

Article

Sustainability Assessment Framework for VET Organizations

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Abstract: This paper presents a new and innovative approach to assessing Vocational Education and Training (VET) organizations institutional sustainability in terms of five key pillars: institutional capacity, environmental, economic, social, and training provision. In the five areas of the proposed new and original sustainability assessment framework, a total of 40 performance indicators are used to make the assessment. The assessment process is based on a novel approach for the couple values for performance and importance of the indicators, by using scales from 1 to 5 for both. There are five performance categories (awareness, measures, action, innovation and excellence) and five importance categories for each indicator. The framework is innovative, both by its objective, which consists in impact determining and improvement on environmental, economic, social and quality of the training system and by development of a strategy based on performance indicators that integrates sustainable development. The implementation methodology is based on the newly developed framework and detailed application guidelines are provided. Exact results from a case study carried out and an analysis of the results for the environmental area are presented in order to validate the methodology in action. The results are used to establish a sustainability baseline, to identify possibilities for improvement, and to prioritize implementation.

Keywords: sustainability assessment; framework; environmental pillar; performance indicators; vocational education and training

1. Introduction

Organizations all over Europe are becoming increasingly aware of the need for, and benefits of, the triangular union of economically, ecologically and socially responsible behavior. The European Union

sees sustainability as a key factor for financial systems and the economy as a whole [1], while the International Organization for Standardization member bodies overlap these 21st century pillars and have reasons to consider that an organization's impact on the environment has become a critical part of measuring its overall performance and its ability to continue operating effectively [2], as the economy is dependent on the health of the world's ecosystems.

In this context, the Vocational Education and Training (VET) system needs a paradigm shift and revision of its role in society from focus on delivering competences for a market economy towards delivering competences for sustainable development, in which the market is confined to social development, respecting the limits on growth [3].

A first revision in the VET system is done by the curricular content, stressing the importance of education for all people to achieve sustainable development [4], the competence-based model being the means of achieving educational and societal transformation towards sustainability [5], which is framed by a shared vision about quality education and a society that lives in balance with Earth's carrying capacity [6].

Environmental education—in whatever form—actually supports and promotes more sustainable development in practice; its development being accompanied by the implementation of a problem-based learning approach [7], environmental impact assessment [8], environmental protection rules [9] and integration of knowledge management. This is supported by a framework [10] that may also include the regulatory and operational requirements to adopt a Green Plan, as proposed by Menet [11].

A second revision in the VET system can be done at the level of VET organizations that have competitiveness and sustainability on the agenda, by developing frameworks to improve their performance in regard to quality and sustainability issues [12].

A range of different quality frameworks have been proposed for VET providers, but Shah and Stanford [13] state that there is a need for institutions to develop a single framework to meet internal and external needs that are economical, sustainable, and morally responsible in order to improve academic quality and to monitor standards.

By reviewing the existing literature, we feel it is clear that, along with the environmental education that is commonly claimed to be at the center of efforts to achieve sustainable development, there is a need to develop adequate frameworks in organizations that may support sustainability policies.

Furthermore, implementation of a sustainability assessment framework in a VET organization is a strategic one, because it supports a sustainable development strategy, which ensures the competitiveness of the organization.

In our opinion, adoption of a sustainability assessment framework is the operational part of a strategy focused on sustainable development that is positively related to the other competitive strategies adopted by a VET provider. We consider that it has a central role in the competitive strategy of the organization, and we believe that it determines the other competitive strategies: marketing, training delivery, partnerships, *etc.*, as illustrated in Figure 1. Such strategies describe how the VET provider plans to gain advantage over competitors, for example with the support of technology by using new educational technologies such as distance training, blended learning, learning management systems and video systems for delivery of training with paperless support; strategies using the alternance model for training by working part-time with an employer; *etc.*

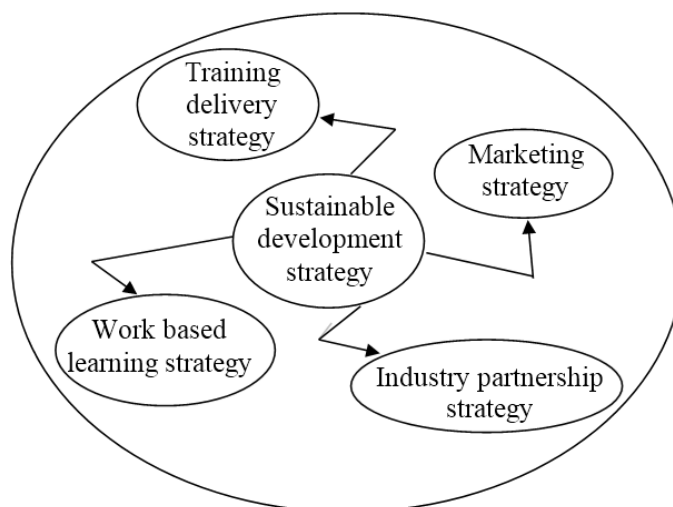


Figure 1. The relationship between the sustainable development strategy and other competitive strategies of the Vocational Education and Training (VET) provider.

The scope of this research is to develop a framework for sustainability assessment of VET organizations, relying on a management system that is: socially fair, economically viable, and ecologically responsible.

The methodology of research started with the literature review in relevant scientific journals on sustainability, quality, and vocational education and training themes.

With this support, in the next step of the research methodology a qualitative study of five case study VET providers in the Mures County was undertaken, which allowed us to identify the areas and performance indicators of a framework for sustainability assessment of VET organizations.

