

European Education for Electro-mobility

Newsletter #1
October 2014

Leonardo da Vinci

supports mobility and innovation projects in vocational education and training and further education. Individuals can do a work placement or other stay abroad – and thus broaden their knowledge and skills. European cooperation projects between institutions and interest groups in vocational education contribute to better quality, attraction and innovation in the European vocational education systems and practices.

Aims

- ◆ More mobility for people in vocational education and training and in the labour market
- ◆ Better project support for people in vocational education and training
- ◆ Higher quality, attraction and innovation in vocational education and training
- ◆ Improved transparency and recognition of qualifications and skills
- ◆ Support of modern foreign languages
- ◆ Implementation of ICT



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The project „European Education for Electro-mobility“ (EEE) is a Leonardo da Vinci Transfer of Innovation project.

Project number:
2013-1-NL1-LEO05-12228

Lead partner:
Aventus, Apeldoorn,
The Netherlands

The EEE - project

Because of the increasingly stringent requirements with regard to the reduction of automotive exhaust emissions (CO₂ and particulates), the European market-share of electrically propelled vehicles will grow slowly but surely. This will also result in more workshop activities (maintenance and repairs) for this type of vehicles in the automotive companies. The – in the electrically propelled vehicles – used technology is new for the automotive sector. Special high Voltage (300 – 400 Volts) systems are used which can be lethal when handled in the wrong way. Because of this reason, automotive companies/workshops are facing problems in safe maintaining, diagnosing and repairing this type of vehicles, since their staff is not (yet)

competent. This means that current and future automotive technicians have to be trained on this new and dangerous technology.

Based on the search for available learning resources – results of LdV partnerships research (2011-1-DE2-LEO04-07891 1 & 2012-1 E2 LEO04-11732 2) – it can be concluded that there is a great need for training of the current and future (our VET students) automotive technicians and – hardly available training materials – on the subject of safe maintenance, diagnosis and repair of electrically propelled vehicles.

However, there is a solution. Our UK partner (Central College Nottingham) has a number of nationally

recognized training modules available for automotive technicians in the field of safe maintenance, diagnosis and repair on electrically propelled vehicles. By transferring and further development of this – state of the art – innovative training package to our partners we can contribute to the solution of this problem: having skills workers in the field of automotive service and repair on electrically propelled vehicles. This has resulted in the LLP Leonardo da Vinci Transfer of Innovation project ‘European Education for Electro-mobility (EEE)’.

Visit our website:
<http://eee-leonardo.eu>



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EUROPEAN UNION DISCLAIMER

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AVENTUS

MBO (Middelbaar Beroeps Onderwijs) is the abbreviation for secondary Vocational Education and Training (VET) in the Netherlands. VET is the main supplier to the labour market and is often regarded as the “foundation of the economy” and the “backbone of society”. Approximately 40% of the Dutch working population have completed a vocational course to at least a secondary vocational training level. There are currently 630,000 students in the VET sector, 485,000 of them taking part in regular VET courses. The government invests about 2.6 billion euros annually in this sector, which represents approximately 12% of the total budget for education.

Aventus is the school for VET located in Apeldoorn, Zutphen and Deventer. Aventus has a special department for motor vehicle technology (located in Apeldoorn). They are involved in innovative developments regarding sustainable motor vehicle technology. Recently they have started a special minor training for ‘Automotive Technical Specialists sustainable drivelines’ (Dutch highest level: 4). Development of the curriculum for this training is in close collaboration with representatives of the automotive branch in order to implement the newest developments in the sustainable area.

ATEC - Training Academy

ATEC-Training Academy is a non-profit association created in December 2003 by the German companies Volkswagen Autoeuropa, Siemens, Bosch and the Portuguese and German Chamber of Commerce and Industry, with the support of the Portuguese Government.

ATEC offers technical and behavioral training and consultancy services to companies, so that these become more competitive, not only at regional or national level but, above all, globally competitive.

ATEC acts in three main areas of intervention:

- ◆ continuous training of the Promoters’ employees;
- ◆ training of unemployed, namely of youngsters looking for their first job, and
- ◆ training of unemployed adults looking for another job, reconversion or recycling.

With its headquarters located south of Lisbon, in the Volkswagen Autoeuropa Suppliers’ Park and with a delegation in the northern city of Oporto, ATEC has a nationwide reach.



The **Franz-Jürgens-Berufskolleg (FJBK)** is situated in Düsseldorf, the capital of North-Rhine-Westphalia. Combining different educational branches the FJBK has a great variety of students covering all social classes, from near-illiterate refugees to students preparing for university.

The FJBK teaches students in all metal-technical professions, also in specialised classes for the appropriate district. Metal technology is covering a wide range of schooling:

- Automotive engineering
- Industrial / mechanical engineering
- Mechatronics
- Building services

As a partner in the Dual System the FJBK offers vocational education for approximately 2300 students and cooperates with about 700 apprenticeship companies. About 550 students attend different full time courses leading to general qualifications and graduations from class 9 to 13 and up to the advanced technical college certificates (about 300 students).

