

Leonardo da Vinci-partnership
Sustainable Quality in Vocational Education and Training

Quality Area 15: Sustainability in VET

Introduction.

The European Commission's Lifelong Learning Leonardo Partnership Project, **Sustainable Quality in Vocational Education and Training**, is seeking to produce a tool which VET providers can use easily in peer assessment to ascertain their progress in this area.

What is sustainability in VET?

There is a wide range of interpretations of "sustainability in VET" depending on the cultural, organizational and personal context. And there are different stages in the social, economic and even legal progression in European countries. Due to these facts the project partners have different interpretations and perceptions of sustainability in VET. These include:

- VET that meets the needs of the present without compromising the ability of future generations to meet their own needs.
- The process of combining education with economic concept and ecological concepts by planning the right strategy in a VET organization, implementing it and evaluating it.
- Sustainable development means preserving the viability of the globe for generations to come and includes both environmental matters and human capital, e.g. how we treat each other. We should not over-exploit nature or other people.
- The ability and resources to maintain and develop relevant learning for everyone at all times.

Background to the project.

For the background to the project, see Annex 1.

The Tool

It is suggested that the tool could be used in different ways:

- as a self-assessment-tool by staff and executives of the VET-organization themselves,
- in Peer Reviews by external persons to the organization.

The tool consists of a number of possible criteria associated with sustainability, each with a number of potential indicators. To demonstrate that you have met the indicators, a number of potential sources of evidence are also suggested.

When you use the tool for the first time please consider that the mentioned criteria and indicators are a collection of possible aspects that can be taken into account concerning sustainability in vocational education and training. It is not necessary to comply with all of the criteria. The tool could be seen as one assisting in organizational self-development.

Quality Area 15: Sustainability in VET

Criteria	Indicators (examples)	Sources & Evidence
Planning and Decision-making	<p>Specific personnel charged with interpreting and integrating European, national, regional and local policies into the organisation's planning process.</p> <p>The organisation has explicit and specific ethical policies for sustainability informed and coherent with its organisational vision.</p> <p>A network of stakeholders is established and are consulted as part of the planning and decision-making process.</p> <p>Ownership of the plans is ensured throughout the organisation through effective internal communications.</p>	<p>Organisation's strategic documents</p> <p>As above</p> <p>Consultation documents</p> <p>Departmental Action Plans</p> <p>Internal communications with staff and students</p>
Finances	<p>Expenses and revenues are well balanced.</p> <p>The VET-provider has financial reserves for at least 6 to 12 months depending on the size of your organization.</p> <p>Sources of income are diversified: customers, public funds (governmental or EU), membership dues, private donations, charity donations.</p>	<p>Organisational budget plans</p> <p>Financial balances</p> <p>Financial balance sheet or accounting documents</p>

<p>Curricula</p>	<p>The Senior Management Team communicates to all staff its vision on the embedding of sustainable development into all areas of the curriculum and it gives a mandate to curriculum leaders to implement this.</p> <p>Curricula promote sustainable development including aspects such as environmental responsibility, sense of community, tolerance, equality and prevention of social exclusion.</p> <p>Curricula include values and principles that are the basis of sustainable development: intergenerational equity, gender parity, social tolerance, poverty reduction, environmental protection and restoration, natural resource conservation, and just and peaceful societies.</p> <p>Staff feel that their contributions to the embedding of sustainable development into the curriculum are valued.</p> <p>Curricula mirror the real demand of the labour market and employer needs – sustaining training for the longer term through employer support</p>	<p>Strategic papers Staff bulletins Organisational intranet</p> <p>Samples / Examples from curricula from different areas within VET delivery of the organisation.</p> <p>Samples / Examples from curricula from different areas within VET delivery of the organisation.</p> <p>Staff reviews Staff surveys Interviews</p> <p>Employer feedback surveys. Statistical evidence such as % employed at the end of training</p>
<p>Learning and teaching methodologies</p>	<p>The organisation promotes interactivity and sharing within the learning process to stimulate interest and thus sustainability.</p> <p>Learners and teachers are encouraged to suggest developments in resources and to take part in creating learning objects and processes.</p> <p>Learners and trainers have access to different and reusable learning</p>	<p>Employee survey Teaching concepts with examples</p> <p>Other Teaching materials. Sharing of resources built into staff contracts/ informal agreements Learners’ survey</p> <p>Employee survey</p>

