EfVET Virtual Workshop
WS1 VET 4.0

5.11.2020
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Moderators: Kari Puumalainen & Vibeke Holtum Nørgaard

• Kari Puumalainen:
  • EFVET Steering committee member, a national delegate of Finland
  • Director of Ylä-Savo Municipal Federation of Education and also the principal of Ylä-Savo Vocational College
  • Worked in manager & director positions in VET sector and companies about 25 years

• Vibeke Holtum Nørgaard
  • EFVET Steering committee member, a national delegate of Denmark
  • Head of International Relations at Technical Education Copenhagen
  • Vibeke has worked with education and internationalization for more than 25 years nationally and internationally in various ways, from student and apprentice exchange, staff development through international experiences, project- and partnerships, expert role and during the latest years strategic implementation of internationalization in the school and educational export.
Unleash your skills

Welcome by Joachim James Calleja and Intro about workshops of the day

Common session for Workshop 1 - VET 4.0
Kari Puumalainen / Vibeke Nørgaard

Subgroup 1: Sustainable Globe/ From Global to regional
Chairperson: Katriina Lammi / Emmi Bani

Subgroup 2: Group 2: The New Normal Boosts Society 5.0
Chairperson: Alicia Miklavic / Jasmina Poličnik

Subgroup 3: Technology
Chairpersons: Unai Ziersolo / Antonio Perez

Subgroup 4: Resilient organization
Chairperson: Els de Waard / Ineke de Graaf / Peter Stolk

MS TEAMS sessions

Common session for Workshop 1 - VET 4.0
Kari Puumalainen / Vibeke Nørgaard

Wrap up and conclusion by rapporteurs and EFVET president

ZOOM session

ZOOM session

ZOOM session

ZOOM session
One definition of Industry 4.0 (KPMG): Industry 4.0 (Industry 4.0, i4.0) is a term used globally to describe an ever-expanding entity of objects, Internet of Things (IoT)-based technologies, artificial intelligence, augmented reality, advanced analytics, and advanced automation.

Industry 4.0 is not just about a particular technology. It is about doing business and its performance, catching up with and gaining competitive advantage. The next challenge is how to find pragmatic and effective ways to make products and deliver services even better, faster and safer, and more responsibly, and how we can develop completely new products and services - and thus generate broad added value for your investment and create a sustainable competitive edge.

This opens up opportunities for organizations to reflect on key challenges such as:

- Is our operational model appropriate?
- How can we increase our market shares?
- How can we improve productivity without increasing costs?
- What new services can we develop?

The Fourth Industrial Revolution is now underway and nobody knows exactly what it really means and how far its impact will extend.

Subgroup 1: Organisational change
Subgroup 2: Technological change
Subgroup 3: Global Change
Subgroup 4: Societal Change
Subgroup 5: Industry change

What are the main trends concerning leadership, management, work models, etc.?>
How they change the way we should work in the colleges

What are the major changes in technology and what are the effects in Vocational...?

What is happening in global scale and how change will change teaching (big things)

What are the main changes in society and how they change learning ➔ how they change colleges and VET.

What are the main changes in industry and how they change VET

All together
How the profession of the teacher will/should change
How we ensure quality of trainers? How it affects to our work models and our colleges / VET system.

Combining the proposals and findings. Discussion about the findings and proposals ➔ common understanding!

EfVET policy paper: “Vocational College 4.0”

Azores conference 2019
EfVET virtual Conference 2020

2021
When it’s the best time to make big changes in your own college?

• When the external changes are big enough
• In extreme situations we can develop something new,
  • which in normal situation would be impossible

• Some examples:
  • Attitudes:
    • In old normal:
      • Cooking, welding, house building, ... can be only taught in physical world (with the teacher or instructor)
    • But in new normal:
      • Those subjects can be taught via eLearning solutions
        • But not in the same way as before

• COVID and education / VET in Europe
Covid is also a chance for change

• Covid is a horrible virus and it has a lot of negative effects on people and countries

But

• Tough times also provide an opportunity to reform things quickly

• In Finland (like in many other countries in Europe)
  • We wouldn’t have a large scale test how to use eLearning solutions in VET
  • We wouldn’t have had a change of attitudes towards teleworking
  • We wouldn’t have got a boost of new skills of teachers (concerning eLearning)
  • there wouldn’t be possible to invest in eLearning solutions in such a short time
  • we wouldn’t have been so interested in the relationship between teaching and learning outcomes

• All these things has been done because we hadn’t other possibility
  • Teaching has not been interrupted at any school level in Finland
  • Several teaching methods has been tested after March 2020.

