

# Assessment, Policy Development and Certification of Education for Sustainable Development: AISHE 2.0

Niko Roorda

DHO (Stichting Duurzaam Hoger Onderwijs – Dutch Foundation for Sustainable Higher Education);  
Avans Hogeschool (Avans University for Professional Education)

## Contents

Summary

Abbreviations

1. Introduction
2. Reasons for an ESD assessment instrument
3. Characteristics of an ESD assessment instrument
4. Characteristics of AISHE 1.0
5. Certification and accreditation
6. The need for an update of AISHE
7. Characteristics of AISHE 2.0
8. The AISHE 2.0 project
9. Invitation to join

References

Appendix: Possible elements of ESD assessment

## Summary

An international group of universities and university network organisations has started the development of AISHE 2.0, an instrument for the assessment and certification of higher education institutions with respect to the implementation of sustainable development. The instrument is a redevelopment of an earlier version of AISHE, which was developed by DHO, the Dutch Foundation for Sustainable Higher Education.

In this paper, a number of reasons for the assessment and certification of higher education with respect to sustainable development are described, followed by a description of the main characteristics of such an instrument. Next, the development and use of the first AISHE version (now called AISHE 1.0) are shown, as well as the introduction of the Certificate.

There are several reasons why AISHE 1.0 needs a major update. Some of them are related to some fundamental changes in higher education itself in the last 8 years. Another reason is the internationalisation of higher education, which calls for a redevelopment of AISHE by a university network in many countries. The main characteristics of AISHE 2.0 are described, followed by an outline of the development project. Finally, universities all over the world are invited to join this project.

## Abbreviations

AI	Assessment Instrument
AISHE	Assessment Instrument for Sustainability in Higher Education
CSR	Corporate social responsibility
DESD	United Nations Decade of Education for Sustainable Development (2005-2015)
DHO	Stichting Duurzaam Hoger Onderwijs, the Dutch Foundation for Sustainable Development in Higher Education, <a href="http://www.dho.nl">www.dho.nl</a>
EFQM	European Foundation for Quality Management
ESD	Education for Sustainable Development
GRI	Global Reporting Initiative: 1. Set of regulations for CSR reporting; 2. organisation behind those regulations
HE	Higher Education
HEI	Higher Education Institution, including universities and 'hogescholen' (Dutch)/'Hochschule' (German)/ 'högskola' (Swedish), also described as universities for 'professional / vocational education' or for 'applied science'.
QM	Quality Management
RCE	Regional Centre of Expertise
SD	Sustainable Development

## 1. Introduction

In 1998, a network organisation was founded in the Netherlands, called DHO, with the goal of advancing the integration of sustainable development (SD) in higher education (HE). In 2000 and 2001, DHO developed an instrument for the assessment of SD in universities. This was called 'Assessment Instrument for Sustainability in Higher Education', or 'AISHE' for short. After AISHE was tested and validated in the Netherlands and in Sweden, it was published in 2001. Since then, it has been used more than 100 times in the Netherlands, Belgium and Sweden. Based on AISHE, a Certificate was defined by DHO. This Certificate of Education for Sustainable Development (ESD) has been awarded to about 60 educational programmes in universities since then.

Between 2001 and 2008, many things have changed in HE. Consequently, DHO decided to redevelop the assessment instrument. The new version, 'AISHE 2.0', will be developed not just by DHO but by a large group of universities and HE network organisations in an international context. This group also aims at defining an international Certificate for ESD. This paper gives some details.

### About DHO

DHO is the Dutch Foundation for Sustainable Higher Education. It has a staff of about 15 people. The main task of most of them is to build and maintain the contacts with higher education institutions (HEI), and to assist them as consultants with the process of implementing SD in the education, the research, the operations and their relations with society. Our contacts are on all levels of the HEI's, on one moment discussing the mission or the policy of the institution as a whole with the University Board or the management, on another moment doing workshops with members of the teaching staff, or giving lectures to students. DHO has strong relations with most of the HEI's in the Netherlands and with a number of universities in other countries. The annual budget (ca. € 600,000) of DHO is partly based on subsidies by the Dutch government and by some NGOs, and partly on paid services to the universities, which have an annual total of about € 100,000.

### Definitions

In this paper, assessment instruments will be called AI's for short. Although such instruments will no doubt be relevant for all levels of formal education, as well as for informal education (such as life long learning), this paper will be limited to formal higher education (HE), organised by Higher Education Institutions (HEI's). These HEI's are universities as well as 'hogescholen' (Netherlands), 'Fachhochschule' (Germany, Austria, Switzerland), 'högskola' (Sweden), CVU's (Denmark), Institutes of Technology (Ireland) and Ammattikorkeakoulu (Finland), usually described in English as universities for 'professional / vocational education' or for 'applied science'.

## 2. Reasons for an ESD assessment instrument

Several reasons exist why the existence of an AI for ESD is important, in order to realise the goals of the United Nations Decade of Education for Sustainable Development (DESD). This paragraph describes the main reasons (see table 1).

### ESD policy: development, support and evaluation

The most obvious reason for an AI on ESD is that managers and policy makers want to get information about the situation in a HEI. This information can be used to formulate a policy towards ESD, in order to implement elements of SD in the education, the research etc., and in order to evaluate the policy of last years. Experiences in the Netherlands, Belgium and other countries show that the use of an AI contributes strongly to ESD development processes within HEI's. They also show that one of the most important effects of assessment is the raising of awareness and support for ESD among the management, the staff and the students.

