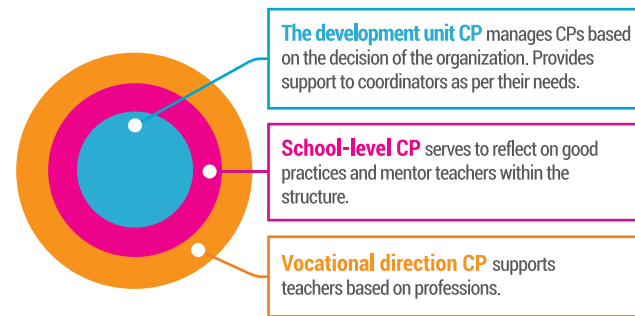


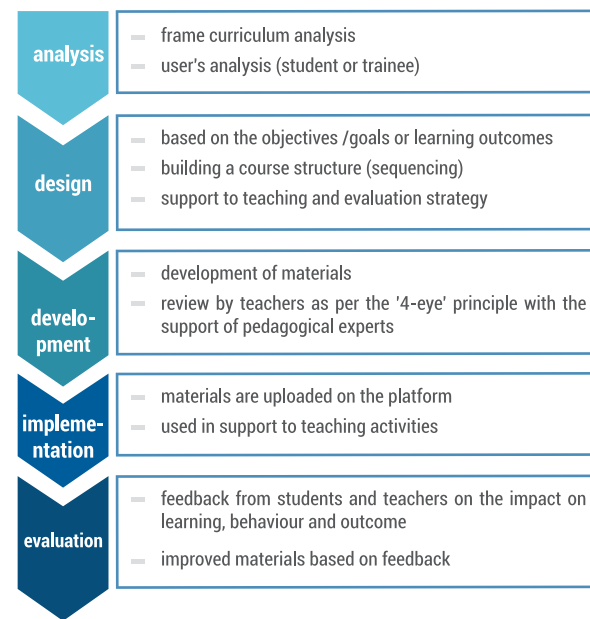
**Communities of Practice (CP)** are an opportunity for informal learning among teachers who share common interests, similar challenges and comparable opportunities.



## New practices shared at the Knowledge Fair 2018

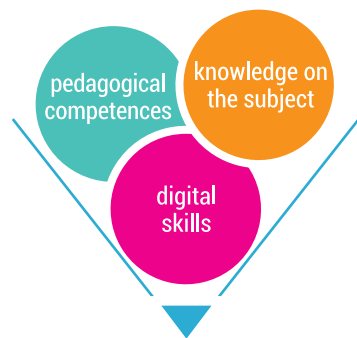
- Remote apprenticeships
- Interdisciplinary projects and learning situations supported by technology
- Student-centered teaching and learning
- International industry standard virtual platforms for blended learning, such as CISCO NetAcad, Microsoft Imagine Academy
- Certain functionalities of Moodle platform
- Management information systems
- Gamification
- Digitalization of planning, evaluating and documenting apprenticeships in business
- Gender sensitive VET

### Process for designing learning materials



## Digital Learning Materials

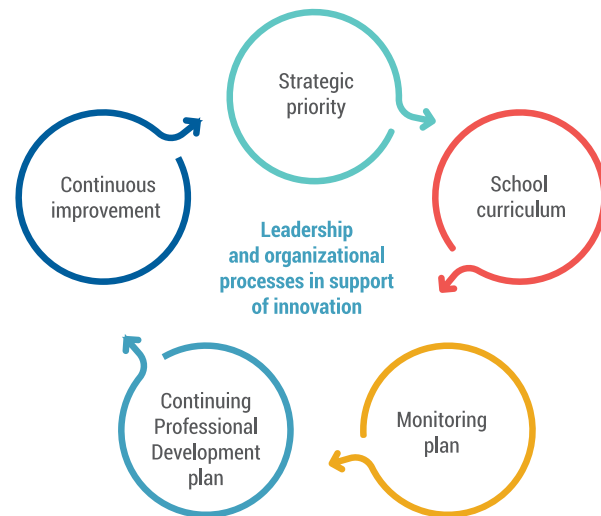
### Competencies for designing learning materials