• In VET is unlikely that we would go back to the former teaching model
  • Of course the best parts are returned but all kind of hybrid models are “the new normal”
Developmental leap

- We should look at things according to what we want to achieve

- Not according to how the things have been done in the past
A quite simple example

How to travel from Iisalmi to Brussels for EfVET SC Meeting? (before COVID)

Best route (shortest time): travel time in one way 5 hours
  Iisalmi-Kuopio-Iisalmi (by car)
  Kuopio – Helsinki – Brussels – Helsinki – Kuopio (by plane)
One night in hotel + meeting time + waiting time: 24 hours
Total time: about 48 hours

Best route (cheapest): about 9 hours in one way
  Iisalmi-Helsinki-Iisalmi: by train
  Helsinki – Copenhagen – Brussels-Copenhagen-Helsinki-Kuopio: by plane
Two nights in hotel + meeting time + waiting time
Total time: about 60 hours

Best route (best experience): about 2 weeks
  Iisalmi – Brussels-Iisalmi: by boat
Total time: about 2 weeks

What is the purpose of the meeting?
  ➔ To discuss and make decisions of certain issues concerning EfVET

OnLine meeting
  Travel time: 0 hours
  Duration of the meeting 3 hours,
  Total time for meeting 3 hours.
Of course

• In Online meetings we don’t have so many positive side effects as in normal meetings

• **But if our target is only to make decisions**, then the online meeting is the best choice.

• **If we have also other objectives** in our meeting then the ”normal” meeting can be a right choice
  • Online tools has also their limitations
  • We need also time for team building and discussions
Second example: A Traditional way of pair-teaching pedagogy

Teaching session (pair-teaching model) in a picture:
- Two teachers
- Students (about 20)
- Big classroom (and empty seats)
- Chairs
- Whiteboard
- Teacher and students in the same place at the same time
- “A Teacher is speaking, almost all students are listening”
- Another teacher is waiting her turn to speak

Benefits:
- Tested model (long history)
- Easy to operate
- Possibility to meet other people
- Etc ...

Cons:
- “My class” – “my students” -ideology
- Students are studying mainly at the same pace
  ➔ Cost / student is quite high ➔ Financially quite expensive model (two teachers + 20-30 students)

Unleash your skills
eLearning + new way to organize pair-teaching

• Same amount of teachers, but they have different tasks with same students
• Students can have individual guidance or group guidance
• Teachers and students doesn’t have to be in same place at the same time
• There can be much more students than in one classroom could be (with the help of new technology)
• LMS (Learning management system) can offer new possibilities to individual guidance
You can study with your own schedule
Cost / student is lower than in a traditional training
  • Costs of the teachers are the same as previous
  • Cost of the technology is higher than before
  • Costs of the classrooms are lower
  • And there can be more students / teacher
Trend of e-learning

E-learning, European Union (% of students)

Source: Eurostat

- Using online learning material
- Communicating with instructors or students using educational websites/portals
- Doing an online course

Unleash your skills

6.11.2020 12
Working in 4 groups

- **Group 1**: Sustainable Globe/ From Global to regional
  - Chairperson: Katriina Lammi / Eira Bani

- **Group 2**: The New Normal Boosts Society 5.0
  - Chairpersons: Alicia Miklavic / Jasmina Poličnik

- **Group 3**: Technology
  - Chairperson: Unai Ziersolo / Antonio Perez

- **Group 4**: Resilient organization
  - Chairperson: Els de Waard / Ineke de Graaf / Peter Stolk
Working in groups

• **Question for all subgroups:**
  • *Do you anticipate future in your own organisation / what is the situation in your country (concerning other VET organisations)?*
  • *Other questions in subgroups*

• 50 minutes time for discussions

• Chairpersons are moderating discussions

• Findings are written to **Jamboard**
  • [https://jamboard.google.com/d/1Ge62mbafRb64ncPfKJ0O18YvwGtxnpq2W_rgeleUo4/viewer?f=0](https://jamboard.google.com/d/1Ge62mbafRb64ncPfKJ0O18YvwGtxnpq2W_rgeleUo4/viewer?f=0)

• **Coming back to common session (zoom)**
  • Presentations to others (5 min / group)
    • Findings + discussion
  • End of session
Please join your subgroup

- Before joining, **please mute your microphone in Zoom session!**
- After 50 minutes, join this ZOOM session again
Thank you!

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