for the production and selling of goods to ensure the safety and security of their people it would also be wise to set criteria for the new digitally produced goods and services.

**Digital illiteracy**

The most prominent it is now being shown in the digital developments. Digital developments create a sort of digital illiteracy where the European Commission rightfully has made an issue to try and prevent this. However, at the same time we should ask why digital products are evidently so difficult that they create this illiteracy. The promise of promoters of these technological accomplishments is that it will make things easier and accessible for everybody and not only for the ones that were able to read the “tablets”. So, when we were hardly able to close the illiteracy gap since the invention of book printing we are creating a new illiteracy with the invention of digital technology.

**Social development and employment for certain groups**

This takes us to the third important contextual factor. This is the social development in the EU. Even when the largest technological developments are evolving we are faced with millions of people in Europe that are not in employment, education or training. Social and economic inclusion is probably the most important factor for a sustainable future development in Europe.
We are talking frequently about technological revolutions. We are forgetting about the history of social revolutions. There are too many people who feel that they are left behind and that they themselves are sometimes blamed for that situation. This ranges from the elderly person that has contributed to European development all his/her live and now feels socially isolated in a digital desert, to the student that has dropped out or laid off and cannot find employment at an age that she/he wants to build a good life, to the migrant who has fled the tragedies of war, which Europe has also known, and is not accepted because of where her/his origins are.

It is positive that through the adoption of the European pillar of social rights and other policy initiatives this is recognized. At a time when adhering to European Union decision making is doubtful, it is going to be the actions rather than the words that will decide whether this fundamental underlying issue can be turned into a favorable direction for Europe.

Global movements and challenges
The last policy context factor is the shifting continental and geo-political movements. On the one hand there is a realization that we are facing threats that can only be solved at a global scale. At the same time, it seems that the large continental blocks are increasingly retreating in their continental bubble. This seems safe but it lacks the realization that the above problems are even greater, if looked at from a global perspective. The combination of climate change, trade and financial interests and migration are not unique to this day and age. The challenge will be to solve these issues better and more peacefully than has been the case in the past. Again, investment in (vocational) education is essential to lay the foundations to make this happen.

Holistic and humanistic vision in education
Education systems must be relevant and respond to rapidly changing labor markets, emerging new jobs and professions, technological advances, urbanization, migration, political instability, environmental degradation, natural hazards and disasters, competition for natural resources, demographic challenges, widening inequality and expanding threats to peace and safety. At the same time vocational education should be inspired by a holistic and humanistic vision of education and development, based on European values, i.e. the principles of human rights and dignity, social justice, peace, inclusion and protection, as well as cultural, linguistic and ethnic diversity and shared responsibility and accountability, achieving effective and inclusive partnerships.

Reinventing educational policy
In looking forward to European Union policies in VET
3. Europe and Education: Some fundamentals for the future

3.1 Introduction

We will not go into the political discussion on whether Europe should evolve to a United States of Europe or to a voluntary multilateral cooperation of nation states. It is evident that in all cases provision of (VET) education will be necessary. It is sufficient to say that in present EU policy development both directions are visible. Fact today is that the European Union has no legislative powers on the national policy of (vocational) education. So, EU (vocational) education policy consists of the delicate art of persuasion, seduction, management by speech and monitoring and creating political consensus and a resulting voluntary implementation. This is sometimes more effective than in other cases. The art of, what in political science has been coined, “nudging” is however important.

Fundamental (economic) principles and education

It is also important to realize that the European Union is true to its founding principles from the start of the European Economic Union. Apart from the post-war geo-political considerations, the basis can be found in the economic theory of comparative advantages. This says that, without market imperfections, production will take place most efficiently at the place where production factors are best equipped, which means the cheapest thus the most profitable. No border barriers would promote the efficient travel to the production sites. High mobility of workers would ensure that labor would go where the production was situated. These fundamental principles can still be found in EU policy including educational policies. For example, differences in educational quality would hamper labor mobility and act the same as formal or informal border barriers for goods. Trying to organize (vocational) education in Europe as if it were an individual country fits these principles. An example is the realization of a bachelor-master structure across Europe.

Based on this present reality we would like to highlight some important basic things from the point of view of providers of vocational education. After that we will go deeper into more specific issues.

3.2 Alignment of policies is of paramount importance

As we have repeatedly argued, many policy initiatives that are produced at the European level never reach the level of providers of vocational education. This is even the case when the management of VET institutions have a positive attitude towards the European Union and is knowledgeable on EU VET policies. The reasons are lack of involvement in policy making by VET providers, lack of policy alignment between European and national vocational educational policies, differentiation of educational systems across countries. This makes it difficult to assess which initiative is applicable where and this is compounded by differences in allocation of funds in different nation states.

For the post 2020 policy initiatives it is therefore a necessary requisite that involvement of VET providers needs to be increased and the imbalance of involvement of VET providers from different European Union member countries should be countered by stimulating measures to create a broader involvement and thus acceptance at the providers level.

3.3 System instruments will be less important in the future

The speed of change will make almost all traditional policy instruments obsolete. System instruments do have their justification where a basic systematic approach with regard to qualifications, examinations and quality assurance still needs to be implemented. Once this is achieved bureaucratic requirements make them inherently inflexible, and therefore ineffective regarding the speed of change VET has to deal with nowadays.