The new and innovative proposed framework integrates quality and sustainability in vocational education and training institutions. It is a starting point to help VET managers to create and manage their organizations towards high standards of sustainability.

2. Sustainability Assessment Framework

2.1. Selection of Areas and Performance Indicators

We have developed the sustainability assessment framework as operational part of the sustainable development strategy with the support of performance indicators.

Application of performance indicators to VET is a phenomenon imported from the higher education sector [14]. In the field of VET, it is employed by the European Quality Assurance in Vocational Education and Training (EQAVET) quality assurance reference framework [15], which operates by means of 10 indicators with the main objective to determine the impact of unemployment. In fact, this is the single framework operational for VET providers, which has one area and makes no reference to sustainable development.

In the research, we had to decide the areas of focus in the new proposed framework, the format for description of indicators as well as their content.

In the first phase of the development, we started with establishing the areas of the new framework by collecting relevant ideas from the literature review in order to keep a significant and causal positive relationship between a good institution and sustainability, as demonstrated by Stoevers [16].

In this stage, we have considered the synergies between quality and sustainable development in an organizational framework described by Isaksson [17]; the capital-based frameworks as part of the statutory responsibility that promote the social, economic, environmental and cultural well-being of their communities [18]; and the many perspectives for implementation described between the extremes of the ecological sustainability perspective described in the international standard for environmental systems [19] and the well-being perspective [20].

Among the so-called three “pillars” of sustainable development, it is necessary to introduce a fourth dimension—institutional component, as demonstrated by Zdravkovic and Radukic [21], due to the fact that sustainable development cannot be achieved without governance because of its nature: it is normative and requires collective action.

Having analysed the previous conceptual components of a framework evidenced in literature: quality, social, economic, environmental and institutional, in the new developed framework we considered merging institutional capacity with quality management, and adding a fifth component related to training as a core area of a VET organization. As a result, the new developed sustainability assessment framework for VET organizations helps orienting within the following five areas:

- institutional capacity and management;
- environmental responsibility;
- economic performance;
- social responsibility; and
- training provision.

These areas are seen as key pillars a VET organization will have to consider for both implementing and continuing a sustainable development approach, by interconnection of economics with environmental issues that are of great significance.

In the second phase of the development, we have selected performance indicators in order to cover as wide as possible areas, but also to have a limited number of indicators.

The criteria for selection of sustainable development indicators were built from the basic functionality of the indicator, which is to transfer relevant information from physical space to users through communicable data [22]. For this purpose, a qualitative study of five case study VET providers was undertaken. The five VET providers represent the landscape types selected because each exhibited a cross-section of characteristics—such as declining, growing and stagnating—as well as differing levels of human capital.

Gathering quality and sustainability approaches developed by each organization was proceeded in a comparative analysis in order to achieve a common reference framework.

We examined how the VET providers implemented the quality assessment for sustainable development and we discovered different approaches to help other VET organizations find a common way to implement sustainable management. The key aspects that informed the methodology are:

- The vision/mission/goal related to sustainability assessment;
- Previous experience of the organization;

- Institutional context;
- Key issues for “implementation to governance” of a sustainability assessment towards a sustainable quality development (this should describe how organization started, how they implemented it, how they run and manage it, who is involved when/why, what measures have been taken, *etc.*); and
- Key success factors.

In addition, from the literature review, in describing the performance indicators, we have used the integrative management concept elaborated by Jabareen [23], but also the 16 elements contributing to the framework of sustainable technical and vocational education: creativity, innovation, networks and partnerships, staff development program, teaching methods, generic skills, industrial relations and internships, counseling, entrepreneurship, ICT skills, interest, recognition, knowledge, competency based training, articulation, and commitment of management revealed by Minghat *et al.* [24].

Finally, the new and innovative sustainability assessment framework was designed, with the main objective to determine the impact on the environmental, economic, and societal quality of the training system.

The new developed framework is composed of five key pillars: institutional capacity, environmental, economic, social, and training provision, which interact in the context of globalization of training, as presented in Figure 2. Thus, all five areas are considered in their mutual interaction and dependency.

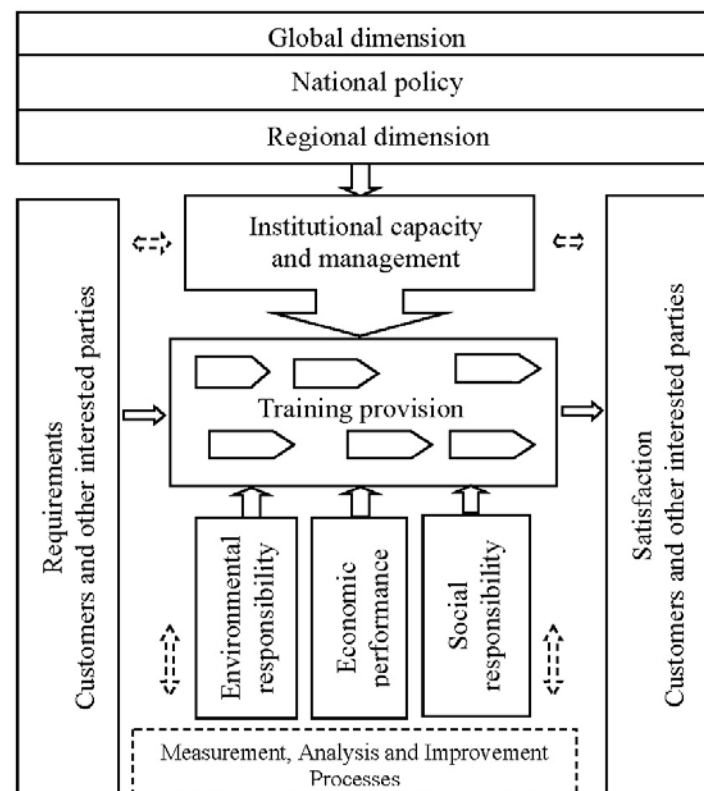


Figure 2. Interaction of the sustainability framework areas.