Central College Nottingham was formed in November 2012. It is the new name for South Nottingham College which merged with Castle College in July 2011.

We run full-time courses for school leavers 16+ and part-time courses for adults and local business.

Did you know?

- ◆ Central enrolls around 4000 full-time and 20,000 part-time students each year
- ◆ The College currently operates on 9 sites across the City with main centres in Clifton, Ruddington, City Centre and Beeston

We offer a range of vocational courses in subject areas including:

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| - Art & Design | - Automotive | - Business & IT |
| - Care & Childcare | - Catering | - Construction |
| - Electrical | - Engineering | - Events & Hospitality |
| - Hairdressing & Beauty Therapy | - Photography | - Public Services |
| - Science | - Sport, Travel & Tourism | - Visual Arts |

- ◆ The College employs around 1000 full-time staff.



RBZ-Technik — Kiel

The Regional Training Center for Technology (RBZ-Technik) in Kiel is certified as a European school with more than 2600 students and 130 teachers in the areas of technology. The school focuses on intercultural communication within European projects, self-dependent learning structures and multimedia instruction with appropriate promotional.

In recent years, numerous projects were conducted with the help of Comenius and other European programs. The RBZ sees itself as a technology center for vocational education in the region and for the region. The school is located in the state capital Kiel and its position has a significant importance to trade and industry, the institutions of further

education such as college and university.

Our training program includes many different types of education programmes, which are offered as part-time or full-time courses.

At RBZ technology, either professional qualifications or pre-vocational qualifications can be acquired.

CPC Austria GmbH

The CPC Austria was founded in 1998 by the City of Graz, Department for Environment and is now a private company and member of the bit group. The fields of operation of CPC Austria are Consulting, Coaching and (Vocational) Training, Education in the fields of

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|---|------------------------|
| - Cleaner Production | - Environm. Management |
| - Environmental protection | - Energy Management |
| - Renewable Energy | - Eco-Efficiency |
| - Networking | - ECOPROFIT |
| - Transnational environmental and training projects | |

The CPC Austria has specific expertise and experiences in the following areas:

- Environmental Management Systems (EMS), implementing of EMS
- Implementing of ECOPROFIT programmes, international dissemination of ECOPROFIT
- Development of Cleaner Production modules in the frame of EMS
- Training, training and coaching of consultants
- Development and design of specific training programmes for employees of SMEs
- Establishing local, regional and international networks, running of networks



Our partnership is made up of 6 organizations across 5 European countries. In a geographical context the partnership represents European coverage (North-west, Central and South). All partners are currently delivering automotive technology training and educations in line with employer demand.

Each partner will provide at least a Project Coordinator with its own project team and will be responsible for at least one Work Package. Each coordinator will be a member of the steering group and will attend all project meetings (except for project meeting 2) and is also responsible for local recruitment of staff supporting the successful delivery of project aims and objectives.

Each partner is responsible for the collaboration with at least two automotive stakeholder companies for testing of the training package and discussion regarding required learning outcomes and to embed future (foreign) student training possibilities.

Although all partners will be involved in all Work Packages (and responsible for at least one) the approach of each partner will encourage exchange of best practices, cross fertilization of ideas in order to de-



Aventus
De school waar jij 't maakt

Aventus

Apeldoorn, The Netherlands
Project Coordinator
www.ventus.nl



Central College Nottingham

Emtec Colleges Limited

Nottingham, UK
www.centralnottingham.ac.uk



Franz-Jürgens-Berufskolleg
Landeshauptstadt Düsseldorf

Franz-Jürgens-Berufskolleg

Düsseldorf, Germany
www.fjbk.de



ATEC

Quinta do Anjo, Portugal
www.atec.pt



Regionales Berufsbildungszentrum Technik

Kiel, Germany
www.rbz-technik-kiel.de



Cleaner Production Center Austria

Graz, Austria
www.cpc.at

The goal of the project

Currently – within the partner countries – there is insufficient training and education materials available in the field of safe maintenance, repair and diagnosis of electrically propelled vehicles in order to prepare the current and future automotive technicians (our VET students) for this new technology.

Partners motivation is to support the development and delivery to the market of effective and safe training for electrically propelled vehicles (adoption in their curriculum) and increase in the capacity of high quality training provision to facilitate and stimulate growth in green motor vehicle usage throughout the EU.

At the same time (while developing the training package) a significant number of VET teachers and EQF level 4 VET students will be trained. We will also develop a European Reference Profile for Servicing Electrically Propelled Vehicles (ERP-SEP) in terms of Learning Outcomes to promote international VET student training exchange including 'tools' for recognition of gained competences for VET students during their International training.

Target groups

The EEE project supports all actors in vocational education, training and further education, for example

- ◆ people in vocational education and training and in the labour market
- ◆ vocational schools, external educational institutions and educational institutions at intercompany level
- ◆ companies, occupational unions and chambers
- ◆ Social partners and their organisations

EEE—Newsletter #1

This is the newsletter of the LdV project European Education for Electro-mobility (EEE)

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<http://eee-leonardo.eu>

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