AISHE - Auditing Instrument for Sustainability in Higher Education

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Abstract
Sustainable education is: education which contributes effectively to a sustainable development of society. Sustainable education is education in which students: acquire knowledge and insight about sustainable development, in general and in their own field of profession; are trained in skills, methods and techniques supporting their work as a (future) professional; develop an attitude in which sustainable development is seen as important;
Sustainable development consists of a large number of varying aspects such as communication about Education for Sustainable Development, sustainability in the Curriculum, Environmental management. All these aspect will be evaluated and reported in the AISHE-report of the organization
The auditing instrument AISHE is designed to measure the level to which sustainable development has received a place in the education of an institution (or a part thereof). In short: AISHE measures "sustainable education".
The AISHE-method is based on a model for quality management, developed by the European Foundation for Quality Management, and enhanced by the Institute for Dutch Quality Management (INK). For this reason, it is called the "EFQM-INK model".
In the EFQM-INK model the idea is that organizations can be in one of several development stages with respect to a number of criteria. The model defines five of these stages. The original EFQM-INK model has been developed to be used in commercial companies, for instance in industry. By a group of Dutch Universities for Vocational Education an adaptation has been designed, suitable for Higher Education (see: HBO Expert Group (1999)). Instead of themes concerning production processes, in the educational version themes are described concerning educational processes. It is this model, which may be called "EFQM-HE", which has been chosen as a basis for AISHE.

Keywords: Quality Management, Sustainable education, auditing instrument, AISHE

Introduction

In the former years and in various countries, in different ways attempts have been made to define the way in which Higher Education should contribute to sustainable development. One of these ways is the implementation of sustainable subjects in the curricula. For example, there are the Charters of Talloires (1990), Kyoto (1993) and Copernicus (1994). In Agenda 21 (especially in Chapter 36) too, there are directions for the "sustainification" of Higher Education. Although these documents contain important guidelines for education, none of them offers concrete prescriptions on an operational level for what Higher Education should do exactly in order to contribute maximally to sustainable development.

Many Universities have been working on the effective implementation of sustainable education. So, there is a great need for a concrete list of criteria, operationalized through some auditing instrument. This instrument should make it possible to decide by internal or external auditing, up to which level the University (or a part of it) has succeeded in implementing sustainability.

Using AISHE, it will be possible to audit Universities (and other organizations for Higher Education, like the Dutch "Hogescholen" and the German "Fachhochschule") or parts of it (like Faculties or separate courses). Internal as well as external audits are possible. Perhaps the instrument can also be used in institutions for secondary vocational education; no research has been done on that.

1. The roles of Educational Institutions

Educational institutions play an important role in responding to emerging needs about CSR. Their actual response to CSR- skills and - competency needs will ultimately depend on the risk posed to the organizations of either addressing, or not addressing, these needs. These decisions are complex and are balanced against strategic, operational and educational risks, benefits and realities within each given educational institution. Educational institutions - through their linkages with the workplace, industry, professional organizations and government - have a unique view and understanding of many facets of the complexity of CSR. Reporting about Operations, Education, Research and Society will lead to a new vision for sustainable education.
AISHE is a way to characterize the kind of institute.

The organization, or at least the management, has a vision on sustainable development in general, on aspects within the own fields of expertise and on the consequences of this for the organization policy. The vision is expressed in the strategic policy.
What is "Sustainable development"?
The best known definition of the concept of sustainable development is the one of the Brundtland Commission (1987). According to their report, entitled *"Our common future - the world commission on environment and development",* sustainable development means: meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.
(In the Higher Education 21-project, which was performed in the United Kingdom, sustainable development was described as: Sustainable development is a process which enables all people to realize their potential and to improve their quality of life in ways that protect and enhance the Earth's life support systems.
Sustainable development consists of a large number of varying aspects such as communication about Education for Sustainable Development, sustainability in the Curriculum, Environmental management. All these aspect will be evaluated and reported in the AISHE-report of the organization