	<p>media and materials.</p> <p>The organisation encourages the use of small learning objects which can be re-utilised more easily in other pedagogical contexts.</p> <p>Learning Materials are developed to common standards to ensure interoperability and migration between different departments.</p>	<p>Institutional data repository Shared data repositories with other institutions.¹</p> <p>Learners survey e-learning action checklist²</p> <p>Teaching materials Repository evidence Evidence of use in delivery</p>
<p>Resources</p>	<p>The acquisition / purchase of products for use in the organisation is based on sound sustainability principles reflecting social and environmental as well as economic costs.</p> <ul style="list-style-type: none"> • For catering regional, organic, Fair Trade and seasonal products are used. • Electrical equipment is chosen for its energy efficiency. • New building are constructed in energy efficient materials. • There are regular checks on use of lighting, ventilation, electronic equipment to ensure minimum wastage. <p>Carbon emissions are reduced through energy conservation measures undertaken in terms of building construction, insulation, regular maintenance / checks and other housekeeping activities.</p>	<p>Organisational Policy Documents</p> <p>Recycled products are used – see invoices. For catering regional, organic, Fair Trade and seasonal products are used – invoices and inspection of goods</p> <p>Inspection of labels on equipment.</p> <p>Detailed construction plans.</p> <p>Internal inspection reports Audit reports</p> <p>Audits take place to measure energy consumption and the report associated with these can be evidenced. Housekeeping schedule in place and available for inspection with regard to energy conservation –</p>

^{1 2}, Fuller elearning action checklist can be found in Annex 2.

	<p>There are waste management system and conservation policies in place (and acted upon) based on the 4R approach: Reduce, Re-use, Recycle, Repair. Decommissioning of redundant buildings takes place with minimum landfill.</p> <p>A Transport Policy is in operation relating to staff and students to further reduce carbon emissions and conserve energy as well as a more pleasant sustainable environment.</p> <p>The Institution has moved or is moving towards the use of Open Source software.</p>	<p>damp, window repairs, etc There are regular checks on use of lighting, ventilation, electronic equipment to ensure minimum wastage and these personnel routines and reports can be evidenced.</p> <p>Invoices show that carbon neutral servers are used.</p> <p>Audit indices showing reduced waste to landfill. Recycling measures documented Use of e-resources instead of paper Bio-diversity can be demonstrated in the grounds</p> <p>Policy available Car-share scheme evidence Cycle storage facilities in place Rent of bicycles is available Public transport discounts can be demonstrated Surveys conducted on staff and students showing awareness of these schemes and their actual use</p> <p>The organisation has a policy of trying to source Open Source software in preference to full commercial software.³</p>
People	<p>There is Human Resource Management team that takes care of the employees starting from the recruitment process, including motivation systems, well-being, equality, gender mainstreaming and salaries.</p>	<p>HR strategy of the organization, HR monitoring documents, well-being at work parameters (surveys)</p>

³ Fuller elearning action checklist can be found in Annex 2

Annex 1. Background to the project.

Introduction

In the past decade, quality assurance and quality improvement have become increasingly important for institutions providing vocational education and training, and for education authorities throughout Europe. Different procedures have been introduced for evaluating quality at the level of VET institutions/providers. They include quality management schemes adapted from the business sector (such as ISO, EFQM, BSC, etc.), inspections and audits by government agencies, and self-evaluation.

One particularly promising instrument of quality assurance and development is Peer Review – the external evaluation of VET institutions/providers by Peers. Peer Review is prevalent in higher education but the use of Peer Review has so far been marginal in vocational education and training. Peer Review can build on quality activities already in place at a VET institution/provider, it is cost-effective and it fosters networking and exchange between VET providers.

The European Peer Review procedure is in line with the principles of the European Quality Assurance Reference Framework (EQARF) and, in turn, also seeks to contribute to the further development of the EQARF. It takes a formative, development-oriented approach and aims at supporting VET institutions/providers in their efforts to offer high quality education and training. The focus lies on the promotion of a culture of continuing quality improvement in an atmosphere of openness and mutual trust that contributes to enhancing transparency and comparability in Europe. Good practice is valued and mutual learning encouraged in a dynamic and motivating process, from which both the VET institution reviewed and the Peers can benefit.

This paper is a result of the Leonardo da Vinci-partnership “Sustainable Quality in Vocational Education and Training” (SustainVET 2012 - 2014). The project supports the implementation of the European Quality Assurance Reference Framework by supporting the use of self-assessment and peer review in the quality assurance process of VET organizations.

