



EMEU ERASMUS+ Key Action 2 Project Newsletter

EMEU exceeds expectations in 1st project year

The Engineering Mobility in Europe (EMEU) project has exceeded expectations after one year into the project. Partners have produced and offered more study modules than aimed at and already more students than estimated have benefited from attending modules abroad in an EMEU partner country.

The students' responses have all been very positive sparking off much interest from new students and potential new partners. All EMEU partners are now seeing the benefits of the impact the project is starting to have on staff, students and their educational programs.

Aims of the project

The EMEU partners aim to create 40 study modules in total for Engineering and ICT.

These study modules comprise theory, hands-on activities and experiences in industry. Students are also encouraged to stay on after the module to gain work experience.

Finally, the EMEU project aims to create functional assignments for virtual

communication between students and staff in order to offer as many students as possible an international experience. The sharing of good practices and the modules have led to a great interest from new partners that would like to participate and thus expand their partner network across Europe.

All project information including the modules on offer at present is presented on the EMEU website: <http://EM-EU.EU>

In this second Newsletter the EMEU partners describe their experiences so far in the 1st year of the project:

Bridgwater College, UK. Jon Harding, international coordinator at Bridgwater College, UK, says 'We have offered a cabinet making course to two students: Tannile, from Finland and Jim from the Netherlands.

They completed a range of skills including hand skills, problem solving skills, and planning skills. The module set them a real challenge. They had to complete a trinket box, which needs very precise hand skills'.

Important events in 2015

10-13 May 2015

EMEU project meeting 2, Bilbao, Spain

17-20 September 2015

EMEU project meeting, London, UK

2 September 2015

GGTV crew films EMEU project in Heerhugowaard, The Netherlands

22 September 2015

EMEU teams present project at EFVET conference on Cyprus

7-10 October 2015

ICT and Cabinetmaking Teams from Intercompany Training Centre, Slovenia, visit Horizon College

9-13 November 2015

3rd EMEU meeting in Kuopio, Finland

1 December 2015

ROC Horizon College and ROC ID College introduce EMEU project to Dutch Minister of Education during Erasmus+ Charter Award Event

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Jim from ROC Horizon College showing off his work at Bridgwater College



Taneli from Finland at work

IES (ITS) Construcción, Bizkaia. Carmen Romero Martin, international coordinator: 'Construcción Bizkaia offered a bricklaying module called *Execution of different types of brick bonds*, and 6 students visited us: Mitchell and Kevin from ROC Horizon College (The Netherlands); Ville and Milad from Jyväskylä College (Jyväskylä-Finland); and Arttu and Elmeri from SAVO College (Kuopio-Finland).

The students learnt typologies and processes to execute different types of brick bonds in a realistic context which helped them to achieve the module's objectives. Furthermore, they spent some hours in the classroom using media and plans to increase their knowledge of the subject. They attended English classes with our students and visited a building site where Finnish students did their training'.

From the beginning IES students were involved in making the partner students'

experiences easier, collaborating and helping them, solving the different doubts related to the job in the workshop. They were very keen on these new schoolmates that they worked with for a couple of weeks, so hosting foreign students was a very good experience for all students involved; it helped them to open their minds to other cultures.



Outdoor construction activities at IES Construcción, Bilbao, Basque Country

Carmen continues: '2 of our students from the Construction Cycle, Julen and Itziar, travelled to SAVO College in Kuopio, Finland, in April 2015 to take part in the module *Erecting a timber frame for a small house*, during two weeks. They learnt about the Finnish building systems and got in touch with the culture and customs of the country. Their experience has been very positive and has stimulated their schoolmates to improve their English in order to participate in the EMEU project. I'm very happy our college is involved in this project'.

SYDDANSK ERHVERVSSKOLE, Odense, Denmark. William Wernay Lynge from SDE reports: 'The electrical department at SDE College, has developed a KNX module, and is in the process of developing the 2nd EMEU Module. We have been investigating the possibility of inviting our plumbers department into the project. We have had 3 students, participating in the Electro-pneumatic module in January at BSFT in Munich, and there will be 2 students participating in the PLC module, also in Munich in October 2015'.