2. The concept of sustainable education

The auditing instrument AISHE is designed to measure the level to which sustainable development has received a place in the education of an institution (or a part thereof). In short: AISHE measures "sustainable education".
This term "sustainable education" is formally incorrect. It is not the sustainability of education itself, which is the point of interest: this would be the literal meaning of the term, meaning that it will be present for a very long time. Usually something else is referred to. This is formulated as a definition:
Fundamental definition
Sustainable education is: education which contributes effectively to a sustainable development of society. In principle this is a very clear definition. However, the main problem that arises immediately is: what does such education have to look like? In other words, theoretically the definition may be perfectly correct, but it doesn't offer much practical information. Looking for a more concrete description, it seems a good idea to define

something in terms of educational results that have to be reached. This hands us a concept that perhaps looks like the following:

Conceptual definition:
Sustainable education is education in which students:
• acquire knowledge and insight about sustainable development, in general and in their own field of profession
• are trained in skills, methods and techniques supporting their work as a (future) professional
• develop an attitude in which sustainable development is seen as important

In order to turn this into a practically usable definition, it will be necessary to add more details. Of course it is obligatory to be in agreement with what is generally accepted as the meaning of the concept. Therefore, the experiences and opinions will have to be used of people who deal with sustainable development and education as a job or publish about it. Out of these experiences a list can be designed of characteristics that are more or less important in making education contribute to sustainable development. Such a list might look like:

Enumerative definition:
Sustainable education is education in which students acquire knowledge, insight and skills about:
• environmental problems
• limited resources
• technological opportunities and limits
• social-cultural opportunities and limits
• (infra)structural opportunities and limits
• policies leading to sustainable development
• etc. etc.

Such a criteria list can only be meaningful if it is possible to use it in real life. So, it needs prescriptions indicating how a link can be made between the theory (the criteria list) and reality (education as it is realized in a certain course). In other words, the criteria have to be measurable and testable. In short, the criteria have to be made operational.

As long as this hasn't been done, actually the definition of "sustainable education" is incomplete.

Operational definition
An operational definition is a definition that indicates, in the form of a series of actions, how the level of sustainability of education can be determined. Therefore, such a definition requires a measuring method, for instance AISHE. This renders (for instance) the following definition:

Operational definition:
Sustainable higher education is: education which, when measured using AISHE, is judged as sustainable.

Now however a fundamental problem arises. On the one hand it is important to determine whether AISHE is a valid instrument, i.e. if it really measures what it should measure. In order to determine this it is necessary to define sustainable education first, and next find out whether it is this which is measured by AISHE. On the other hand it appears to be impossible to define sustainable education in a practically meaningful way without a reference to a measuring method, for instance AISHE. In other words, it is fundamentally impossible to formally establish the validity of AISHE

3. Description of AISHE
The method, and this book, will be used by two categories of people. On the one hand it will be used by managers and by experts on quality management, didactics or sustainable

development. And on the other hand by the large group of the teaching staff, and possibly by students. For this latter category, it probably is the most interesting to start without delay with the instrument, without being bothered by much theoretical backgrounds.

Structure

The AISHE-method is based on a model for quality management, developed by the European Foundation for Quality Management, and enhanced by the Institute for Dutch Quality Management (INK). For this reason, it is called the "EFQM-INK model".

In the EFQM-INK model the idea is that organizations can be in one of several development stages with respect to a number of criteria. The model defines five of these stages. The original EFQM-INK model has been developed to be used in commercial companies, for instance in industry. By a group of Dutch Universities for Vocational Education an adaptation has been designed, suitable for Higher Education (see: HBO Expert Group (1999)). Instead of themes concerning production processes, in the educational version themes are described concerning educational processes. It is this model, which may be called "EFQM-HE", which has been chosen as a basis for AISHE.

A short description is given for each of the five stages, as they are defined in the EFQM-HE version.