Additionally, these approaches favour formal qualifications, setting entrance requirements into professions and levels of continued educations and also fulfilling the need for social stratification. This seems to provide a sense of control to the level of people’s competences that can only be described as illusory. Given the half-life period of knowledge and skills in a rapidly changing world, formal qualifications lose their validity rather quickly, if not enhanced by informal and non-formal life-long learning. Adaptation of formal systems will
probably not be able to meet the speed of change and differentiation in professional requirements. The relevance of portfolios and (network) acknowledged experience will increase.

Against this background traditional policy instruments will not work as is needed to solve the problems at hand. They will become obsolete and need to be replaced by more flexible ones. For the future policy initiative, a FFFF test on Fit For Future Flexibility will have to be applied to assess present and future systems proposals.

3.4 Hybrid integrated professional education (HIPE)

21st century education will mostly not look like as it was offered in the 18th or 19th or 20th century education. A lot can be achieved in the quality of VET through apprenticeship-schemes as opposed to strict school-based learning. We must realize however that apprenticeship education dated back to the middle ages with the black smith as a master transferring his competences to his apprentice. The old scholastic tradition from monasteries was later transformed into a batch like industrial production processes that resulted in the school-based systems that are now still prominent.

We can now see that through experimentation people are searching for a new kind of educational systems using networking, pop up education, MOOCs and digital learning and hybrid teaching. To develop this further we would need to think away from traditional approaches. The following points are a starting point for developing a new approach. Such an approach will be based upon the four pillars of education and the reality that all education (general, vocational and professional) will be focused on fulfilling a profession that will continuously change in its requirements. It also bases itself in education that is equitable and allows people to rise to the best of their abilities and talents

- Integration of general and vocational education from an early age (This will not only erase the distinction between vocational, general and professional education but also help students to develop perceptions and attitudes that are more realistically aligned with the future of work. Combined with positive role models from working life and intensive guidance for students and parents it will lead to realistic and beneficial educational and vocational career paths for both, students and society)

- Open access and free permeability to all education levels. Skip the distinction between lower and higher education into shorter and longer professional education. Some professions take longer to master than others but that does not make them 'higher' or 'better'

- Integration of this cooperation into hybrid education involving companies and educational providers at all phases of education

- Focus initial education on the most durable of competencies and knowledge. Modularize continued (i.e. lifelong) education in easily changeable bits and pieces. Specifically integrate Adult education with the development of a new educational system. Ensure easy access to modules of continued studies and cumulative learning to reach the changing requirements for professional qualification.

- All education should show outcome-based results that can blend (with additions from continued and lifelong learning) into a validated portfolio of abilities, instead of only been deducted from diplomas

- Develop new more personalised didactical methodologies to ensure that everybody can get along in education for employability and personal development and adaptability. Make more use of innovation that is based on research not only about VET, but with VET and the extensive experience VET providers have from directly working with the one’s that should be our all priority – the students and (adult) learners, taking their real needs, wants and abilities into account.

The term hybrid refers to the networked and two-way co-creation by students, VET providers companies and government. The term integrated refers to the fact that all pillars of education (learning to know, learning to do, learning to live together and learning to be) are represented in all education and training. The term professional refers to acquiring integrated competencies that allows someone to fulfil a task in society that creates added value and thus income. Education refers to a process by which competences are acquired in a way that could not be done as effectively and efficient without that process.

3.5 Compete to cooperate

Many dilemmas in education and work circle around the concepts of competition versus cooperation. The
idea of competition is that by being challenged and rewarded for the best effort will bring out the best in people and companies. The downside of competition is that knowledge will be monopolised to keep an edge over each other in the competition game. The paradox is often that companies will not rise to high levels of competition if they do not promote cooperation within the company. With regard to education cooperation should not only happen within the institution but also with other educational institutions. It has been said often that education and training provide something that increases when it is shared. At least for government funded education the norm should be that the development of new educational approaches is actively shared through cooperation. For the lovers of competition, we could call this compete to cooperate in education and training. A new European award could be for the best result through cooperation in education next to all other awards that are seen relevant.

3.6 Only flexible approaches are fit for the future

Ross Ashby's first law of cybernetics implies that the degree of control of a system is proportional to the amount of information available. This means you need an appropriate amount of information to control any system, whatever it is. The motto at the beginning of this position paper says that the future will be increasingly uncertain.

Uncertain future and strategies

Unfortunately, our brain is designed in a way that uncertainty creates fear and overwhelming caution, shifting from the rational brain to the limbic system. What might have been necessary for survival eons ago is a hindrance in our current world. This is true on all levels, down to the teacher and trainer who has to implement new methodologies and the student/learner who has to prepare for an uncertain future. Taking this into account part of the solution must not only focus on practical solutions and flexibility but also tackle strategies of successfully dealing with uncertainty, like not seeking for perfection, acknowledge the possibility of making mistakes but learn from them for the future etc...