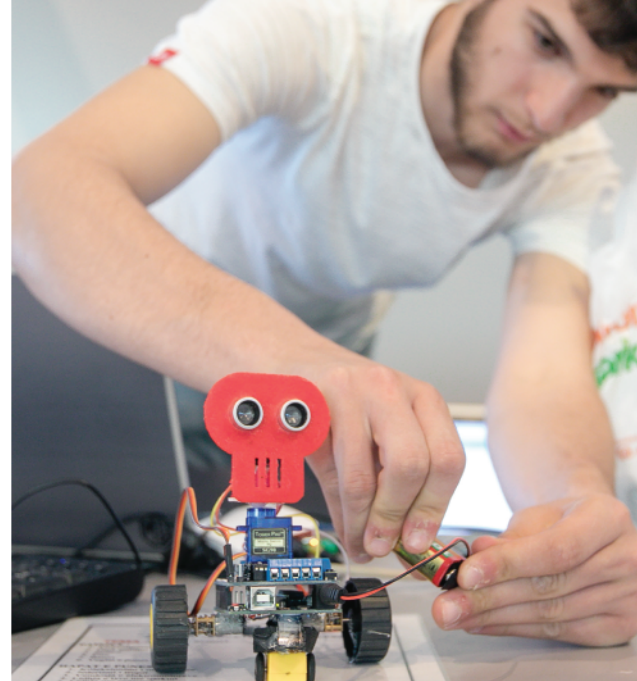
### Digital Learning Materials

In addition to learning materials in international platforms (CISCO NetAcad, MIA, Khan Academy), digital learning materials in Albanian have been designed, reviewed (by communities of practice at subject-level) and are being tested for Mesovet.al platform. These include texts, videos, quizzes, exercises, games, presentations, etc. on some topics in 19 courses in Hospitality & Tourism, ICT and Economy. General subject teachers consider it a worthy platform to present occupation-related learning situations.

## Organizational Support



	Benefits	Challenges
<b>students</b>	<ul style="list-style-type: none"> <li>- positive emotions and attitude</li> <li>- improved classroom climate</li> <li>- inclusiveness and collaboration</li> <li>- certification in online courses</li> <li>- integration into the innovation community</li> </ul>	<ul style="list-style-type: none"> <li>- limitation of the learning process during school hours</li> </ul>
<b>teachers</b>	<ul style="list-style-type: none"> <li>- possibility for personal and professional development</li> <li>- working in a comfortable environment</li> <li>- recognition and motivation</li> <li>- part of the community</li> </ul>	<ul style="list-style-type: none"> <li>- time for preparation</li> <li>- not always supported by colleagues in the institution</li> <li>- limited access to infrastructure and materials</li> </ul>
<b>school</b>	<ul style="list-style-type: none"> <li>- Improved quality and learning outcomes</li> <li>- improved image and attraction of new partners</li> <li>- enhanced ICT support and maintenance service</li> </ul>	<ul style="list-style-type: none"> <li>- technical problems, mainly with internet</li> <li>- infrastructure which is not used efficiently</li> <li>- lack of internal policies</li> </ul>



## Lessons learnt

- integration of technology in VET is a gradual process
- the implementation strategy should coordinate the physical, virtual and organizational enabling environment, with teachers support
- teachers are fundamental to the design and application of blended learning
- industry level training enhances teachers' expertise and quality of teaching materials
- technology does not replace, it complements face to face learning
- infrastructure for blended learning is not expensive, it requires innovative solutions
- communities of practice are good mechanisms for collaboration, material development and knowledge sharing.

## Digitalization and Blended Learning in Vocational Education and Training



### What is Blended Learning?

Blended learning integrates online and face-to-face learning activities that are well planned and convey pedagogical values. This methodology offers the possibility of adapting to a set of learning styles, which are often difficult to achieve through traditional learning. The focus shifts to the learner by fostering commitment, satisfaction, and self-responsibility for the learning process.