4. AISHE Methodology

The application of AISHE consists of a series of steps. Some of them are necessary, some other are optional. First they will be shown schematically, then they will be treated elaborately.
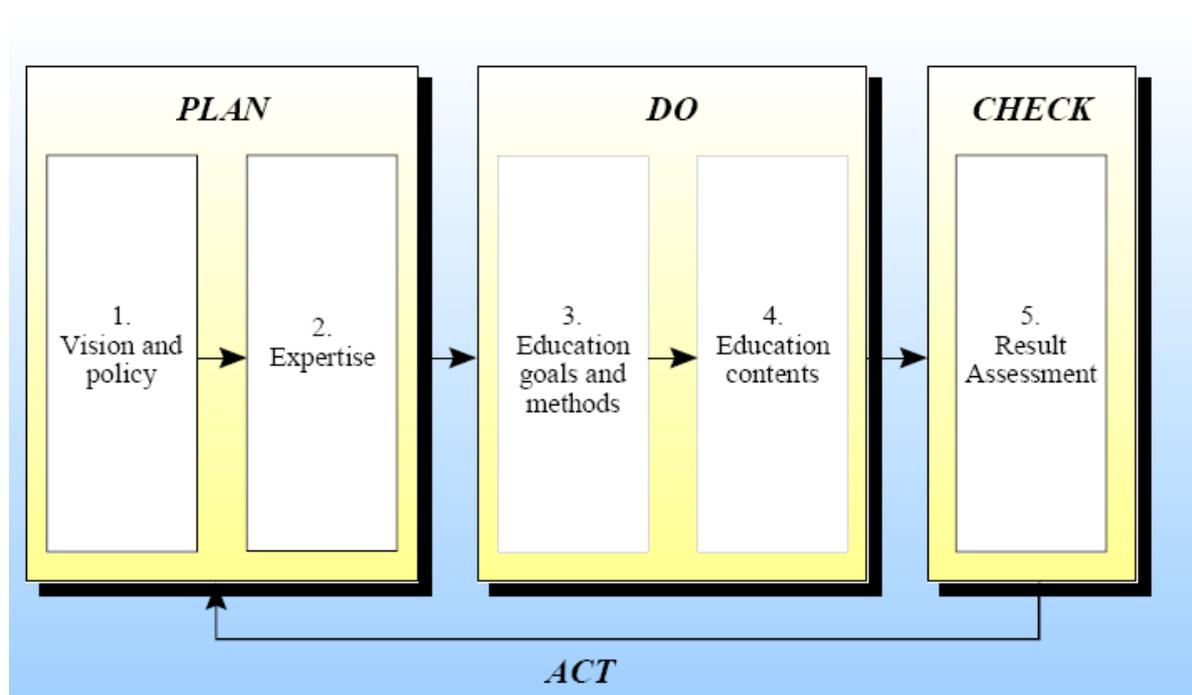
The steps of an AISHE assessment (minimum approach)
• Preparation with the internal assessment leader:
- Explanation of the method
- Discussion of the procedure
- Selection of criteria and appendices to be treated
- Composition of the group of participants
• Written information to the participants

• Introduction with the group of participants:
- Explanation of the AISHE method
- Discussion of the procedure
• Filling in the criteria list: by the participants individually
• Consensus meeting, participants + consultant
• Review with internal assessment leader
Elements of a more intensive consultancy (optional)
Before:
• Introduction of sustainable development with the staff, e.g. through presentations or workshops, as a preparation for an AISHE assessment
• Introduction of sustainable higher education with the management, e.g. through presentations or discussions, as a preparation for an AISHE assessment
After:
• Assistance with the translation of the results to policy- and activity plans
• Assistance with the application of the results in relation to the (Dutch) Certificate for
Sustainable Higher Vocational Education or in relation to the Copernicus Charter
• Assistance with the integration of AISHE and SHE in the intern al quality management
• Assistance with the application of AISHE results in the preparation of visitations and/or accreditation