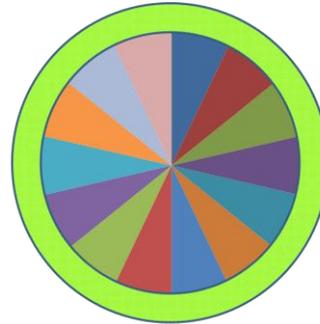
SustainVET intends to develop a new tool for the assessment of sustainability in VET-institutions: The Quality Area 15 (QA15) is a supplement to the Toolbox for European Peer Reviews that has been developed in previous projects. QA15 describes criteria and indicators of sustainability in VET:

- three dimensions of sustainability (economy, society, environment) and
- three dimensions of quality (structures, processes, results).
- criteria and indicators of sustainability in VET in general and in e-VET.

It provides examples how to sustain quality in the mentioned 6 dimensions.

The tool is a supplement to the 14 quality areas that already have been developed:

- QA 1: Curricula
- QA 2: Learning and teaching
- QA 3: Assessment
- QA 4: Learning results and outcomes
- QA 5: Social environment, access and diversity
- QA 6: Management and administration
- QA 7: Institutional ethos and strategic planning
- QA 8: Infrastructure and financial resources
- QA 9: Staff allocation, recruitment and development
- QA 10: Working conditions of staff
- QA 11: External relations and internationalization
- QA 12: Social participation and interactions
- QA 13: Gender mainstreaming
- QA 14: Quality management and evaluation
- QA 15: Sustainability





Annex 2. Elearning checklist and associated tools.

Elearning Action Checklist

Criteria	Indicators (examples)	Action checklist
<p>E-learning is used throughout the institution.</p>	<p>The institution has a strategy that reviews the needs of learners and staff in the utilisation of e-resources in a sustainable and efficient way.</p>	<p>Does the organisation have a strategic plan (long term vision) that incorporates e-learning? The plan would address the following areas</p> <ul style="list-style-type: none"> • What we want to be as an organisation (Organisation’s vision) • Where we are now (Analysis of current position) • Aims and objectives • What we need to do to get there (Development options) • Action plan (all areas of organisational activity) • Review and monitoring procedures <p>Do your staff appraisals include specific references to using e-resources? Which of these does your organisation use for internal communications?</p> <ul style="list-style-type: none"> • Digital Noticeboard • Email • Newsletter • Web site • Social media
	<p>The institution is committed to the more intensive use of scarce resources and materials developed within it through the promotion of</p>	<p>Does the organisation have a “repository” – for example this could be a shared folder or Dropbox, GDrive etc. – that can store e-learning (courses or objects)? (It can be an organisation’s own or shared resource or shared with other institutions)</p> <p>Are these courses or objects able to be retrieved and reused? Are staff encouraged to share their resources with others either contractually or through</p>

	a culture of sharing.	informal agreements? Does it use public shared repositories such as Youtube, Facebook, Tumblr, Flickr etc.? Does the organisation use Creative Commons or something like it? ⁴
Support for e-learning can be demonstrated.	Trainers / teachers and learners are supported in the pedagogical use of e-resources on an on-going basis.	Does your organisation have awareness raising development opportunities provided for staff? Can you evidence these? Is staff able to acquire skills through a range of learning methodologies such as: informal learning from others, planned training programmes? Can you provide evidence of the content of such learning and evaluation by participants? Is staff provided with technical assistance and pedagogical assistance to use e-resources on an on-going basis? Can you demonstrate how this is provided? How do learners and staff evaluate the use of e-resources? Is the evidence kept to improve their use?
	Trainers / teachers and learners are supported in the development of e-resources on an on-going basis.	Do you have an operational plan that focuses on the development of e-resources? Does this plan contains information/policies regarding: <ul style="list-style-type: none"> • Access to the Internet • Access to professional software • Using the organisation's ICT equipment for instruction in the organisation • Security issues (data security and privacy) • Sharing e-resources with internal staff • Sharing e-resources with external partners Does your organisation have a development plan that includes: <ul style="list-style-type: none"> • procurement of digital devices and equipment for teaching and learning? • procurement of specialised professional software for use in teaching and learning?

⁴ Creative Commons is a licensing agreement for the sharing of software. This is US based but has a range of licences to cover most needs. See <http://creativecommons.org/choose/>
There are pros and cons to using Creative Commons (it has a US bias in its legal form). See http://webdesign.about.com/od/copyright/a/creativ_commons.htm

Does your school/organisation allocate resources for e-learning:

- time in the teachers' workload for the development and administration of e-learning?
- Is the amount of time adjusted to the percentage of e-training provided by the organisation?
- Is the time provided by the organisation, for the development of e-learning, structurally embedded in the contract/timetable?
- Do teachers/trainers have a specific budget available for the realisation of e-resources?
- Is this budget regularly revised and adapted to the actual needs?
- Is there staff in your organisation or department responsible for the procurement, maintenance and repair of the digital infrastructure, equipment and software?

