



## **Learning providers and the challenge of TEL: enhancing teachers' and trainers' skills (Sub-group 1)**

This thematic area is coordinated by René van Schalkwijk, EUproVET President assisted by Tina Bertzeletou, Cedefop.

Members: Panagiotis Anastassopoulos, Gilberto Collinassi, David Corke, Tibor Dori, Adrijana Hodak, Marko Kemppinen, Virginie Lassalle, Stylianos Mystakidis, Lucilia Santos and Alicia Leonor Sauli-Miklavcic.

The first meeting of the Sub-group took place on 16 and 17 May 2017 in Brussels.

The following is the draft of the short report on the meeting's main outcomes for Sub-group members to comment on following which a final version will be sent for agreement and endorsement.

### **Working approach**

Participants subscribe to the Community's overall motto: *Think European Act Locally* and agreed to the principle that work should depart from VET-providers' priorities in the specific field and be based on their own experience and know-how. In parallel reflection should be enriched through the outcomes of relevant EU- funded projects, Cedefop work on transnational mobility of apprentices and students in initial VET (IVET) and the EU Commission related policies.

The Sub-group should work with validated documentation and through information sharing and expert cooperation with the aim to formulate concrete practical guidelines on how best to support VET-providers in meeting TEL- related challenges. The Sub-group's output should be clear and sustainable and based on "what works and what does not" for students/learners. The guidelines should be primarily addressed to VET-providers and the EU Commission; and shared with competent national authorities and interested in TEL organizations across the EU.

Although face to face debate would be preferable it was acknowledged that due to budget and time constrains, Sub-group members should work mainly through e-mail and the e-Community already set up on YAMMER. Despite the fact that EPALE, the broad on-line Community platform of the European Commission on Adult learning, is mentioned in the background note underpinning the creation of our Community, it was considered more practical to work with YAMMER, at this stage, at least. YAMMER should serve as depository for background material tagged and collaborative environment.

## Content

The Sub-group agreed on the following principles: to adopt a “learner-centred approach”, to focus on technology enhanced learning (TEL) or blended learning and not on ICT exclusively<sup>1</sup>, to consider the training needs of both youngsters and Adults and to address training in its IVET and CVET forms under the lifelong learning (LLL) perspective and as education of second chance for early school-leavers and “groups at risk” of exclusion and marginalisation.

Three fundamental values underlie the above holistic approach: a) students are considered in their full integrity namely both as human beings and citizens (and not only as learners); b) digitalisation affects all parts of life (not only teaching and learning) and c) digitalisation causes constant change and questioning that pre-suppose open and reflective organisations. As Gilberto noted ‘innovation without change (at VET level) remains an academic exercise’.

The Sub-group reflected on the following five proposed work themes:

1. Enhancing teachers’ and trainers’ cognitive and pedagogical competences to cope with new approaches to teaching and interacting with students/learners;
2. Supporting VET-providers in assessing the quality of their TEL provision and related learning tools;
3. Promoting the role of TEL as education of second chance for NEETs;
4. Developing and implementing TEL-based assessment methods;
5. Defining VET-providers’ challenges in managing TEL and supportive measures needed.

A sixth theme was added by Adrijana at a later stage:

6. Differentiation and personalisation (according to the DigiCompEdu).

Discussions were open and rich, covering several themes at the same time not following necessarily the above order. However, effort was made to present the outcomes of our common reflection under one or the other theme.

In relation to 1, participants agreed to take teachers’ effective mastery of their field of expertise as granted. However, even under this assumption, the revision of their studies becomes necessary as TEL necessitates a different articulation of scientific knowledge and universities could play a role to this effect. In addition, TEL requires teaching staff to reconsider their pedagogical methods profoundly as teaching shifts from teacher-centred to learner-centred approaches. In TEL environments teachers’ role is becoming that of a monitor and facilitator who encourage learners to develop their autonomy and spirit of initiative. In short, teachers act as mediators between learners and knowledge. To be able to carry out this new role successfully, they have to go through training as a mere up-skilling of their ICT competences does not suffice. In addition, there is another challenge to address in

---

<sup>1</sup> It was suggested to avoid using the expression of “e-learning” or even of “blended learning” as closely associated to the past time of distance learning, twenty or more years ago. “TEL” is considered a most appropriate and sufficient term having a broader meaning in the light of the current era of digitalisation that has changed our ways of living, working, learning etc. In this way confusion between terms will be avoided and our documents will be aligned with those of the EU Commission in which exclusive use of the term “TEL” is made.

**Blended learning** is an education program (formal or informal) that combines online digital media with traditional classroom methods.

**E-learning:** the delivery of a learning, training or education program by electronic means. Whereas:

**TEL** enables new choices for learners. Flexible learning focuses on giving learners choice in the pace, place and mode of their learning, assisted and promoted through appropriate pedagogical practice, supported and enhanced through TEL. Technology can enable new approaches as to how learning is delivered and assessed, and can make certain pedagogic approaches viable and scalable.