In the five areas of the new sustainability assessment framework, a total of 40 performance indicators are used to make the assessment. They are designed to cover as wide as possible areas.

2.2. Sustainability Assessment Framework Content

The purpose of the innovative sustainability assessment framework is to assess VET organizations institutional sustainability in terms of the five key pillars (areas): institutional capacity, environmental, economic, social, and training provision.

The map comprising the areas of the sustainability assessment framework and the corresponding performance indicators are presented in Table 1, in which the four phases of the continuous improvement cycle are bordered.

Figure 3 demonstrates the allocation of indicators from the five areas of the framework on the four phases of the continuous improvement cycle.

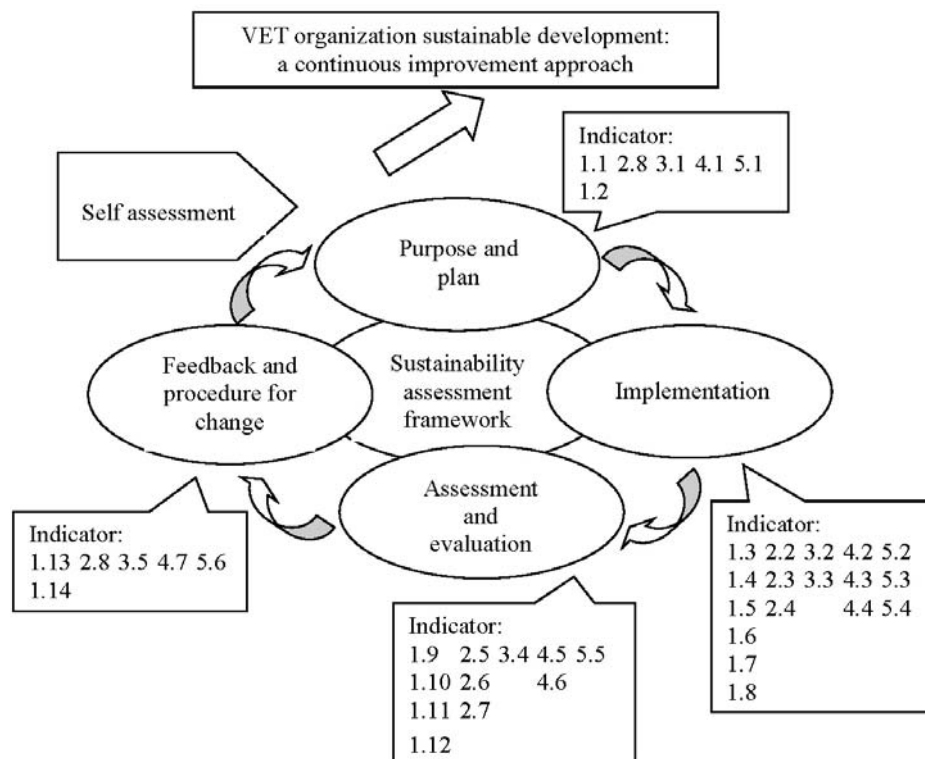


Figure 3. Continuous improvement cycle for the VET organization sustainable development.

The sustainability assessment framework is based on the Plan-Do-Check-Act (PDCA) cycle and consists of four phases:

- setting of policy goals/objectives and planning phase;
- implementation phase;
- evaluation phase, which deals with the design of the mechanisms for evaluation and the assessment of achievements/outcomes at individual, provider and system levels; and
- review, based on a combination of internal and external evaluation results, processing of feedback and organization of procedures for change.

Table 1. Sustainability assessment framework areas and performance indicators.

1. Institutional Capacity and Management	2. Environmental Responsibility	3. Economic Performance	4. Social Responsibility	5. Training Provision
1.1. Strategy and planning mechanism	2.1. Bio diversity	3.1. Design and development of VET delivery	4.1. Community involvement and development	5.1. Design of training provision
1.2. Management system				
1.3. Responsibility				
1.4. Internal and external communication	2.2. Water consumption management	3.2. Policy of employment and wages	4.2. Equal opportunities	5.2. Training contents
1.5. Facilities	2.3. Non-renewable energy consumption	3.3. Marketing and sales of services	4.3. Social relation in organization	5.3. Training delivery
1.6. Logistics	2.4. Consumption of raw materials		4.4. Fair operating practices	5.4. Training resources
1.7. Staff participation				
1.8. Participant access				
1.9. Relationship with stakeholders	2.5. Water pollution	3.4. Investment	4.5. Health and safety	5.5. Citizenship and training
1.10. Supply chain	2.6. Soil management and pollution		4.6. Consumer issues	
1.11. Legislation awareness	2.7. Air pollution and greenhouse effect			
1.12. Risk management				
1.13. Fundamental rights	2.8. Waste	3.5. Economic performance	4.7. Training and education	5.6. Training review
1.14. Internal audit				

2.3. Performance Indicators Format

In order to enable assessment for each indicator, there are five performance categories: awareness, measures, action, innovation and excellence and five importance categories.