Need for cooperation

To handle and manage future challenges we will need variety in solutions and flexible approaches. The present variety in approaches to VET education could thus be a blessing in disguise. However, the distribution of the differentiation is mostly between countries. In the point on cooperation the amount of active sharing and implementing educational solutions is lacking. New technological possibilities could help us in this. It means that the fundamental idea of freedom of education can be realised.

Variety is needed

Instead of trying to find one best way to organise or one scenario to meet the future challenges we should allow for a variety of solutions. We should respect and promote a diversity of roles, missions, objectives and types of provisions of professional and vocational education, based on jointly agreed values, principles and instruments as the most effective response to emerging challenges and further development, while providing opportunity to education for all.

Authority at the level of centres

In practice this means that more authority should go to colleges and training centres if they meet broad quality criteria as are outlined in this paper and use quality assurance systems to ensure a learning culture and attitude. It is shown that in countries with a high level of quality in education there is a relatively large subsidiarity which means decision authority is low in the decision tree. To be effective it needs a close involvement of VET/HEP providers in the development of these broad principles.
4. Policy developments for the future

4.1 Introduction

As indicated in the introduction of chapter 3 the development of ideas for the post 2020 policy is an ongoing process with not all the study results available, yet. The above chapter is a contribution that should at least have a place in the scenario development for the future. Next, we will focus on several more specific issues that are important for the future as seen by the VET4EU2 associations, as well into some proposals in the new financial plan for the European Union and in the Gothenburg declaration proposals. We will comment on some of the ongoing policy developments and will comment on the intensity, timeliness and direction of some of the proposals. In doing so we will keep our experience of practical effectiveness of policy and the above-mentioned fundamentals as guiding ideas.

4.2 Quality assurance, mutual recognition of quality, joint qualifications international qualifications

As indicated above comparability of educational attainment across member states is important. As long as general and vocational education are not yet integrated it will give VET education an edge promoting its attractiveness. We been launched. The example of the Benelux for having procedures for this in higher education should be followed to include VET education. Looking at lowering barriers to permeability to continued studies ECTS and ECVET should be aligned. The different systems create an upward barrier that is maybe more serious than cross country comparisons. We prefer an outcome-based system like ECVET but would not object to using the input based ECTS systems since alignment is more important. The European Commission carefully suggests that the process should be step by step. However, the steps are towards a European wide recognition system. As has been indicated mutual trust is very important in this. However, the issue of trust can also be misleading. It seems that on this item it is suggested that quality of VET education within one-member country has a level that is of fixed quality beyond a doubt. At the same time, we know that quality differences between colleges and regions also exist within countries.

Joint qualifications

There is an easy way to tackle this which is joint qualifications. In general providers will be careful about their results and quality image. At the same time they are capable enough to compare their results with that of partner colleges in other countries.

Thus, VET providers should be encouraged to cooperate in the creation of joint European qualifications. However, the goal must be, that these joint qualifications prove to be of high quality from the very beginning to make them attractive and accepted – by students/learners, counsellors and parents and by companies/VET/HE.

This will most probably start in border regions. So, we would propose that any school that has the authority to issue diplomas linked to a formal qualification can enter into mutual diploma recognition. If these mutual recognitions are being put into a database, the system for automatic mutual recognition will start automatically. Other schools can reflect to already issued mutual recognition of qualifications.

In the short run especially in border regions the effect will be immediate. Besides that, the database it will not require any EU wide system for comparison. Since many countries already have procedures for diploma assessment and comparison to decide on the competences for foreign workers to work at a certain level. This expertise could also be put in this database.

In the long run we would have to go to a joint accepted EU quality assurance system. Again, it needs to be a quality system like EQAVET or EFQM and systems that can also be applied to continued professional education.

Evaluate the systems, for coherence

Based on the mentioned decline of the effectiveness of EU wide systems we should evaluate the ECTS, ECVET, EQAVET, EQF and EUROPASS systems. In any way they aim to do a bit the same, i.e. ensure comparability and acceptance. However, alignment between the systems is lacking, there is no clear coherence and they interfere with many national systems.

This will also stimulate access to continued professional education across countries since having been awarded with a mutual recognised diploma entry to such education in the other country is governed by the mutually recognised diploma.
No barriers for cross border education
Fundamentally it amounts to removing barriers to cross border education in the same way as barriers are removed for cross border employment. It would be strange that for instance someone could get a labour agreement in an apprentice ship in another country but could not qualify because his school leaving diploma does not give entrance to the educational program connected to the apprenticeship.

Advice
1. Stimulate the acceptance of an EU wide quality assurance system for (VET) education like EQAVET or EFQM that should be implemented at the level of VET providers
2. Evaluate the cost benefit and alignment of the existing instruments like ECTS, ECVET, EQAVET, EQF and EUROPASS developed for comparison and recognition and better align them, respectively create a flexible system of inherently consistent tools.
3. Promote the creation of Joint European (VET) qualifications being developed by the cooperation of VET providers of many European countries.

4.3 Closing the gap between the world of work and VET education. Including apprenticeships, on the job training Continued professional education and Life Long learning

In an earlier chapter we have indicated that the interaction between the world of work and education should be reassessed. It should develop into a hybrid co-creation of education. This will include a hybrid teacher who works in part-time or for certain period both at the company and at the school or training centre. On the other hand, VET providers could be more involved in re-skilling and upskilling employees from companies, for instance with regard to internationalization, thus creating partnerships with mutual benefit.