	Procurement	Maintenance	Repair
Digital infrastructure			
Equipment			
Software			

Does your organisation provide technical support for teachers during:

- the organisation of online course (access rights, back up, editing rights, accounts)?
- preparation of digital education resources?
- facilitation and communication?
- Assessment?
- building online courses (filling out the course structure with content)?

Does your organisation provide technical support for learners when they use technology specific for VET?

Does your organisation provide facilities with multimedia tools/equipment where trainers/trainers can develop digital resources?

Can teachers/trainers rely on :

- well skilled technical staff?

		<ul style="list-style-type: none"> • dedicated staff to help them with pedagogical questions or implementations? <p>Are teachers/trainers in your organisation provided with training for the use of ICT in instruction in terms of:</p> <ul style="list-style-type: none"> • technical skills? <ul style="list-style-type: none"> ○ audio ○ video ○ web 2.0 tools ○ LMS (learner management systems) ○ collaborative tools ○ other (please specify) • didactical skills? <ul style="list-style-type: none"> ○ e-moderating ○ instructional design ○ e-assessment ○ development of pedagogical resources ○ quality control ○ versioning ○ other (please specify) <p>Is there quality control of the created e-resources at every level of design, testing and implementation by colleagues and learners?</p>
<p>E-learning draws on all appropriate resources.</p>	<p>The institution encourages the use of small learning objects⁵ which can be re-utilised more easily in other pedagogical contexts.</p>	<p>Do the created learning objects have clear and succinct instructions for reuse? Are the created learning objects made for diverse learning experiences? Do you create learning objects to be used in multiple courses? Do you create Learning Objects appropriate for your end users bandwidth? Can users reassemble objects in ways that best support their learning requirements?</p>

⁵ Learning object = any digital resource that supports learning, can be reused in different contexts and across systems, has an indefinite shelf life, and can be accessed by the learner regardless of location or learning environment.

		<p>Are resources shared</p> <ul style="list-style-type: none"> • across systems? • amongst colleagues? • amongst external partners? <p>Do you use a standard template⁶ in your organisation? Does your organisation use a standard that can easily be used on several platforms/LMS? Is there a procedure in place that helps to log and retrieve all data – for example learning objects in TAGS? Is this procedure automated? Is there a system in place for versioning? Is the organisation aware of (and has it) a policy for ownership/copyright of e-resources? Are e-courses developed based on small learning objects that can be reused by others or in the future for other courses? Created e-resources on the system (or in the „repository“) are open to all approved users?</p>
	<p>The institution promotes the use of interactivity within e-learning in order to stimulate interest and therefore sustainability.</p>	<p>In terms of interactivity, are there potentially technical issues around connectivity and the resultant speed of broadband in multi-centre organisations? Are you aware of average download and upload speeds in your organisation? If so what are they?</p> <p>What levels of interactivity are in your e-resources:</p> <ul style="list-style-type: none"> • passive or no interaction known as “page turners”? • limited interaction with links to other resources, simple exercises, audio and video? • moderate interactivity – very much the industry norm with animation, customised audio, complex simulations and scenarios? • simulation and/or games based learning?

⁶Template = a standardised format with same style, font, approach,...

		<p>A Key area is in terms of the promotion of interpersonal interactivity. For example are learners encouraged to post/publish a story that highlights some area of activity and ask for responses (community reporting)?</p> <p>Are there facilities for forums to encourage interactivity and help build a community?</p> <p>Are Learners encouraged, maybe through a system of prompts, to suggest developments for the resources and participation in its creation?</p>
	<p>The institution has moved or is moving towards the use of Open Source software.</p>	<p>Does the institution have a policy of trying to source Open Source software⁷ in preference to full commercial software?</p> <p>Can examples be found within the institution?</p> <p>Can partnership examples be found with open source companies for support?</p> <p>If correct, can you evidence them?</p>

⁷ There are many, many Open Source software programmes available on the net. But as discussed in the other areas above care needs to be taken to ensure that over technical issues such as interoperability, pedagogical approaches, organisational and personal constraints. The EU Leonardo da Vinci programme provides a vast range of freely available software and support from its own repository made up from other European projects. See Adam database: <http://www.adam-europe.eu/adam/homepageView.htm#UacdFOC1GBI>