The assessment process is based on the novel approach of “couple values” of each indicator’s performance and importance, both evaluated on specific scales from 1 to 5.

To help understand the above-mentioned areas and indicators, the descriptions below in Table 2 exemplifies the format in the case of the “Water consumption” performance indicator (code 2.2) from the environmental area, which is composed of “Indicator description”, “Environmental aspects to check” and the couple criteria (Performance.Importance).

For a more synthetic presentation of the other seven indicators from the “Environmental responsibility” area, the following is a summary of: the description, environmental aspects to check and performance criteria for the five rankings: (1) *Becoming aware*; (2) *Measures*; (3) *Setting up actions*; (4) *Incomplete mastery of innovations*; and (5) *Excellence/model behavior*.

Non-renewable energy consumption (code 2.3): Lightning and heating as well as specific training activities using energy are elements to be taken into account in energy consumption management. These elements are: information, by type of activity or by sector, and its own consumption; prevention actions and individual and collective sensitization towards staff and learners; being aware of energy needs regarding premises, transport, materials and other kind of electronic equipment and the actions developed in order to optimize them; and using renewable energies.

All organizations are concerned with this indicator; whatever we think of lighting, or heating for some of them, the control of energy consumption is a collective topic to think about.

Environmental aspects to check: information about the energy needs; the cost of the consumption; activity or uses that are the most important consumers of energy; follow up of energy consumption settled in the organization; decisions or measures taken in order to manage and control the energy consumption (control and reduction of heating, hot water temperature, lighting, double glass windows, *etc.*); and how the organization raises staff members and trainees’ awareness.

Performance: (1) *Becoming aware*: No management nor control at all of energy consumption. None or very little knowledge about types of energy consumed; (2) *Measures*: Existence of a detailed report of consumption and evaluation of costs sharing by location and activity; (3) *Setting up actions*: Actions are implemented in order to reduce energy consumption. Actions are set up to raise and develop staff and trainees’ awareness on saving energy; (4) *Incomplete mastery of innovations*: An action plan has been settled and formalized in order to reduce energy consumption (including a quantitative objective for consumption reduction). It has been communicated towards staff members and training participants. It includes measures/means that enable reducing consumptions but also optimizing needs (isolation of premises, using systems of low consumption, *etc.*). Surveys and analyses on premises allow considering what to do in order to optimize energy consumption and use renewable energies; (5) *Excellence/model behavior*: Building and construction of projects, purchasing or renting new premises taking into account energy consumption aspects (premises certified as being “low consumption”). Concerning type of energy, preference is given to renewable energies.

Table 2. Performance indicator format.

Indicator Code	Water Consumption 2.2	
Indicator description	Water has becoming such a rare good that it needs better consumption management by individuals as well as by organizations. To be able to observe better and more efficient consumption, an organization must know its level of consumption, types of use, the origin of water consumed, communication actions developed towards staff members and learners.	
Environmental aspects to check	What is the water resource origin; the water consumption and the amount of the invoice; the uses and sectors most concerned by water consumption; means to follow up water consumption; means and measures taken to reduce water consumption (“saving” taps, use of water rain, <i>etc.</i>); how the staff members and trainees awareness is raised about this subject.	
	Description	
Scale	Description criteria: Performance	Impact
1	<i>Becoming aware:</i> There is no management or control of water consumption.	Assessment result with concrete examples from VET provider organization
2	<i>Measures:</i> Control of water consumption without any optimization.	
3	<i>Setting up actions:</i> Optimization of water consumption and formalized follow up—optimized networks of used and consumption waters. Activities oriented towards staff members and training course participation in order to develop awareness.	
4	<i>Incomplete mastery of innovations:</i> Formalized action plan with a fixed quantitative objective for water consumption reduction and actions developed to reach the objective. Action plans for staff member and participant awareness.	
5	<i>Excellence/model behavior:</i> Exclusive use of renewable water resources. Functioning is performed in close circuit. Mode of functioning that gives priority to recycling.	
Scale	Description criteria: Importance	Impact
1	The issue is of little consequence; dealing with it is not on the agenda, and it can be ignored for the moment.	Assessment result with concrete examples from VET provider organization
2	Not to master the issue could undermine or penalize—for a limited time and in a limited area—the operating process of the organization.	
3	Not to master the issue could jeopardize the success of the organization’s projects. Mastering it is essential in order to accomplish projects.	
4	Not to master the issue could jeopardize the successful completion of all the organization’s projects. Mastering it is essential for the successful completion of the whole body of projects	
5	Not to master the issue could put the very existence of the organization in jeopardy. It is essential for its survival that it should master the issue.	

Consumption of raw materials (code 2.4): All raw materials have to be taken into account whenever they are common (used by everyone), such as ink or specific to an activity (e.g., food stuff for a catering and cooking course). It is relevant to know the level of consumption, the origin of products and to take them into account. The raw materials used for training courses provision are paper, ink, *etc.*

Environmental aspects to check: Disposal to identify and check permanently the raw materials consumption; how the organization raises staff members and trainees awareness.