XABEC, Valencia, Spain. Javier Perez informs us that Horizon College student, Tom, performed his modules tasks outstandingly well.

The technical learning schedule included:

- Pneumatics
- Industrial Electricity
- PLC
- SCADA and HMI

'In the first stage Tom familiarized himself with the theory, tools and practical tasks that were required in this module. Tom showed ambition and energy doing even more than was asked from him.



Tom working on his project at Xabec in Spain

In the second stage, Tom built a prototype: 'he assembled and disassembled parts, checked and repaired, and finally modified the software and the supervision system. All the module's learning outcomes were achieved in that way'.

Tom was sharing the workshop with another student from The Netherlands and with the XABEC students. They could share knowledge, skills, competences, and learning methods'.

Film crew shoots at ROC Horizon College, The Netherlands. For half a day the cabinet making workshop run by teachers Aster de Vos and Paul Gunneweg, changed into a real film set. The GGTV film crew had been asked by the Dutch National Agency to film the EMEU project and luckily Matt and Nadia from Bridgwater College were just finishing their cabinet making assignments. Nadia and Matt were very positive about the module results and claimed that every student who is offered a chance to study and work abroad like they have, should jump at the opportunity. It's been a wonderful experience they agree, vocationally but also socially; surviving riding a bike in a country swamped with cyclists, is a feat!



GGTV at work with Nadia and Matt

'It's quite a gift from our National Agency' states Frans, 'and naturally we would very much like to express our gratitude, also on behalf of all EMEU partners. We are looking upon this gesture as a recognition of the quality of the EMEU project. In fact it encourages us even more to transfer the EMEU project format to other vocational sectors in a new Erasmusplus KA2 project, EMEU4ALL in Spring 2016'. Horizon College has sent and/or received students from Construction, Mechanical Engineering, Cabinet making, ICT and Installation Technology.

ROC IDCollege, Gouda, The Netherlands Bert Schuilingh, international coordinator: 'We have developed two modules in



Matt showing his finished products

Engineering and ICT, but unfortunately we have not been able to send any students yet. Engineering and ICT have been in the middle of a major renovation of workshops. Once the new facilities have been completed, we will make an extra effort to promote the EMEU project, because we fully believe in the aims of the project'. IDCollege is also an active member of the successful AUTOMOVET network which develops study modules for automotive students: <https://www.youtube.com/watch?v=sCGkw037aGk&feature=youtu.be>

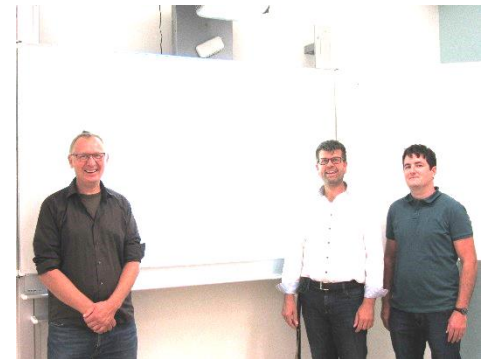
Aarhus Tech updates the EMEU website

Louise Okon Willie, international coordinator in Aarhus, is the webmaster of the EMEU project and she provides regular updates of the website. She says: 'Initially we aimed the website to be for students only; gradually, however, also owing to interest from external parties, we decided to publish information on the website which is relevant for EMEU partners and new partners. This is easier than using more sources of information!' The Team ICT at Aarhus Tech has just sent two students to Horizon College in Purmerend.

BSFT München, Germany. Markus Müller, international coordinator at BSFT: '3 teachers from Berufsschule für Fertigungstechnik (BSFT) in Munich prepared the module 'Industrial

Automation, advanced PLC applications with TIA'.

In October 2015 the BSFT expects 16 participants from 5 EU partners for a specialized module in automation technology. 7 German students will host 9 students from Finland, Holland, Denmark and Slovakia for 3 weeks inschool and in their companies (MAN bus and truck, Yaskawa, BMW, GBN systems).



