

## A GUIDE TO THE SUSTAINABILITY AND TRANSFERABILITY OF THE SCOBE PROJECT

This Guide will outline the necessary procedures for ensuring long term collaborations between vocational educational organisations and the business sector. It is based on the lessons learned from the production and validation of the SCOBE Toolkit and the development of two e-learning programmes in Wind Power.

### ACTIONS AND ACTIVITIES THAT THE WORLD OF BUSINESS AND THE WORLD OF EDUCATION CAN DO TO DEVELOP A TRAINING PROGRAMME.

Initially an effective and enduring working relationship needs to be established. This can be created using the SCOBE Toolkit, a set of tools for ensuring long term and effective collaborations of VET Centres and Businesses. It has two complimentary components [a] the Engagement Box [b] the Business Observatory.

It is key to adopt the SCOBE Toolkit methodology and the templates for action. This will address the mismatch between skills required in the labour market and current training programmes.

- a) The ENGAGEMENT BOX consists of a set of materials and procedures to involve experts of the business world with the creation of a new training programme. It has a range of templates to facilitate the process.

Firstly, create a *dissemination database* of business and employer networks, organisations etc. within the specific technical sector. This would include contacts from the VET sector, schools, colleges and universities with expertise in the appropriate technical area. The participation of technical partners will be crucial, as they represent the target audience.

SCOBE has identified examples of suitable tools for engaging with targeted employers and training experts. NB. This is not an easy undertaking. Most professionals will allocate time to their work priorities, which may not coincide with those of the training project. They will need to be persuaded that the project is relevant and useful to them. Tools for engagement include

personal contact by phone or email, interviews and surveys, networking with other European projects etc

Next, identify *core motivational factors* for the engagement from both business and educators.

[See the SCOBE Motivational factor survey questionnaire template and results.]

The type of motivational factor can be varied according to their field of expertise etc. This survey contributes to the information required to develop a training course fully adapted to the needs of the labour market.

The Engagement Box helps to identify technical and educational experts, enabling the successful implementation of the other Toolkit component – the Business Observatory.

b) The role of the BUSINESS OBSERVATORY is to establish a set of procedures for systematically defining:

- Global and national relevant trends and scenarios in a technical sector [For SCOBE it was the field of renewable energies- but it could be for any technical business sector]
- Pedagogical specifications for the training programme. [see the *ECVET guidelines and templates*]
- Technical specifications for the training programme tailored to market needs

The Business Observatory identifies skilled-labour deficits. It structures the information gathering process, combining academic research with focus groups.

Practitioners will: -

- Collect information about current employment trends, consulting technical and expert literature.
- Conduct surveys amongst business experts engaged with the project.
- Validate the findings by technical partners.
- Define pedagogical specifications by VET partners.
- Compile technical, pedagogical and market trends findings into a single report.

[See the *SCOBE Business Experts Survey as an exemplar*].

The Business Observatory relies on the relationships that the Engagement Box establishes between the worlds of education and business. Both tools should be used, in sequence, in order to reach the desired objectives. This is a reciprocal process. Technical experts, from the business world, will be

informed about ECVET guidelines and pedagogical procedures; educational professionals will be supported in technical matters. Guidelines will also establish quality control procedures

Finally, after completing all the activities in the SCOBE Toolkit, partnerships will be able to identify a target group of learners – then collaboratively design and create training curricula, materials and tools.

*See SCOBE curriculum design templates and the ECVET Unit templates.*

These templates follow ECVET guidelines which ensure pedagogical quality and transferability.

The SCOBE training curricula has been created for delivery via an e-learning platform.

*See the SCOBE content template unit for e-learning.*

*NB. The success of the above information gathering process depends on an effective dissemination campaign*

The Engagement Box provides guidance on how to define the communication strategy, which includes the following sections

- Definition of communication goals.
- Communication strategies depending on core motivational factors.
- Message definition.
- Collaboration workflow templates.
- Templates for agreements of the terms of collaboration during and beyond the development of new training programmes.

## ACTIONS AND ACTIVITIES THAT THE WORLD OF BUSINESS AND THE WORLD OF EDUCATION CAN DO AFTER HAVING JOINTLY DEVELOPED A TRAINING PROGRAMME

### Sustainability

The SCOBE project has highlighted the importance it gives to sustainability and can be a guide to others. It has been fully committed to the idea of creating contents accessible to as many people as possible. All the intellectual outputs of the project will be available in five languages: English, French, Greek, Hungarian and Spanish for up to five years.

The project's website <http://scobeproject.eu/> will ensure free access to all the project results. Anyone accessing the website will be able to:

- Download the project's outputs in any of the five, partner languages.
- Participate in the two Wind Power E-Learning courses.
- Subscribe to the project's newsletter.
- Access the project news and events.
- Contact project's partners to request information.

The main access points (website and social networks profiles) will remain operational for at least five years.

The e-learning platform will be fully available and interested trainees will be able to participate in the two Wind Power courses for free. Additionally, VET institutions willing to provide the blended learning course, will have the chance to do so by the utilization of the contents and the curriculum freely available on the SCOBE project website.

SCOBE Partners will promote sustainability by: -

- Including the new Wind Power training courses in their existing portfolio, thus broadening their training offer.

- Establishing agreements with local, regional and national VET providers in order to develop new training programmes tailored to the specific local needs
- Obtaining “letters of intent” expressing the commitment of stakeholders to support and promote the utilisation of the project’s outputs after its’ completion.
- Offering VET institutions services for the development of virtual learning platforms, showing them the advantages of using the SCOB Toolkit.

