EQAVET Peer Learning Activity on 'Quality Assurance in Centres of Vocational Excellence (CoVE)'

Online workshop on 7-8 October 2021

Project story factsheet: European Centre of Vocational Excellence in Microelectronics (ECOVEM), Bulgaria

European Centre of Vocational Excellence in Microelectronics (ECOVEM)

Project information

The project will establish a European Cooperation Platform of Vocational Excellence in Microelectronics to tackle the challenges of digitalisation, artificial intelligence, green technologies, gender equality in technology, and the integration of migrants. It will implement innovative instructional approaches towards life-long capacity to self-regulate learning, hard skills and soft skills using the ecosystems-based theoretical models and performance support systems.

The project involves CoVEs in iVET and in cVET, industrial associations and companies, Organisations working on social inclusion and reintegration: VET provider of training for immigrants and the European Association of Women in Technology, National and Regional Authorities: CIMEA which developed and maintains the Italian Qualifications Framework and participates in the work of the Council of Europe Group of National correspondents for QFs and European Association of Carrier Guidance.

Approach to quality assurance

- Skills/needs analysis of labour market – continuous survey and analysis of job offers in the sector; results analysed every 6 months
- Collaborative development and implementation of courses: involvement of professionals from enterprises in teaching; work-based training
- Implementing new teaching methods: project-based learning; internet-based performance support systems; life on-line teaching for interactivity
- Tackling non-discrimination and social inclusion in cVET focusing on the gender dimension of employability in the sector and VET for immigrants
- Motivation and regular re-training of teachers and trainers
- For rising quality of training courses towards sustainable development a training module in green and circular economy for each VET curriculum in microelectronics and entire curriculum in "green microelectronics"
- Development of a database with best practices in VET

Which QA instruments have been used (at provider level or for the network)?
Documents analysis (skills needed in job offers, study of the EC recommendations, publications in QA of educational and HRD systems)

- Labour market survey for skill needs analysis
- Interviews with industry representatives, teachers' association, with policy makers
- Questionnaires for expectations and satisfaction of trainees, teachers, employers
- Observation for effectiveness of the training
- Expert review of pedagogical issues

- Peer review of contents
- Knowledge tests for assessment of knowledge outcomes
- Performance tests for assessment of skills and competences

Which EQAVET indicators have been used for quality assurance

- Responsiveness to labour market needs (indicator 9) – in progress
- QA knowledge and skills of all actors in VET (indicator 1 indicative indicator – planning)– in progress
- Training of teachers and trainers (indicator 2 indicative indicator – implementation) – in progress
- Quantitative (numbers of trainees attending indicator 3 VET, women in microelectronics education, immigrants trained, no. of work-based placements) and qualitative (learning outcomes achievements, attitudes and satisfaction of learners and teachers) indicators for the implementation of courses indicator 4 – to be dealt with on the next stages
- Employability of VET alumni (indicator 5) – to be done
- Schemes to disseminate the microelectronics achievements in digitalisation, green energy, robotics, space technologies and medicine to raise the attractiveness of VET (indicator 10) and microelectronics through open days, international schools and competitions.

Strengths and challenges

Strengths:

- Involvement in the consortium of different stakeholders: iVET and in cVET providers, key industry stakeholders, organisations working on social inclusion and reintegration, national and regional authorities;
- Internationalisation of VET and learning from good practices of others;
- Involvement as external QA committee of associated partners from industry, other CoVEs;
- Collaboration with national policy makers.

Challenge:

- Teachers and other actors in VET are not familiar with QA and evaluation of educational systems and programmes; training on QA is needed. We have only planned training for teachers on innovative teaching methods and techniques, but more training in QA is needed.
- How to follow the employment of trainees and the results of the training on the workplace of alumni of VET.

Lessons learnt

Training in QA is crucial.

Next steps/ future developments

Training in QA, involvement of all stakeholders and continuation of good practices of regular analysis of labour market needs, analysis of satisfaction and attitudes of

learners, teachers and employers, improvement of processes and products according to the feedback obtained and continuation of the cycle of planning, prototyping, testing, improving, implementing.

Further information

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Useful sources and resources (link to project's website or related publications):

Ecovem.eu