Performance: (1) *Becoming aware*: No concern nor management at all of raw materials. None or very little knowledge of raw materials origin and types; (2) *Measures*: Measure of quantity of raw materials used by location and activity in relation with turnover or training activity level; (3) *Setting up actions*: Actions are set up in order to reduce raw materials consumption. Actions are implemented to raise staff members and participants' awareness in saving energy; (4) *Incomplete mastery of innovations*: An action plan aiming to reduce materials consumption (including a quantitative objective for consumption) is formalized and communicated to all staff members and trainees. Some materials come from recycling. Use of recyclable raw materials; (5) *Excellence/model behavior*: Consumption is permanently decreasing (for the same level of activity). Raw materials come from recycling. Preference is given to renewable energies when making the selection.

Water pollution (code 2.5): According to its activity, a training organization can produce waste that might have a risk of impacting water pollution. Being aware of this impact, measures taken to reduce it, awareness of staff and learners are points that can be observed to measure how this risk is managed.

Environmental aspects to check: Existence of a reflexion within the organization about environmental impacts on water and if these impacts are taken into account. If yes, how? How much is the water consumption in terms of quantity and costs; the impact of disposal on the environment; and how the organization raises staff and trainees awareness.

Performance: (1) *Becoming aware*: None or very little knowledge of the activity impact on rivers in the neighborhood and of the potential treatments of polluted waters rejected by the organization; (2) *Measures*: Quantitative and qualitative analyze of throwing (types and pollution risks); (3) *Setting up actions*: Treatment of waste; (4) *Incomplete mastery of innovations*: Limiting wastes and disposal at source. Staff members and trainees awareness; (5) *Excellence/model behavior*: Technological observation enables identifying, for one's activity and inherent risks of pollution, what are the most relevant and appropriate techniques for liquid waste disposal. Functioning is performed in closed circuit. Staff member and participants to trainings are developed on new technologies that enable better liquid waste disposal.

Soil management and pollution (code 2.6): Decisions and activities may have an important impact on urban and rural environment and its ecosystems. This impact can be, for example, associated with urban policy, buildings, construction, transport systems, waste, used water and to agricultural techniques.

Environmental aspects to check: The impact of the activities on soil and subsoil (underground).

Performance: (1) *Becoming aware*: No observations of impacts on soil or subsoil. None or very little knowledge about the impact produced by its activity on soil or subsoil; (2) *Measures*: Rough knowledge of soil pollution and geology; (3) *Setting up actions*: According to the law and regulations—storage in hermetic containers of all waste and equipment that may generate soil pollution. Organization of cleaning and decontamination of sites previously polluted; (4) *Incomplete*

mastery of innovations: An action plan is set up and aims at reducing the organization impact on soil and subsoil. Soil geology is taken into account within the training organization activity. Research and implementation of new processes to limits impacts are organized; (5) *Excellence/model behavior*: The organization implements its staff, training participants, and partners' awareness on this topic.

Air pollution and greenhouse effect (code 2.7): Gas emissions, in particular greenhouse gas emissions, have an impact on climate evolution. Depending on the knowledge of the atmosphere, this pollution can be taken into account and actions implemented to limit it. The purpose is to identify types of disposal that cause air pollution, and they are quite numerous and depend on the activity: gas released by means of transport used by staff members and by persons attending courses has to be taken into account; and gas issued by training activities or production directly linked to training, and these are quite common.

Environmental aspects to check: The types of gas released into atmosphere; following up on gas released by the organization; how to take into account these emissions and what actions can be set up; and method for measuring the gas throwing out greenhouse effect; actions implemented to reduce these impacts.

Performance: (1) *Becoming aware*: No idea or very little knowledge of atmospheric emissions. No conformity with legislation or no knowledge of legislation obligations; (2) *Measures*: Identification of which gases are emitted. Measure and analyze emissions and their impacts (in particular for greenhouse gas). Conforming to legislative obligations; (3) *Setting up actions*: Setting up of punctual actions in order to reduce greenhouse gas emissions. Reduction of emissions (in particular through improvement of transport policy); (4) *Incomplete mastery of innovations*: An action plan in order to reduce all throwing out into atmosphere for any kind of activity (personnel's transport, trainees' transport, emissions directly linked to training activity) and on processes concerned with the training activity (e.g., purchase policy); (5) *Excellence/model behavior*: The organization organizes and develops staff members, trainees and partners' awareness.

Waste (code 2.8): It includes waste produced by all organizations (paper, ink, old IT material) and specific waste directly linked to training activity (oil, food, etc.). The identification (type, quantity) of the activities that produce waste, all the measures taken to reduce waste, reusing materials, recycling, and waste treatment, are elements to be taken into account by the organization in order to improve its waste management policy.

Environmental aspects to check: nature and volume of waste the organization is producing by type of activity or location; the types of use that produce the most waste; the impact of waste on the environment; how the organization deals with its waste; measures and means the organization sets up in order to reduce waste; and how the organization raise staff members and trainees awareness.

Performance: (1) *Becoming aware*: No idea about legislation or at least some knowledge but no application; no specific waste management; and everything is put into the dustbin; (2) *Measures*: Partly in conformity with laws and regulations; identification of volume and type of waste and location; (3) *Setting up actions*: Identification of the impact of waste on the environment; pretreatment of waste (for example, selective waste sorting) organized on some sites; and actions are implemented in order to raise staff and trainees awareness on waste reduction; (4) *Incomplete mastery of innovations*: An action plan is set up with the aim of reducing waste by changing habits (for example, it could consist of reusing paper); organization of waste that is formalized and communicated to staff

members and trainees; waste selection is systematically done; forthcoming waste is checked at “collector’s” or “eliminator’s” location; and when selecting waste “collectors” or “eliminators”, the energy cost is taken into account (e.g., transport); (5) *Excellence/model behavior*: Volume of wastes decreases (for an equivalent activity); reducing raw material consumption; and agreements have been made with local partners in order to valorize materials when the organization cannot do it by itself internally.