Triple Helix
There is huge difference between member states on how well or poor the VET providers and world of work cooperate. A strong investment is needed in the possibility and further development of triple helix partners from different countries- not only between universities, but also VET providers and companies respectively governments to learn from each other. Also, national traditions can be analysed to see what tools can be used to narrow the gap.

Staying employable
In a rapidly changing world and work environment, where existing jobs are threatened to be replaced due to digitalization and artificial intelligence, it is becoming even more important to focus VET on LLL and CPD, to provide people with the necessary competences that will keep them employable and empower them to active citizenship their whole (work) life.

Future challenges provided by rapidly changing work environment can only be mastered if the whole workforce is taken into account. It cannot be achieved by only training the young. Experienced employees need to be enabled to catch up on recent developments getting a granted right of participating in (public-funded) LLL programmes that will guarantee their future employability.

A closer connection between education and training could also guide students’ expectations better. A recent survey made done by OECD and other partners (https://www.educationandemployers.org/drawing-the-future-report-published/ ) shows that students set up their professional ambitions rather early, though permanently. They do not change these formed perceptions until they leave school. Their choices are often based on limited and unrealistic perceptions, like TV series or internet influencers – due to missing different role models. To develop more realistic perceptions of professional options, the students need to have direct earlier insight in professions and VET. Counselling and guidance information are not as effective as a real-life experience. In this way they can find and choose a first profession which is really suitable for them considering their capabilities competences, motivation and ambition.

Cooperation between providers and companies
The necessity of acquiring lifelong learning competences and transversal skills is not only true for IVET, but also for adult education. Continued professional education (CPD) is crucial for reskilling and upskilling the current workforce, also including VET teachers/trainers as the important multipliers in this process. Therefore, an even closer cooperation between VET providers and companies is needed, providing manifold opportunities for VET teachers/trainers to gain practical work experiences and offering opportunities for re-and upskilling for the workers in the companies. This will create the hybrid teacher/ trainer that was discussed before.
Continued training as a right
In the relevant sectors CPD should be an educational right and obligation like general education and initial VET. Therefore, this should not be dependent on income or funding possibilities of the employees. European, National or Regional funding must guarantee, that everybody can acquire the competences needed for life-long employability providing public funded programmes. Company or unions of employers/employees would be another source of funding. Possible synergies between VET providers of different educational fields (IVET, HVET and adult education) and work-life/companies need to be used. Focusing on this will also strengthen Europe's competitiveness in the world, the innovative power and national economies. (On the link between responsibility and funding please look at the discussion in annex 1)

Due to the speed on change and the long period of participating in working life a stronger focus should be on lifelong learning opportunities.

✓ Advice

1. For the good of education, the students’ informed educational choice and the competitiveness of education a strong connection between (vocational)education training and the world of work is essential.
2. Several methods (apprenticeship, WBL, job shadowing, experiential learning peer to peer learning and digital tools like MOOC’s Flipped learning and virtual reality or serious gaming) must be used to reach the best results. Also, the history and culture of a country must be taken in consideration when these instruments must be developed.
3. Promote programs and regulations that facilitate LLL and CPD in every respect, financially and by fostering closer cooperation between all kinds of VET providers and companies.
4. Promote a right for free access to LLL programmes ensuring future employability.
5. Promote exchanges between countries with a strong triple helix cooperation including VET and other countries that are interested in further developing this.
6. Member states should be encouraged to develop more flexible education frameworks and structures to allow learners to easily jump to education during all working years for shorter or longer periods.

7. Make the relation between responsibility and funding across the four pillars of education explicit in policy development. Appreciate the relatively large differences in this between countries and try to achieve better alignment for equality and equity in all European Union member states.

8. Promote the use of guidance and counselling mechanism by enhancing the use of new technologies.

4.4 Preparing for the next technological revolution
digitalization and artificial intelligence 3D printing internet of things. Skills 4.0 Skills development 21st century key competences

Due to the technological revolution our world of work is changing more rapidly than ever before. Change in itself is not good or bad. The important question is why we have to change and what will be the intention of this change. Regardless of the necessity of VET systems having to adapt to the new technology, we must not forget, that VET also has the obligation to emphasize and strengthen uniquely human competences that cannot be replaced by machines and artificial intelligence, such as emotion and feelings, imagination and creativity, intuition and the capability to improvise. Original human skills are mainly connected to emotional competence. There can be artificial intelligence, but there can never be artificial emotion. Technology is there to support us, but we are the ones to create. VET has to train people to manage technology and improve things for people. If inclusion and solidarity are not taken into account, the world might be broadening technically but shrinking from the human point of view. Mere technical development is not enough to survive in this changing world.

Solid structure for using new technologies in VET

Considering the speed in this technological revolution is happening so fast that VET providers will have to make priorities in which sectors they will develop. This will mostly be governed by regional available companies. At the same time the new technologies will also affect existing companies. The decision where to invest
in and when not is complicated. Cooperation in further developed triple helix structures is necessary to ensure a solid educational structure for new technologies that serve and include all people. Since the possibilities for investing will differ across member states a larger productivity gap will eventually be expected putting strain upon member states cooperation.