TEL offers opportunities for personalised learning with the learners finding their own pathway through learning material. From an institutional perspective, TEL can offer new opportunities for flexibility in learning and more flexible schemes of study.

what concerns learners, namely that students do not possess (quite often) critical thinking to the required level and teaching them “how to learn ” and how to assess and use information made available through ICT remain key-problems. As René noted, students become more often technology-consumers than information producers.

In relation to collective work, both teaching staff and learners need to develop their respective cooperation skills because technology is pervasive and needs interdisciplinary approaches. Learning to work together among teaching colleagues and among learners themselves represents an important mind set shift for both groups and here lays the social element of TEL. Under this perspective, TEL becomes a socialisation process with an important social learning function. Learning from peers is crucial for teachers and students, alike.

Tibor added that teachers have to use digital gadgets to keep students’ interest, students losing interest and attention rather quickly. “Education hacking” could be a method for.

The Sub-group took note of the EU Commission “Proposal for a European Framework for the Digital Competence of Educators (DigCompEdu)” of March 2017 and agreed to reflect on the six competence descriptors proposed and consider whether it can serve as basis (or one of the bases) for its work (attached in the e-mail accompanying the present draft report. René added that it could be helpful to ask the teachers themselves about their ICT-related needs (something successfully done in the Netherlands in another case).

In relation to 2 and 4, teachers’ different starting points as well as their burn-out should be taken seriously into account. Gilberto stressed that teachers should be properly equipped with the necessary e-tools and then focus on pedagogy. Universities could contribute to palliating teachers’ eventual knowledge gaps and authorities should adopt motivating policies to their attention. Finland is a Member State that is heavily investing on teachers’ e-skills development even on primary school teachers. Adrijana confirmed that Slovenia too is promoting the development of its teachers’ e-skills. For instance, in the period 2008 – 2013 Slovenia invested a lot in developing the digital skills of primary education teachers, VET teachers and high school teachers as well as of leadership. 70 different training programmes were developed; 30 different services of technical support were standardised and 7.029 off-line and 14.058 on-line counselling sessions were provided. The digitalisation effort covered 979 schools and addressed 19.891 teachers, leaders and technical staff as well as 1.053 trained counsellors. Similar initiative will continue later this year.

The Sub-group agreed that TEL impacts on the way learning outcomes are assessed.

René pointed out that TEL-based assessment is already used for assessing learners’ competences in various sectors like for instance, the transport-related ones as aviation, navigation or railways and this is done through simulation. Simulation is also used as a learning tool in the same sectors.

Participants noted that TEL could help deliver better assessments and TEL-based certification systems (independently from training) but this issue has not been further discussed.

TEL

In relation to 3, TEL contribution is considerable, as Virginie mentioned. She referred to the policy of AFPA that is using TEL for instructing the poorly educated ones, like for instance, prisoners, illiterate people etc. and for introducing migrants/refugees to the French reality and culture. She is also using ICT to combat digital exclusion with the help and involvement of peer groups. A MOOC for learning French as foreign language has been developed for the refugees/migrants who have been moved from the Calais camp. Virginie offered to share

information on the French experiences with the use of TEL for socializing and educating “groups at risk”.

In relation to 5, it was shortly said that VET-providers have to dispose of a sufficient understanding of the advantages and disadvantages of TEL, elaborate an appropriate strategy for (with experts/teachers contribution), take management decisions including investing on new technologies, promote staff continuous development. They have to be open to learn themselves and to networking with other VET-providers.

As the meeting run out of time, René, the coordinator asked participants to further reflect on the above and propose eventually additional points, always in relation to the 5 work themes.

In relation to 6, Adrijana proposed it as an important dimension of Sub-group’s overall approach because it relates directly to (all) students with no exception and should be consequently part of our reflection even if our work will focus on *staff’s* digital skills and needs. In the context of individualisation and differentiation digital tools are used to address learners diverse learning needs, e.g. by allowing them to follow different learning pathways and goals, by offering alternative approaches and tools, and allowing learners to proceed at different speeds towards individual learning goals.

### **The Community and the e-platform**

The Sub-group discussed the challenges the Community of VET-practitioners would have to face and in particular the issues of continuity and sustainability because, as Gilberto and René pointed out, there are thousands of communities that dye away sooner or later and we should avoid the danger of “creating yet another community for the book shelves”. Gilberto stressed that communities function only if members perceive an advantage for participating. It was underlined that reaching teachers/trainers, the real actors at grass root level, would represent a considerable challenge.