Necessary time
If only the minimum scenario is followed, the participants will meet two times. The first is an introductory meeting, followed immediately by the individual scoring by each participant. In the second meeting, the group works together
In that case, the necessary time is :If the minimum scenario is followed:
• Group of about 10 to 15 persons
For each participant:
• Introductory meeting: ca. 45 minutes
• Individual scoring: 30 to 45 minutes
• Consensus meeting : 4 to 5 hours
Step 1: Preparation with the internal assessment leader
1a: Determination of the internal assessment leader
The internal assessment leader is the person who will co-ordinate the process internally, i.e. within the organization.
Possibly, this person is appointed on beforehand. If not, he or she must be determined first. E.g. it could be a member of the management team, a quality co-coordinator, a sustainability co-coordinator, etc.
The allocation of tasks between the external AISHE consultant and the internal assessment leader and possible other people involved (for instance the secretary of the meetings) will have to be made clear.
1b: Determination of the target organization
The method is meant to be used in a department or a university: a faculty, or a separate study programme. It is also possible to use AISHE in relation to a complete university, if this is an educational institution which is not too large or complex, and if there is a clear unity of policy with respect to education, for example with respect to the educational vision and – methodology.
Unambiguously must be made clear, which part of an institution will be the object of the assessment, so that no problems about this can arise during the process.

In the text of AISHE, the term "organization" will be used regularly. This term will consistently mean this selected target organization, i.e. the faculty, department, study programme or the whole educational institution that has been agreed upon.

1c: Determination of the context and the meaning of the application

AISHE may be used for several reasons:

As an internal audit: to assess the present situation in the organization with respect to sustainab ility; to get starting points for a future policy in this subject; and to g et a group of people involved in the activities undertaken to carry out this policy, in short: to create support and involvement.

As an external audit: e.g. to evaluate the present situation with respect to a Protocol for SHE, in order to investigate if the demands for a Certificate have been met; or in relation to visitation or accreditation. If an external audit is going to take place, probably other people will be involved too, and perhaps the procedure will need some adaptations. At the time of the publication of this book, no information about this is available. Before the actual assessment starts, the goals of the assessment will have to be made explicit. Besides, the starting situation is of importance. Possibly, AISHE has been used before within the target organization, or in a part of it; that is, it is possible to repeat the assessment, for instance after a period of a year.

On the other hand, it is possible that relevant information about the organization has been acquired in another way, for instance information about the general quality management, or about the internal environmental management. If an AISHE assessment is done as a part of a larger assessment, the results have other implications, compared to a situation in which there is only an assessment about sustainability in education.

Information about this kind of subjects is to be brought together, and has to be sent to all people who are involved in the process.

Quick scans

Especially, it is possible to gain insight in the level up to which four different groups of stakeholders (i.e. staff, students, professional field and society as a whole) have appreciation for the organization policy on sustainability. For this goal, the four quick scans can be used. Performing such a short preliminary investigation forms a good preparation to an AISHE assessment.

Furthermore, it is important to determine on beforehand, what will happen with the acquired information afterwards. Will the results be published, and if so, anonymised or not, and by whom? Preferably, agreements about this are made on beforehand and communicated.

1d: Determination of the participants

Next, a group of participants is formed. In small organizations (up to about 15 staff members) each staff member can participate. In larger organizations a group of 10 to 15 participants is selected. The group has to be representative for the complete teams of the staff members and the students, so there have to be one or more managers, a number of teachers (professors, lecturers, etc.) coming from a wide variety of disciplines and curriculum parts, some students, and perhaps one or more members of the non-teaching staff.

It could be interesting to ask other people to join: for example, graduates or (other) representatives of the professional field, i.e. of the "customer". If the organization is – on average – still in a rather low stage (up to stage 2 or 3), probably this will not be a very good idea. But if the organization is in a number of criteria in a higher stage (3 to 4 or higher), participation by external people will probably be worthwhile. The members of the selected group participate on a basis of 100% equality; the opinions of all participants or equally important. The discussions will be chaired by the AISHE-consultant, or if he/she is absent, by the assessment leader, and not by a manager of the organization.

It is absolutely vital that all participants join the whole process. It is impossible to have some participants being present only in the first or in the second meeting.

<u>1e: Determination of the criteria and appendices to be treated</u>

It is not necessary to treat all 20 criteria of AISHE at the same time. Especially if the organization has no experience in using AISHE or similar instruments, it may have an advantage to make some restrictions. If AISHE is used in a situation of an external audit, it will probably not be the organization itself which determines which criteria are going to be investigated, but the external assessor.