The new technologies will require heavy investment and training of educating staff. This will probably only be realized in joint training centers where new technologies can both be experimented and taught and trained to both company staff, teachers and trainers and students. The proposal for Centers of Vocational Excellence (COVE) could help foster cooperation between regions and sectors to facilitate and disseminate innovative technologies and the teaching and training thereof. The promotion of such centers of excellence should be promoted as innovation hubs that can foster and drive local and regional economic development. A positive example is the SOLITY- VET social utility monitor.

VET needs to properly fulfil this task which needs again closer cooperation between VET, industry, research and government. For instance, Brainport in Eindhoven where hurdles and barriers between the different protagonists are overcome and close cooperation takes place.

Learning methods and creative approaches

In the face of these technological developments education, teaching methods and curricula must be evaluated, not only with regard to innovative and digitally based learning/teaching methods but also with an even stronger focus on lifelong learning competences and transversal skills, even if this means a reduction of professional knowledge and skills. Regarding the speed of change, the latter will be obsolete in few years. The capability to self-regulation, to acquire new skills and competences, to further develop existing knowledge is more important than static knowledge. Entrepreneurship, creativity and innovation as well as responsibility and ethical behavior must be fostered by vocational education and training, thus not only reacting to technological change but shaping it for the benefit of mankind.

Advice

1. Regardless the necessity of enabling students and (adult) learners to become proficient users and creators of new technologies and innovation as described below, VET cannot only focus on technologies but needs to embed them in a holistic concept fostering uniquely human competences as well as responsible and ethical use of these new technologies.

2. Europe should be aware and responsive on differences in the ability of member states to adapt their education to the arising new technologies. Since education in these technologies will directly influence the competitiveness and adaptability a productivity gap between member states is to be expected.

3. The cooperation of new technology training centers should be encouraged. The proposal for networks of centers of vocational excellence can be helpful in disseminating and sharing knowledge of such new technologies in education across member states. This is a good example of what was described as “compete to cooperate” These centers could also function as innovation hubs that drive local end regional economic and social development.

4. As part of the digital agenda more focus should also be on stimulating educational innovation to both use and meet the possibilities of new technological innovations.

4.5 Stronger investment in internationalization for both staff and students. Multilingual and multi-cultural exchanges

True European identity and full mobility on the European Single Market can only be achieved if people perceive themselves as Europeans and gain European experiences. This is in particular true for students in VET and their role models – teachers/trainers in VET, but also for adults in work life, following the LLL approach. Thus, the existing Erasmus+ programme must be even further strengthened and extended. Bureaucratic administration in the application and accountability should be diminished. Employers need to be made more aware of the benefits they will gain when opening such opportunities for their staff. There must be put more effort in gaining the companies support when employees want to participate in mobility, for instance by fostering real work exchange programs.

The news that the budget for Erasmus plus will be doubled is therefore a welcome announcement. However,
the fact that this will only be the case in 2027 reflects a modest position towards what is needed. It is well known that the amount of application by far exceeds the funds now available. We propose that an effort will be done to speed up the increase in funding over the years.

We support the efforts of the European Commission to increase the possibility for more mobility and student and staff exchange. As indicated earlier, mutual extended triple helix visits between countries can support further developed triple helix cooperation with a stronger focus on VET in all countries.

Advice

1. The increase in Erasmus plus funding is fully supported. However, we advise that the increase will be speeded up, so the results will be there earlier than 2027.
2. The number of company staff involved and extended triple helix exchanges should be facilitated more. Since this is relevant for all educational sectors in vocational education and training a cross sectoral facility for this could be considered.
3. Language barriers should be eliminated by promoting and enhancing foreign language training

4.6 Permeability to higher education flexible pathways Including EQF5 and SCHE, HVET and other qualifications

With the challenges we are facing, it is important to ensure that everybody will be able to reach the top level of their individual talents and developmental possibilities. In history sometimes, educational barriers functioned as conscious or concealed method of social stratification and selection. Evidently seen from recognized values as equality and equity these barriers in education should be broken down. Also, for economic reasons we will need the best of the best but also the best out of each individual to meet the challenges in the future. These challenges have been indicated in the chapter in policy context. This means that countries should break down barriers and facilitate permeability to continued professional education. This becomes even more important when we look at the necessary growing need for lifelong learning in the face of the rapid change we will have to adapt to. We cannot afford to continue to have this educational spill of talents.

No dead ends and second choices in VET

VET will only be more attractive and considered a first choice when it is not a dead-end street, when there are possibilities for graduates to further develop themselves, as in many countries the option to attend higher education is still considered the main reason to decide for an educational pathway. This is true in particular for parents who want to provide the best social and income chances for their children. It has no use to encourage people to see VET as a first choice when the educational system makes it an evident second choice in terms of social and economic success.

In some countries permeability from VET to HE/HVET is not possible now at all. Others have formal or informal barriers in this.

Using the EQF level 5

The EQF5 level is, in many European Union member states, the hinge between VET and HE, but despite of that it is not everywhere well established. The importance of this level is however very important as employers clearly expressed the importance of a group that can develop more competences than provided at EQF level 4, but not necessarily at bachelor’s degree. Moreover, this level facilitates the permeability between VET and Higher education.