Teachers from BSFT: Mane Schauhuber, Markus Müller. Philipp Schott

The Industrial Automation PLC module is fully booked as it has been for the past six years – The module is indeed one of the 'bestsellers' of the Munich school for vocational education in manufacturing technology. Markus: 'I think the attractiveness of our modules is based on the combination of school based learning in well-equipped classrooms with competent teachers and the experience of learning and training in companies with high technological standards, rounded up by an attractive cultural program'.

SAVO College, Kuopio, Finland. Jaana Räsänen, international coordinator of SAVO College: 'After the kick-off meeting in Hoorn, the module description template was made according to ECVET principles. The learning outcomes should be easy to fill in and understandable for the EMEU partners and their students. The Kuopio teams launched 3 modules in construction, building maintenance and automation technology. Two modules

were tested during the spring term 2015. The construction module in ventilation is offered in November 2015. After the Bilbao meeting, the module contents and expected learning outcomes were checked thoroughly'.

Testing modules' Automation Technology students from Kuopio attended the Electro-Pneumatics module in Munich in January 2015. The module was a success, the students claimed!. SAVO College teacher Eino agrees: 'I've been learning from the 'masters'. In addition, two construction students familiarized themselves with bricklaying in Arrigorriaga, in the Basque country with Dutch and Finnish students from Jyväskylä.

Our college hosted two different groups during Spring 2015. 2 brave Basque students defied harsh Finnish weather conditions and even had a dip into a Finnish lake! Of course, the main reason was attending the construction module. They built a wooden shed under guidance of construction teacher Kari. The Automation module was tested in April by 4 German students from BSFT, München. The students fed back to the college that the *most* interesting part of the PLC module was robotics. We are intending to offer the second automation module related to robotics'.

ECVET and Quality Assurance Jyväskylä College (JAO), Finland

Rea Tuominen international coordinator at JAO is responsible for the description of all modules' learning outcomes (LOs). 'This is quite challenging' Rea claims, 'but it's such a reward to see that the LO descriptions are becoming more and more transparent. This is important for assessment and validation of the module. Already we see that using ECVET is mutually beneficial for partners and that it creates the trust between the hosting partner who tests the module and the sending partner who validates the results'.

Bridgewater College is responsible for the Quality assurance procedures. Questionnaires for students and staff

are made available online and an assessment sheet from IES (ITS) Bizkaia has been adapted to describe the final results of a module in learning outcome terms.

Potential new partners in the EMEU project



ICT and Cabinet makers from Slovenia

The EMEU partner network has agreed that new partners can join after 1 year into the project. After all, introducing new partners means providing support by the college that introduces the new partner. The EMEU project attracts much attention; teams from within the EMEU partners and colleges from EU countries have enquired whether it was possible to join the network. Potential new partner teams ICT and cabinet making from Medpodjetniški Izobraževalni Center, Nova Gorica, in Slovenia, have just paid a return visit to Horizon College. After two whole days of workshop and company visits and a serious evaluation, both parties agreed that cooperation within the EMEU project is much welcomed by both colleges.

At the EMEU Kuopio meeting in November 2015 an inventory will be made of potential partners.

EMEU project Year 2 In year 2 of the project there will be a special main focus will be on developing virtual cooperation activities amongst the partners. There are many ways in which students can develop their skills together; it's not always necessary to be in the same place physically. The most important condition, however, is that there need to

be reasons for communicating together at a distance. Therefore we will also need to look closely at what virtual communication means in industry. Finally the learning environment should provide ample support to staff and students that make use of modern communication tools.

EMEU PARTNERS 2014-2015

ROC Horizon College, The Netherlands

BSFT, Germany

Aarhus Tech, Denmark

ROC ID College, The Netherlands

XABEC, Spain

Jyväskylä College, Finland

Syddansk Erhvervsskole, Denmark

Bridgewater College, England

SAVO College, Finland

IES (ITS) Construcción Bizkaia

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EMEU PROJECT CONTACT PERSON

F.W. van Schaik

ROC Horizon College

Kruseman van Eltenweg 4

1817 BC Alkmaar, NL

f.w.vanschaik@horizoncollege.nl

T: +31 (0) 653373170

Project Website <http://em-eu.eu>

learning outcomes which will help accreditation and validation of the competencies gained abroad.

Applying for partnership If you are interested, then please send a mail to the project contact person: Frans W. van Schaik.