One of the most important actions for future education/business partnerships is to highlight the added value of these collaborations. Training programmes aligned with business needs will lead to substantial benefits for the business sector:

- The creation of a better qualified work force.
- The reduction of initial training costs for new VET students
- The availability of experienced staff, updated with latest technology developments.
- Increased business competitiveness.

Future partnerships would need to create a schedule of agreements and actions. For instance there should be periodic updating of training programmes. Business partners would need to develop ways of involving learners in the work process e.g. internships and work shadowing. Relationships can be further enhanced by experts from both the education and business sectors collaborating in seminars, conferences and workshops.

Businesses can face a highly changing environment, in which workloads and staff availability vary. Therefore business/education agreements should be flexible. Templates with a built-in timeline are crucial. e.g. one-off collaborations; periodic collaborations e.g. monthly, bi-annually or annually.

An extensive dissemination campaign will assist the sustainability of the project. It will engage participants in the project activities and will also emphasise the validity of the methodology. It will boost the use of the SCOB Toolkit – the key to a successful implementation of the methodology.

## TRANSFERABILITY TO OTHER EDUCATIONAL AND TECHNICAL FIELDS.

The versatile SCOBE Toolkit was validated in the field of Wind Energy, but the methodology has a universal application. There is no reason why it cannot be applied in any technical area or at any level of educational vocational training.

It would be a perfect fit for producing VET programmes in other sectors of renewable energies. It could also be aimed at different technical sectors with strong employment potential, such as retail and the fast-growing field of electric transportation. Each case would need to be critiqued to identify what adaptations would be required. In some instances, the methodology of the SCOBE Toolkit would be appropriate but the delivery of training programmes may need to be by blended learning that included practical activities in a workshop setting.

Similarly, the SCOBE Toolkit should be adaptable for any VET level setting from school students [from 14+ years] to colleges and universities. However, in mainstream education the key issues would be to do with accreditation of courses and how this fits with funding for mainstream qualifications and finance. It is vital to have a financial structure that allows staff time and support for implementing the Toolkit methodology. The issues of funding and accreditation etc. will vary across the European Union and so solutions would need to be negotiated locally.

The SCOBE toolkit methodology (including the engagement box and the business observatory) can be used in in other sectors of renewable energies including:

- A) Creation of VET programs regarding **the use of renewable energy technologies (RET) in agricultural greenhouses**. Various mature, reliable and cost-effective RET can be used in agricultural greenhouses providing heat, cooling and electricity to them and the scientific and technical staff working in this area needs updating of its knowledge and skills regarding these fast evolving technologies.
- B) Creation of VET programs regarding the use of locally available **renewable energy sources (RES) in hotels and other tourist accommodation**. Various RET are mature, reliable and cost-

effective and they could be used in tourist accommodation providing heat, cooling and electricity while Academic Institutions can provide the experts required for the preparation of a VET program in this area.

- C) Creation of VET programs regarding **the use of solar photovoltaic (solar-PV) systems in buildings**. Current advances in solar-PV technologies require the updating of the knowledge and the skills of the scientific and technical staff working in this field while Academic Institutions can provide the scientific and technical experts required to develop this VET program.
- D) Develop VET programmes to focus on transferable skills in renewable systems. For example, there is a crossover of skills in the sectors of solar farms, anaerobic digestion plants and the wind industry, especially when AD plants are used for the production of gas for use with generators. Technicians from the wind industry would be ideally suited to service the generators attached to the AD plants as the technologies were similar. The only difference is the fuel source.
- E) Develop VET programmes that offer training extending existing renewable technologies. i.e. Anaerobic Digestion facilities in Norway, Sweden and Denmark are being used for district heating systems, providing fuel for municipal transport vehicles, domestic properties and petrol stations.
- F) Creation of vocational training programs in relation to the use of renewable energy technologies (RET) in irrigation wells. Most of the irrigation wells are located in remote areas where the electricity grid does not reach, this leads to the installation of electric generators in these wells that generate electricity from diesel, emitting large amounts of CO<sub>2</sub>, while local academic institutions have the scientific and technical experience to contribute to the development of VET programs in this area, explaining in a practical way how to install photovoltaic panels that provide electricity in these wells without emitting CO<sub>2</sub> or connecting to the electricity grid.
- G) Creation of VET programs in relation to the use of solar photovoltaic energy on farms. A large number of farms in the autonomous community of Aragon, especially in the Monegros area,

are located in remote areas which are not reached by the electricity grid, this leads to the installation of electricity generators on these farms which generate electricity from diesel oil, emitting large quantities of CO<sub>2</sub>, while local academic institutions have the scientific and technical expertise to contribute to the development of VET programs in this area, explaining in a practical way how to install photovoltaic panels that provide electricity on farms without emitting CO<sub>2</sub> or connecting to the electricity grid.

- H) Creation of FP programs in relation to the use of solar thermal energy for air-conditioning on farms in remote areas. A large number of farms are located in remote areas where the electricity grid does not reach, this means that they end up installing equipment that works with diesel oil to air-condition these areas, emitting large amounts of CO<sub>2</sub> in the process, while local academic institutions have the scientific and technical expertise to contribute to the development of VET programs in this area, explaining in a practical way how to install solar thermal panel systems that together with the installation of underfloor heating can weatherize the target area without emitting CO<sub>2</sub> or connecting to the electrical grid.