We welcome therefore the European Commission’s initiative to encourage cross country admittance to higher education. For the reasons outlined above, permeability should be a factor to be assessed in the European commission monitoring of the developments in European Union member states.

Advice

1. The European Union should support member states to create easy access from VET to HE.
2. The European Union should introduce a Union wide guarantee to equal and equitable access from general and vocational education to continued vocational or professional education.
3. The European Union should make available an inventory of barriers in educational systems that prevent permeability and promote a discussion on the validity of these barriers for equal and equitable access to continued education for everyone.
4. The European Union should promote the introduction and recognition of EQF5 short cycle higher education and qualification as a bridge to further enhancement of access to higher education, up-
4.7 Immigration and social inclusion, including social inclusion in apprenticeships

In chapter two the importance of social inclusion was addressed as one of the major policy context issues. This is more specifically the case for immigrants and asylum seekers. In the history of Europe migration has been a regular condition and often the drive for innovation and change. According to results of a recent survey of Bertelsmann Stiftung – cultural diversity has a stronger impact on innovation than other diversity indicators. [http://www.bertelsmann-stiftung.de/en/our-projects/living-diversity/project-news/cultural-diversity-has-a-positive-impact-on-innovation/](http://www.bertelsmann-stiftung.de/en/our-projects/living-diversity/project-news/cultural-diversity-has-a-positive-impact-on-innovation/)

Sadly enough, tensions between groups of people has also caused disastrous consequences. Not many realize that immigration in an ageing population in Europe is just as much a challenge as it is a solution. Also, many European Union member states face the opposite of immigration. Their population decreases, and people try to make a better life in other countries inducing a brain drain for those countries. So, there is internal migration and migration from outside Europe. It is also a pity to see that sometimes the migration issues cause tensions between population groups. This is amplified if the impression is formed (true or not true) that migrant and asylum seekers are being given more attention and support than the people that were born in the member state countries and who are facing similar challenges in life of getting education, a job, income and proper housing.

It would help if the issue of social inclusion would be taken as an issue that would be addressed for all inhabitants irrespective of where they come from and is being dealt with in the context of everybody’s individual situation.

Europe and its strong economy as a whole – and immigration

For Europe to be the world’s most competitive economy, cultural diversity and social inclusion play a key role. The active participation of asylum seekers/immigrants in the labor market and, more generally, in public life is vital for ensuring social cohesion in the host country and the ability of migrants to function as autonomous, productive and successful, self-confident citizens. It is also critical for facilitating their acceptance by the host-country population.

Why are some economies and societies in Europe far more successful than others in integrating immigrants into their labor markets and why are they better in offering opportunities to young immigrants to unfold their talents?

In many other member states not all the human capital is being used and immigrants are not integrated sufficiently to society. VET and adult education together are the most effective way of integrating immigrants into society. Combined VET programs and language and intercultural training and apprenticeships or internships in companies, together with locals have been proven to be the most successful form of integration.

Strong focus on prior learning

For many adults in Europe a stronger focus on the validation of prior learning could be helpful in attaining diploma’s that still function as essential for entering a profession or even the labor market. The recognition of prior learning and the assessment of prior knowledge and skills is essential for the inclusion of all EU citizens. The link between initial and adult VET learning should be strengthened. The comparison and acknowledgement of foreign diplomas should be realigned more across member countries. There is a strong link with the general recognition of European diploma’s and qualifications across member states.

Advice

1. Citizens and member states should be informed on successful integrative activities for all people that are in a disadvantaged situation of social exclusion.
2. The already great cooperation between providers of integration programs and VET and adult education should be facilitated. The formal recognition of prior learning should be promoted stronger and instruments in place used better (for instance VAE in France). This could reduce the necessity of retraining and thus realize a quicker inclusion and integration in the labor market.
3. Effective tools for language and skills development should be shared through a joint community of practice.
4. European citizenship and its fundamental values should be emphasized and promoted.
5. Meeting European Union challenge in VET provision

5.1 Introduction

All the developments described here will have a significant impact on the provision of VET. VET providers themselves, especially our members, are active in reflecting on how best to prepare for the future challenges. As has been mentioned the variety of VET provision may be a blessing in disguise. However, there are also a number of downsides in which EU policy could be more helpful. This will make it easier to compete for cooperation and make use of the best practices. We will highlight a number of them below.

5.2 Subsidiarity and decentralization of authority in VET provision

It is evident and has also been shown in a background study in the PISA report 2010 that there is a correlation between decentralisation of authority in education and the quality of education. There is need for highlighting this especially at EU level. In our European society and even more in our future society top down policies will get less and less effective unless repressive side measures will be put in place. For the quality of vocational education in particular, a decentralised and non-fragmented policy responsibility has a positive effect on overall quality. An in-depth study will show this. Some member states can benefit more from the policy history in this by learning from better performing member states. Thus, they can see and benefit from the experiences these member states have had during the same process of increasing decentralization in (vocational) education.

What has been said about European Union policy instruments often also goes for centralised government instruments. They may have fit for history but are not fit for the future!