Step 2: Introduction for the participants group

Step 3: Individual scoring

Each of the participants works individually, uninfluenced by the others, through the list of criteria. For each (selected) criterion he/she forms an own opinion about the situation in the organization.

Probably, with most criteria the organization will not exactly match one of the five descriptions. Nevertheless, usually one of them will come nearest to the actual situation. Based on this, for each criterion a stage is selected.

An important "rule of the game" is: it is only allowed to conclude that a certain stage has been reached, if, if all preceding stages have been reached completely, too! All stages of a criterion are meant to be "cumulative", so the demands for stage 1 are again valid for stage 2 and higher; the demands for stage 2 are again valid for stage 3 and higher, etcetera.

Thus, every participant works individually through the criterion list. For each criterion he/she decides on a stage. The conclusion can be filled in directly in the AISHE book: for this purpose, a box is available with each criterion description. It is important not just to select a number! Reasons why the selected stage is the right one has to be written down.

Step 4: The consensus meeting

4a: the composite form

The completed forms are gathered. The scores are inserted together on one score form.

By using different colors, a distinction will be made between the various categories of participants: managers, teachers, students and others, unless objections are made against this.

This composite form is copied for each of the participants.

4b: the consensus meeting

A meeting takes place in which all of the participants are present. At the beginning (or earlier) the copied composite form is distributed.

As before, every participant has the AISHE book, in which the own scores and annotations are written: these are essential for the meeting. The meeting is chaired by the AISHE consultant, or if there is no external assistance, by the internal assessment leader. All participants have an equal weight in the discussions, in the proceeding of the conversation and in the decision making.

The chair can influence the process, for example by clarifying concepts, by guarding a careful decision process, by reflecting critically to the explanations of the opinions of the participants, and by guarding that no participants try push forward to decisions by using their position within the organization. The assessment leader him/herself does not participate in the decision making.

Each (selected) criterion is discussed. On a basis of intrinsic reasoning, a common conclusion is looked for about the right score of the organization. If possible, decisions are made based on consensus. If, however, for some criterion no consensus can be reached, the chair will conclude that, of all proposed scores, the lowest is the one that is decided upon: this is, because a (higher) score has only definitively been realized if all participants agree with it. In no case at all, decisions are made by voting.

Decisions are never made by majority voting.

AISHE report

The report does not have any information about which positions and opinions were taken by which persons

As a result of the AISHE assessment there is a list of recommendations to the management. The AISHE consultant can offer help to turn this list into a concrete policy plan and with the designing of the activities that will lead to the realization of it.

As said before, the results of AISHE gives an indication of the distance that separates the organization from meeting the demands formulated in a Protocol of the Dutch Charter for Higher Vocational Education. The policy may purposefully be formulated in such a way, that at the end of the policy period those demands will be met.

In the ideal situation the organizational policy with respect to sustainability is not an isolated subject, but instead forms an integral part of the total quality management policy.

Conclusions

The AISHE method expresses this by the fact that it is derived from an accepted method for quality management (the EFQM-HE-version).

In a number of recent Dutch external audits (visitations) sustainability was investigated explicitly, thus showing the relation between the sustainability policy and the quality management. It is to be expected that this will increase in the near future.

So, the AISHE assessment can be used as a part of the self-evaluation as a preparation for the visitation

After finishing the policy cycle, e.g. after a year, the AISHE assessment can be done again, in order to measure the rate of success of last year's policy with respect to sustainability and education.

Supplementary Recommended Readings

1. John Huckle, Stephen R. Sterling, Education for sustainability, Ed. EarthScan Publications Limited, London, 2001
2. Paula Jones, David Selby and Stephen Sterling, Perspectives and Practice across Higher Education, Ed. EarthScan Publications Limited, London, 2010
3. Stephen R. Sterling, Sustainable Education: Revisioning Learning and Change, Green Books UK, 2001
4. Stephen Gough, William Scott, Higher Education and Sustainable Development: Paradox and Possibility , Routledge, New York, 2007
5. Journal of Education for Sustainable Education, http://jsd.sagepub.com
6. The Environmental Association for Universities and Colleges (EAUC), http://www.eauc.org.uk
7. http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/