Bio diversity (code 2.1): Biodiversity is life diversity in all its forms, at all levels, in any combination. It includes diversity among species and between species and ecosystems diversity. Knowledge of how the organization’s activities impact fauna and flora, and actions developed to control and limit these impacts.

Environmental aspects to check: Information about the impact of the organization activity upon flora and fauna; existence of emissions into the atmosphere made by the organization; how they are taken into account and what actions are set up.

Performance: (1) *Becoming aware*: No conformity with legislation; none or very little knowledge about the impact of the activity upon flora and fauna; (2) *Measures*: Knowledge; (3) *Setting up actions*: Conformity with legislation; implementation of actions or disposals to correcting negative impacts on biodiversity; (4) *Incomplete mastery of innovations*: An action plan is set up in order to guarantee the consideration of the impact on biodiversity for any new activity; (5) *Excellence/model behavior*: The organization improves the awareness of staff members and trainees.

3. Experimental

Implementation of the new sustainability assessment framework for VET organizations is performed as a self-assessment tool.

A methodological approach for self-assessment in 3 phases and 10 steps is presented in Figure 4.

A pilot test implementation of the sustainability assessment framework and the self assessment tool have been performed at the VET provider Continuous Education Centre (CEC) from Petru Maior University, over one week by a group of five staff members with different jobs: executive, training coordinator in charge of relations with companies, administrative assistant, quality assurance, and trainer. The result of the evaluation for the performance indicators, the couple values (performance.importance), in the environmental area are presented in Figure 5. The minimum value of 1 is for “Non-renewable energy consumption” performance indicator, while the maximum value achieved is 4 (four indicators).

The result is transposed in the sustainability assessment framework diagram, which for environmental area is presented in Figure 6. It is a useful “performance vs. importance” Eisenhower matrix that helps design activities for improvement.

At the end of the self-assessment and diagnosis, the information is used in a common meeting for an internal action plan proposal.

The self-assessment exercise reveals insufficient compliance with environmental duties imposed on the organization. For the restriction of negative influences on sustainable development assurance, some relevant measures are adopted, often joined with labeling activities that have as a task to inform, mobilize, and regulate an activity to limit or eliminate its influences [25].

The water consumption is managed and the organization work to gradually decrease the consumption. Optimization is performed by developing awareness of staff members and training courses participations.

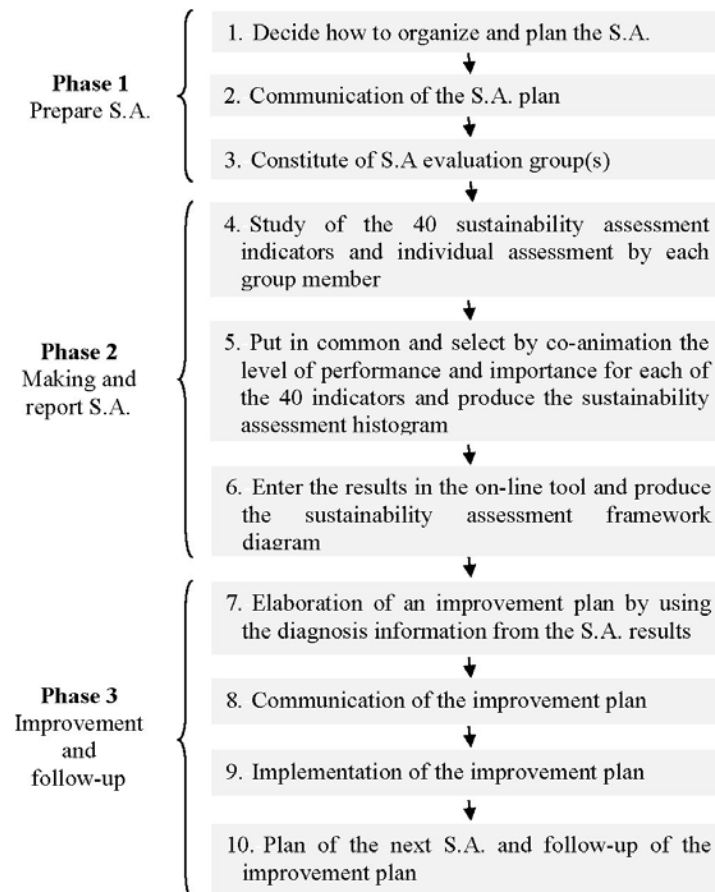


Figure 4. Self-assessment (S.A.) flowchart.