Independent providers

Financial and strategical independence of VET providers is crucial, to quickly adjust to changes in world of work and in skills demands, to closely cooperate with other relevant stakeholders, companies and research, overcoming traditional barriers, but also with international experienced partners.

Rapid and continuous changes require sharp reactions from VET providers and social partners. This can be done more efficiently if there is more subsidiarity. This subsidiarity should be complemented by bottom up verifiable accountability towards democratically set broad objectives of (vocational) education. Even more so if funding of VET provision is done with the taxpayers’ money.

5.3 Enhanced cooperation and sharing of effective practices

It may seem contradictory to the point above but formal systems in place seem to hamper the sharing of effective vocational educational practices. Especially when (vocational) education has been put in a competitive position towards each other, the sharing of what works in education is not promoted. As has been demonstrated this might not promote the best educational results for all. Thus lowering, the total educational effectiveness as a country or continent. The strong development of communities of practice across Europe can improve the accessibility of effective vocational educational practices and innovations. This does, not only but specifically, apply to best practices dealing with the technological revolution as described above. The European Union should invest in the development of an easy access IT framework for the development of effective vocational educational practices. The present pilot that was initiated by Cedefop is a first initiative that could use more support. The initiative to promote cooperation for Centres of Vocational excellence is also a good idea, if only complemented by an open access system so good and best practices of these centres are being shared among all vocational providers.

Moreover, we must realize that the possibilities of VET providers across the member states to participate and influence policy at the EU level is distributed very unevenly. Despite the efforts of our associations (financial) barriers to participate are huge for many VET providers. A strong initiative together with member states to facilitate that participation should be a priority.
5.4 The undisputed value of teachers and trainers

Especially in the light of (increasing) uncertainty in our future, students and (adult) learners need the power and expertise of teachers and trainers, who are role models and can convey and foster the emotional intelligence that is needed to (rationally) deal with uncertainty. These tasks can never be fulfilled by digital means. Therefore, there must be given more attention to the teachers and trainers. They are both drivers and barriers to innovation in education, as they are also object to change and uncertainty and thus underlying the mechanisms described earlier. Worried that their role will be taken over by digital innovations, some react with fear and retreat, relying on methods from the past. This needs to be addressed actively in initial teacher training and CPD. Teachers need to be assured of their unique and irreplaceable competences needed to prepare students and (adult) learners for an uncertain and digital future and they need to be enabled to acquire these competences, no matter at what stage of teaching/training they currently are.

Networks for teachers in VET

Some years ago the commission supported the initiative for a network called “Teachers2” (teachers-squared). This network indicated that teacher’s education was a strong driver and, in most countries, underestimated factor in the development of the quality in education. This network focussed mostly on general education. We think there is a need to highlight the quality in teachers and trainer’s education more and put this more in the focus of a drive towards higher innovation and productivity in VET education.

Recommendations ET2020 working group

The final report “Teachers and trainers matter” of the ET2020 working group on VET has provided a cohesive and structured summary how this can be achieved. 12 policy pointers arranged around four topics and illustrated by 55 examples from 31 countries provide a wide range of measures and best practices, taking different backgrounds into account. As a basis roles and responsibilities of teachers and trainers in VET systems need to be clarified. Professional development of teachers and trainers needs to be strengthened (policy pointers 3 – 5), in particular by setting incentives for all players in the system to invest in it. Incentives can be both financial and non-financial, from facilitating participation in professionally provided CPD to engaging in self-study and tandem teaching linked to recognition and progression. Every measure that may help to make/keep the teacher profession in VET attractive needs to be taken into consideration. Besides remuneration and promotion of the profession, opportunities for LLL and CPD with regard to both the pedagogical and the content/technical perspective can serve to accomplish this. On the other hand, it must be ensured that trainers are valued by providing opportunities for their professional development and clear quality standards. In this ongoing process teachers and trainers need to be equipped with competences to master key challenges of the future and at the same time taking into consideration their first-hand experiences with the students/apprentices in their daily work, in particular with regard to the content of teaching, the assessment of learning outcomes, innovation, digitalization, supporting disadvantaged learners and career guidance (see policy pointers 6 – 10). As the many examples collected by the working group show, this can best be achieved by fostering collaboration (policy pointers 11 – 12) in a structured continuous dialogue based on mutual trust and the development of partnerships and networks that promote excellence, innovation and flexible learning pathways.

New role for teachers and trainers

There should be a focus on the new role and professionalism of teachers and trainers in the light of the developments indicated in our contributions and also contributions of others. Special attention should be given to developing a closer cooperation between the world of work and continued education and the development of the so-called hybrid teacher who might alternatively work with a company of at a VET provision centre.

5.5 Increasing the speed and productivity of VET provision

Education should be able to match the increasing speed of change. As indicated it needs the breaking down of systematic barriers and as slow moving formal policy instruments make adaptation more difficult. Also, a higher speed and increased professionalism of teachers and trainers as described above are necessary. We must realize that an image of how vocational education will look like in the future is developing. At the same time putting this image into reality requires a higher speed and intensity of work. Although innovations come about by trial and error and good intended changes, there is a great need for the use of solid vocational educational research. Even in countries with a reputedly good vocational educational system the use of vocational educational research results is still at a too low level. A strong encouragement to use and make available this research in practice is necessary.