**Other issues:** There was no time left for further discussing the issue of the template to report on; however this is a horizontal issue to be considered with Sub-group 2 and Sub-group 3, too. Participants are encouraged to insert information and documents they consider of relevance on the Sub-group 1 page (Files) on YAMMER and a few have already started doing so. Colleagues are invited to comment as soon as possible on this short report and once finalised, to take it as starting point for preparing their own contribution. The document to be “constructed” collectively over the next two years could be a work in progress but by end 2019 all three Sub-groups should have delivered the main bulk of their suggestions to allow the EU Commission to take stock of in preparing its 2020 reporting exercise. René invited participants to mark already the section(s) they could draft taking in this way ownership of. Colleagues may start with the experiences/ideas they already shared during the meeting of 16 and 17 May 2017, as reported above. Participants will contribute according to their time availability including during summer, and they are kindly invited to deliver by mid-September 2017 to enable René, our coordinator to report on the Sub-group’s work progress.

A few more experts could join the group as full members. René asked members to propose ten experts in the field they know to be invited to join the Sub-group as virtual members and participate in our reflexion.

The exact dates for holding the Community's general meeting in February/March 2018 will be discussed with the whole Community to find the most appropriate time for.

### **Additional information**

1) The matrix below provided by Stefano Tirati of "Sub-group 2 on Learning Mobility" could serve as input to our future reflexion on the reporting template

<https://docs.google.com/spreadsheets/d/1amF8tavUPPmpTtMLUU5NVZrW3INy1dXMn92PD9ZktwY/edit?usp=sharing>

The same applies to the PES document attached in the e-mail accompanying the present draft report.

2) Mentioned was made of "Fab Lab" an idea coming from USA. Adrijana provided the following description and historic evolution of this concept:

Fab Lab - Digital Fabrication Laboratory<sup>2</sup>, is a place where anyone can make (almost) anything, using digital design, 3D printers, laser cutting and other advanced technological means. All these modern tools enable individuals/anyone at any age to experiment and turn their ideas into reality, even downloading products from the internet and personalizing them. Fab Lab process is supported by its own platform. The platform connects all Fab Labs world-wide in sharing all the knowledge that is developed inside the Fab Lab's projects.

All planning, design, production and fabrication processes are done in one place, to create one unique product. All you need to bring with you is an idea, and Fab-Lab supplies the tools and the guidance to bring it to fruition.

In Slovenia Fab Lab represents a part of work based learning, where students can turn their ideas together with the companies and their experts into a reality, prove their practical knowledge and establish an excellent network with potential future employers. It is based on project- and team-work and the initiative can be developed or stimulated either by the companies or the students themselves.

3) Stylianos mentioned Neal Stephenson's book "The Diamond Age" <http://www.penguinrandomhouse.com/books/172835/the-diamond-age-by-neal-stephenson/9780553380965>

In his "cyber punkish science fiction" book the author praises the role of interactive mentor; (please Stylianos verify if I have understood you properly and add any information you consider relevant).

---

<sup>2</sup> The Fab Lab program was started in the Media Lab at Massachusetts Institute of Technology (MIT) as collaboration between the Grassroots Invention Group and the Centre for Bits and Atoms (CBA), broadly exploring how the content of information relates to its physical representation, and how a community can be powered by technology at the grassroots level. The Centre for Bits and Atoms consortium is still actively involved in continuing research in areas related to description and fabrication but does not operate or maintain any of the labs worldwide. The Fab Lab concept also grew out of a popular class at MIT named "How to Make (Almost) anything."

Fab Labs have spread from inner-city Boston to rural India, from South Africa to the North of Norway. Activities in fab labs range from technological empowerment to peer-to-peer project-based technical training to local problem-solving to small-scale high-tech business incubation to grass-roots research. Projects being developed and produced in fab labs include solar and wind-powered turbines, thin-client computers and wireless data networks, analytical instrumentation for agriculture and healthcare, custom housing, and rapid-prototyping of rapid-prototyping machines. Fab Labs share core capabilities, so that people and projects can be shared across them. In order to become part of the Fab Lab network, new labs must assemble the required hardware and software inventory and accept the Fab Lab Charter.

4) René mentioned Nicholas Carr's book "The Shallows: What the Internet is Doing to our Brains" <https://www.amazon.com/Shallows-What-Internet-Doing-Brains/dp/0393339750>  
He underlined Carr's argument that Internet is affecting our long term memory negatively and consequently, we need to strengthen it (please René confirm and add any information you would like to share with the Sub-group).

5) It was suggested Tina to revise the PPP presentation with the introduction to our Sub-group, something already done.

6) Adrijana suggested the reading of Sir Ken Robinson's book on "Creative Schools: The Grassroots Revolution That's Transforming Education" <https://www.amazon.com/Creative-Schools-Grassroots-Revolution-Transforming/dp/0143108069>

The author makes a heavy critic to the present school education system he qualifies as industrial/Victorian one and proposes a highly personalized approach based also on today's technological and professional resources available.

7) Gilberto referred shortly to the importance of forecasting exercises other than the Cedefop ones, like for instance The Millennium Project <http://www.millennium-project.org/millennium/Education-2030.html>

That has conducted in 2006/7 the study "Education and Learning Possibilities by the Year 2030".