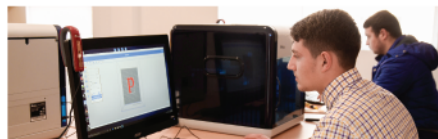
### Why Digitalization and Blended Learning are Important to VET

- Prepare students for the future of work, which requires digital and interpersonal competencies
- Make VET more attractive and improve its image through infrastructure and quality
- Individualized approaches are suitable for students with low grades and motivation
- Create opportunities for a virtual learning environment with quality teaching materials
- Teachers are trained with new methodologies and technologies
- Students and trainees learn in more contexts: in the classroom, laboratory, business and online
- Computerized systems offer providers opportunities for management optimization



# The multidimensional approach of digitalization

The processes of integrating technology into teaching are often deficient as they are limited only to increasing access to ICT infrastructure and providing ready-made solutions. Meanwhile, the approach should be gradual and multifaceted.



Physical and virtual infrastructure



Professional development and new practice



Digital learning materials



Organizational support

During the first phase (2016-2019), "Skills for Jobs" project made the following interventions in the framework of the digitalization of VET providers and the establishment of a suitable environment for the application of blended learning.

## Infrastructure in a Blended Learning Classroom

- Removable modular desks
- Smart TV or projector
- Computer for the teacher
- Computers for the students
- Wi-Fi
- Shelves for teaching tools/materials

Aside from technological equipment and internet access, a classroom does not need to be re-conceptualized to host a variety of teaching methods that promote student motivation and teamwork.

Rectangular desks can be very well reorganized; most important is the teacher's willingness and preparatory work for a more engaging and effective teaching process.

The pilot phase requires **1 cart with 25 laptops for 150 students**

## Platforms and systems in use

- **virtual learning platforms:** Moodle, Mesovel.al, CISCO NetAcad, Khan Academy
- **online courses:** Coursera, Udemy, edx, NetAcad, Microsoft Imagine Academy
- **remote communication:** Skype, Lync, Vidyo, ZOOM
- **web applications:** mentimeter, kahoot, papion, Sololearn
- **management information systems:** Vocational Education Management System (VEMS) School, VEMS Center

## S4J CISCO Academy in 1 year (2017-2018)

- **17 certified** CISCO instructors in 3 schools
- **369 students** enrolled in NetAcad
- **66 certificates** on Internet of Things and Packet Tracer
- **18 courses** on IoT; Packet Tracer Linux; IT Essential; Intro to Packet Tracer
- **3 CISCO labs** for training on CCNA
- **Integration of CISCO NetAcad** in school curriculum
- American University in Kosovo – supportive centre for Instructors' training

## Professional development and new practices

Technology will never replace great teachers, but technology in the hands of a great teacher can be transformational.

George Couros

Innovations in educational institutions are accompanied with teachers' professional development, with a personalized context-based approach, offered in different ways, combined with mentoring, systematic but flexible, allowing revision during implementation depending on the progress or attitude of the beneficiaries, in this case teachers.

## Aspects of digitalizing the VET Teacher profession

- ICT in education
- Curriculum and evaluation
- Digital learning materials
- Teaching in certain industries in which occupations are digitalized
- Pedagogy and digitalization
- Platforms and ICT instruments
- Organization and administration
- Inclusiveness
- Self-development, exchange experience and improve new practices.

**333 teachers supported** during 2016-2019

## Industry trainings

- 3D printing
- Energy efficiency in buildings (HVAC)
- Hospitality in hotels
- Technological solutions for accounting
- Safety at work
- Insurance Industry
- Smart Home
- Tourist guides
- Electric Vehicles
- CISCO Instructor

## Mentoring

- individualized
- intensive through visits in the classroom and monthly meetings
- sustainable
- focused on teaching pedagogy and actual situation.

## The Continuing Professional Development (CPD) model



## Physical and virtual infrastructure

Blended Learning Classroom

Advanced Labs

Wi-fi & Supporting Infrastructure

Maintenance and User Support

Computer Equipment

Virtual Learning Platforms

Information Management System

Common Learning Spaces

2016 - 2019

**876** computer equipment  
**24** blended learning classrooms

**11** common learning spaces  
**9** advanced labs

**6** schools with Wi-Fi access  
**6** schools with support services