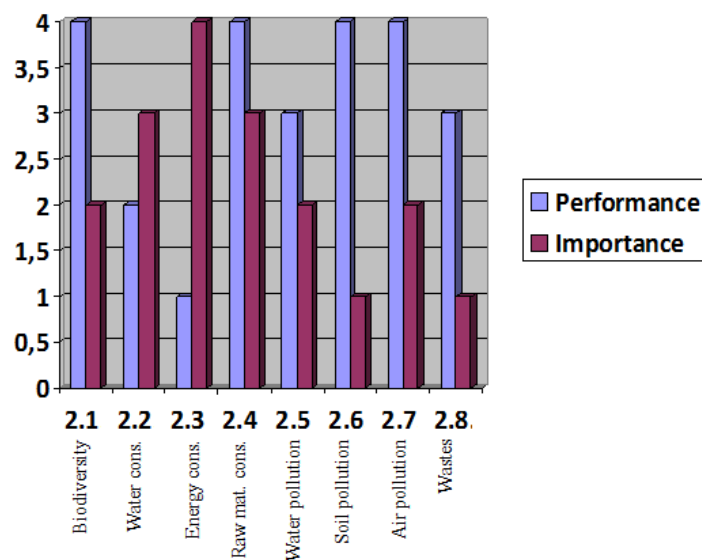


Figure 5. Sustainability assessment framework histogram for the environmental area.

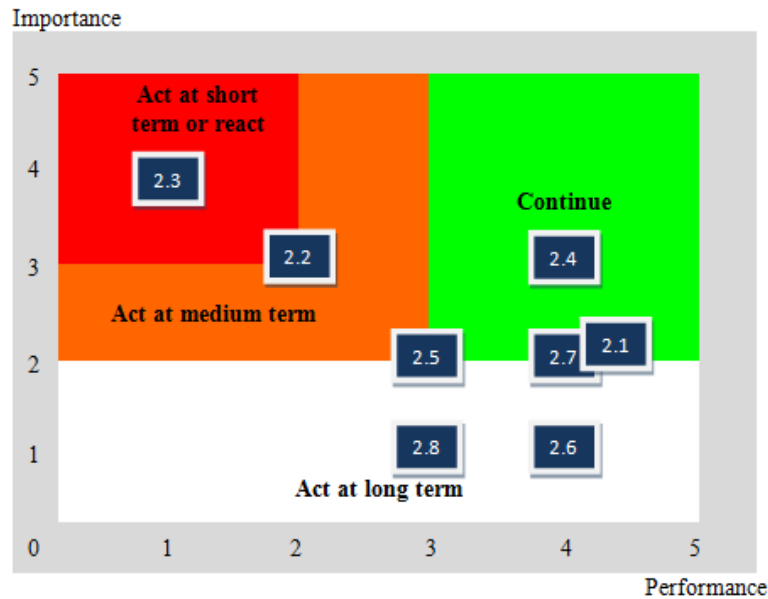


Figure 6. Sustainability assessment framework diagram for the environmental area.

In regards to energy consumption, the organization works to gradually decrease the consumption of electricity, heat and cold through the use of energy efficient equipment: A-rated alternative fluorescent lamps and compact fluorescent H; motion detectors that control lighting in rooms/spaces rarely used, or “turn off the lights” signs; timers that control electrical equipment or electrical outlets; A-labeled appliances; timer control of ventilation, the heating system is based on heat pump; and low-flush taps in the sink; and a Decalogue for energy saving.

In regards to consumption of raw materials, the main issue is reduction of paper consumption thanks to immaterialized learning supports. The delivery of materials in electronic rather than paper-based format is encouraged, but also recycling of printed paper.

In regards to water pollution, the chemicals are envisaged by reduction in the use of environmentally hazardous products: the chemicals risk phases are written down in plain text on a chemical list; good laboratory safety and chemical management is ensured in order to reduce the risk of injury on the environment and human health; the partner cleaning and laundry firms have outlined their environmental policy and are committed to reporting their cleaning chemicals; and non-chemical cleaning methods are used where it is possible.

In regards to soil management and pollution, the use of products that respect the environment and have local origin is promoted and encouraged. By placing relevant environmental requirements on suppliers to reduce their environmental impact and encourage suppliers to improve the environment, Continuous Education Centre (CEC) will promise to buy the products that cause as little environmental damage as possible, the eco-labels. The European Ecolabel (eco-label printing and copying paper and envelopes) is primarily looked for and can be trusted, the suppliers are informed about CEC environmental requirements: written environmental policy and a diploma or certification about the products. Rechargeable small batteries are used.

The goal is to buy organic and fair trade coffee and tea for staff, organic and fair trade or locally produced and cultivated fruit, food and beverages to staff and clients at meetings and events of various kinds.

In the advertising and marketing process, all externally produced printed materials, *etc.* are eco-label, which means an environmentally friendly printing process.

In regards to air pollution and greenhouse gas, the efforts are concentrated on transport related issues. Contacts, human encounters and communication are key elements of CEC business. Meetings can be implemented in different ways. Active selection of environmentally friendly transport and uptake IT as a supplement to travel can reduce the environmental impact. CEC promotes holistic travel and transport, including avoiding unnecessary travel by making use of various remote meeting systems: internet conference, Skype meeting, video laboratory meetings with codecs, *etc.*; leverage of own technology expertise to develop new ways of “remote working”; promoting and development of car-sharing practices; and increasing information regarding public transports; greater use of trains and buses instead of cars and planes.

In regards to waste, a “selective dustbin” is installed on the premises and the organization will work to increase the share of waste sorted at the source. The waste management and recycling is demonstrated by: discussion with suppliers for the opportunity to take back products that are suitable for recycling when they are used (toner cassettes to copiers printers and fax machines); reuse of boxes, packaging materials, printing and copying materials; recycling furniture/fixtures or giving away furniture, for example second hand; avoiding using disposables and reusable packaging and refill when it is possible; not using disposable crockery; not using small packets of milk, butter, *etc.*; and the garbage bags are made of recycled paper/plastic or composted materials source.