Research, databases and VET

While in many institutions of professional (higher) education have access to research results through databases
is self-evident, the costs of database access are prohibitive for most VET Providers. The speed and productivity could be increased if, next to shared access to communities of practice, the access to educational research could be enhanced. Also, educational research could be more demand driven and initiated by vocational education, thus providing answers to the challenges at grass root level more than researchers curiosity. This would require a strong link between the practice of vocational education and research. In teachers’ education and notably teachers’ continued professional development the two could come together.

5.6 “Discover your talents”

Last but not least we all have to realize that we are doing all education foremost for the benefit of our students. Young people lie at the heart of everything we do. They are our investment in the future, and they must be provided with every opportunity to train and to further their personal development. Key objectives include, promotion of education and development in a child’s early years, modernisation of training systems and courses, greater social integration through formal and non-formal training. Information and communication technologies should be employed at all levels of education.

Trust and facilitation

Providers always realize that they must earn the trust that students and their parents put into educational institutions to give them the best possible education possible. In direct contact with students their personal goals and ambitions and uncertainties are more evident than abstract concepts as “the economy”, “the skills mismatch”, “21st century skills” and the such. In practice everybody knows that the individual pathway must be discovered at an individual level. Facilitating this with all known information to chart the territory will help students to discover their talents.

The fundamental uncertainty of the future is self-evident to most of us who have a long future behind them. There is some debate whether “Millennials” are an example of a specific generational change or just a recurrence of typical behaviour of a certain age group that is relatively constant over centuries. Whatever the case, every new generation will have to invent their future under the circumstances at hand. This means that, in this day and age, paternalism towards students is something of the past.

One of the best results of our improved vocational education is that students have even more options than in the 1968 revolution period to take responsibility for their own education. Of course, here are individual differences but the fundamental position should be that students are co-creators of their own education. VET providers in many countries are practicing this in education and in student councils. This should also be the case at the different policy levels. We urge that the effective representation of students in VET from all member states will be stimulated. In a very practical way we could state that the post 2020 ACVT would consist of member state representatives from students, VET providers, unions, employers and ministries. Based on the current developments and the challenges the VET sector is facing, it is necessary after 25 years to have a ACTV that reflects the interests of all parties within the sector.

Advice

1. At the European Union level promote and monitor subsidiarity of authority for VET providers in member states.
2. Help member states to learn from other countries that have achieved this subsidiarity.
3. Develop bottom up accountability systems for financial and quality of vocational educational provision based on quality frameworks and instruments, ideally harmonised throughout Europe.
4. Ensure a solid investment in the development of European Union wide communities of practice in VET.
5. Facilitate the participation of VET providers from all European Union countries to participate in policy development at the EU level.
6. Give specific attention to teachers and trainers in VET education as drivers for innovation and quality in education. Develop a specific network comparable to the “teacher squared” initiative for teacher’s unions teacher’s educators and VET providers.
7. Stimulate a better use of technology for teaching/training stronger and research-oriented learning in order to raise flexibility, effectiveness and productivity in education and training involving for instance peer-to-peer learning, experimental learning.
8. Start initiatives at European Union level, connected to national initiatives, to close the gap between vocational educational research and practice by not only including VET providers in the process but also start research initiatives at the VET providers level.
9. Realize a stronger representation of VET.
10. Change the ACVT in an advisory committee in which next to the present members member state representatives form VET providers and VET students have the same representative position.
Annex 1.

The pillars of education: On responsibility in education and financing of education

Many discussions on (vocational) education do not address the distribution of responsibility and funding shown in the picture below. It is often left implicit who is responsible for what and to what extent. It is also the case that the issue is avoided by saying that we are all responsible, leaving the financing discussion under the table. We must realize that the cells in this table are being filled in completely different in member states. This explains sometimes why people see things as self-evident, while this is a huge problem in other countries. This fact often blocks the possibility to align at the content of issues or challenges.

<table>
<thead>
<tr>
<th>Pillars</th>
<th>Government</th>
<th>Parents</th>
<th>Employers</th>
<th>Students/employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning to know</td>
<td>€</td>
<td>€</td>
<td>€</td>
<td>€</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Learning to do</td>
<td>€</td>
<td>€</td>
<td>€</td>
<td>€</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Learning to live together</td>
<td>€</td>
<td>€</td>
<td>€</td>
<td>€</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Learning to be</td>
<td>€</td>
<td>€</td>
<td>€</td>
<td>€</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

Who is responsible, who pays for what, to what extent and at what age?

The above pillars also show that education it is not about intellectual capacity only. We could identify the following Q's:

- Learning to know refers to Intelligence quotient (IQ)
- Learning to do refers to Ability quotient (AQ)
- Learning to live together refers to Emotional or empathy quotient (EQ)
- Learning to be refers to Existential or spiritual quotient (XSQ)

The background learning is of course the learning to learn. Learning feedback and the ability to use feedback into feedforward activities is very important so we coin it the Feedback quotient, the FQ index. So FQ is the driver for IQ AQ EQ and XQ

There will be a consensus that success can be measured by the sum or maybe even the multiplication of the quotients. This means that a holistic approach to education is essential.