Training modules on environmental issues and sustainability are related to staff training. Staff and students/trainees should know that the organization publicly encourages concrete environmental measures that contribute to a more sustainable development. CEC ambitions in the field of environment must be understood and relevant to employees, students, participants and external partners.

The real internal action plan for sustainable development deduced in the experimental phase is the basis of the CEC environmental policy, which has two strands. The first one is related to the external work aimed at the general public who freely and voluntarily seeks knowledge. The second one relates to the internal work, addressing all employees and electing officials in their daily work.

With respect to the above, CEC aims are to promote sustainable environmental development and aim for greater environmental awareness, both internally and externally, by taking into account an action plan for the environment. It is specified at the organizational level but also in the departments’ annual action plans in the form of concrete actions, as presented in this paragraph.

4. Results and Discussion

The pilot test implementation of the new sustainability assessment framework aimed to validate the methodology in action and to help prospective users.

The overall results of the self-evaluation activities at CEC are positive. In some cases there were intensive discussions and debates for some subcategories, but the sustainability assessment framework was able to create a positive atmosphere for quality discussions within the institution. In particular,

whether performance indicators in some cases were put too generally was discussed. An additional glossary of definitions could be included to explain expressions and distinguish exact content of performance indicators.

All participants have been satisfied with: the mix of jobs, positions, and workplaces of participants to the group; the analysis achieved from different angles of perception and representation, a crossed view due different types of jobs and status within the organization; the opportunity given to take time and put a “distance” from everyday work and to wonder and ask questions about the organization as a whole.

The discovery of some working aspects of the organization that have never been approached before is one of the positive results. Furthermore, the decision to involve representatives of different jobs that can be found in the organization had a positive effect.

Sustainability assessment experience has been an opportunity “to change glasses”, at different levels of responsibility, from one monocular lens to a three-dimensional one: not just economic but environmental and social lenses. In all cases, it was clear that in order to improve sustainability assessment approach, we need a strong commitment from the director/manager of the institution and a “project manager” who lead the process in a working group.

The report showed various main important aspects: time is crucial, the need for planning and scheduling of activities; the team leader is very important; the collaboration in the organization enhances effectiveness and teamwork; and the importance of giving information and explanations to the target group to increase motivation for active participation.

In response to the question “Why do you like this experience?” The answer was because of the interest demonstrated by all participants due to their individual concern for sustainable development as citizens and for the added value brought by sustainable development issues to the quality process and also in terms of external communication towards the clients. This demonstrates that an integral development can be carried out, by considering strengths and weaknesses, and offering more space and time.

The experience was an opportunity to improve: sustainability culture inside the organization, giving information, to have a better approach reducing energy in the building, managing paper/waste/recycling: it was a great opportunity to have a guide to face this problems and to have a practical approach for these; the culture of process; the culture of planning, in terms of defining/redefining resources and time; the culture of prevention, working adapting actions and scheduling prevention programs; the culture of working together and making decisions; the ability to invent new ways to do old or traditional duties/facilities according to the three-dimensional perspective of a sustainability assessment framework.

The adopted sustainable development strategy confirmation is appreciated through the immediate result of confident customers and through the outcome of CEC evaluation by the national quality accrediting body in education, the Romanian Agency for Quality Assurance in Higher Education, which granted “high confidence” to the institution.

5. Conclusions

In this paper, a new and innovative sustainability assessment framework for self-assessment of VET organizations institutional sustainability has been presented. The assessment is made in five areas:

institutional capacity, environmental, economic, social, and training provision, by employing a total of 40 performance indicators. These are evaluated in a new and original format of a self-assessment tool for the “couple values” of performance and importance on scales from 1 to 5. The five rankings for performance are: awareness, measures, action, innovation and excellence.

The framework is different from others by its objective, which consists in impact determining and improvement on environmental, economic, social and quality of training system.

The assessment tool supports training providers in order to: (a) check the level of performance for each area within the framework; (b) identify improvement possibilities for all categories; and (c) make decisions and set priorities in relation to environment, activities and business projects.

With this support, another innovative aspect of the paper is the development of a strategy based on performance indicators that integrates sustainable development. We have evidenced that sustainable development strategy has a central role in the competitive strategy of the organization and we believe that it determines the other competitive strategies of the VET provider.

In regards to the methodological approach of the new sustainability assessment framework, the multitude of indicators employed requires an assessment group of committed experts to accomplish the assessment.

The quality of the assessment depends on the availability of data at the assessed institution. In optimal conditions, the results of the assessment have to be objective and precision may be an issue that facilitates the progress of evaluations.

Implementation of the new sustainability assessment framework is performed as a novel self-assessment tool, which in its application bridges theory and practice. Detailed application guidelines for the self-assessment tool are provided, which include a methodological approach flow chart for self-assessment, organized in three phases and 10 steps, that, together with the exact results presented from a case study carried out at CEC Tirgu-Mures, validate the methodology.

The results are used to establish a sustainability baseline, to identify possibilities for improvement, and to prioritize the implementation.

Furthermore, the results can be used to develop sustainability policies and action plans, establish performance guidelines and improve internal sustainability performance of institutions. This will have direct relevance to improved economic and social performance, institutional effectiveness and an enhanced image of the organization. Graduates of such institutions will naturally be sustainability driven.

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Conflicts of Interest

The author declares no conflict of interest.

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