**Table 1: Nine reasons for the assessment of ESD**

1. Assessment = tool for policy development
2. Assessment = tool for evaluation of policy results
3. Assessment strengthens awareness and support for ESD among management, staff & students
4. Integration of ESD in quality management is necessary to get ESD in mainstream of HE
5. Reporting offers transparency towards stakeholders (financiers, potential students, etc.)
6. Reporting strengthens feeling of responsibility among management & staff
7. ESD certification works as an incentive
8. Benchmarking and ranking raise feeling of competition
9. Standardised assessment enables HEI's to learn from each other and cooperate

### ESD towards the mainstream of HE

In early stages of the process of implementation of SD in HEI's, usually ESD is experienced as something 'extra', 'added', not belonging to the main activities of the HEI. In later stages, SD usually grows to become an integrated part of the activities, the policy and even the mission of the HEI. This is vital in order to achieve one of the goals of the DESD, i.e. that ESD becomes part of the mainstream of education.

If ESD has to become a part of the mainstream, it is necessary that it also becomes a part of the quality management of the HEI. This requires tools, so that ESD can be a part of a Deming Cycle ('plan' – 'do' – 'check' – 'act') of quality management (see: Deming, 1986). For this, an AI cannot be missed.

### Transparency, certification, benchmarking

A strong relation exists between SD and Corporate Social Responsibility (CSR). One of the main elements of CSR is transparency, i.e. organisations explain their activities to all kinds of stakeholders and give account of them, for instance through annual CSR or SD reports or through CSR or SD pages on a website.

CSR or SD accounting enables financing organisations (e.g. a ministry of education) to evaluate the activities and results of a HEI. It enables potential students to select a HEI for themselves. And it enables the general public to form an opinion about the educational and societal impact of the HEI.

This can be strengthened by a system of SD certification, as was introduced in the Netherlands by DHO in 2002. Some 60 educational programmes in the Netherlands and in Belgium have received this certificate, which will be described in more detail below. The ESD certificate appears to be a strong incentive for ESD efforts.

Finally, SD accounting based on assessment and standardised reporting may be used to compare HEI's. This opens the possibility of benchmarking and ranking HEI's regarding their ESD efforts, although no experiences with this exist in the Netherlands (and possibly elsewhere) up to date.

## 3. Characteristics of an ESD assessment instrument

HEI's can be seen in different ways, depending on the role that is emphasised. The two core activities are no doubt **education** and **research**. Apart from that, a HEI can be seen as an organisation in itself. In this role, it performs all kinds of **operations**: it is active as an employer, a consumer of goods, a producer of waste, etc. (see: Clugston & Calder, 2000). A fourth role can be described as a 'member of **society**'. In this societal role, which in some countries (e.g. Sweden) is explicitly described in educational laws and regulations, HEI's may be active in their own local community, in political or societal discussions in their country, helpful in the development of third world communities, etc. (see for instance Megerle & Megerle, 2000).

A number of AI's exist (see: Shriberg 2002). Some of them, like the ULSF Questionnaire, put much emphasis on the operations role (Calder et al, 1999). Others, like AISHE, put the focus on the educational role. No instrument seems to exist that focuses on the assessment of the research or of the societal aspects of SD in HEI's.

*It is important to emphasise here that the term 'ESD', as used in this document, refers not only to the educational role but to all four roles of the HEI's towards SD.*

The presently existing first version of AISHE focuses on the educational role, and is therefore too limited to meet the present and future needs for the evaluation and policy development of HEI's regarding ESD. That is why a newly developed tool is necessary. The AISHE 2.0 project will not only

- develop the AISHE 2.0 tool,

but also:

- Disseminate the tool within the international university community;
- Train and certify an international team of assessors who will perform the assessments;
- Join, or (if necessary) set up an international network organisation which will be the owner of AISHE 2.0, in order to manage the training programme and the dissemination process, and which will guarantee the quality of the process and the assessment and of the sustainability of the network and the assessment process.

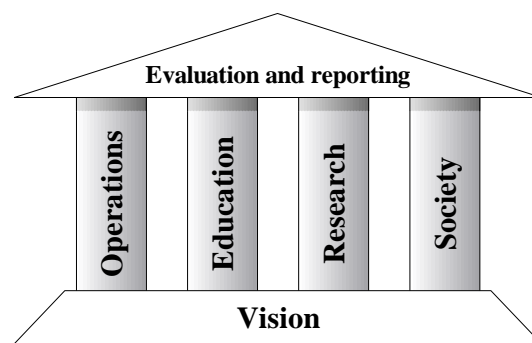


Figure 1: Main roles of a HEI

## 4. Characteristics of AISHE 1.0

The original AISHE method, developed in 2000-2001 by the Dutch ESD network organisation DHO, focuses mainly on the education. This decision was made in 2000 by DHO because, in their opinion, the educational role of HEI's is the strongest way in which a HEI can contribute to SD, due to a snowball effect that the education can have on society. (For several reasons, in 2008 this does not suffice anymore, and so AISHE 2.0 will have a broader range.)

Because of the emphasis on education, in its design AISHE 1.0 aims at the level of separate educational programmes within HEI's. If a group of educational programmes (like a faculty or a department) is sufficiently homogeneous with respect to some indicators (like the disciplines, the educational methodology, the rate of ESD integration), they can be assessed all in one.

AISHE 1.0 pays some (but not much) attention to the research, the operations and the societal role of a HEI.

### Process orientation

In 2000, when the development of AISHE started, some HEI's in the Netherlands were in a pioneering stage towards ESD. Most of the other HEI's were hardly interested in ESD at that time. For this reason, it was not a good idea to construct an AI focusing on the achieved results of ESD policies. Instead, it was a better idea to focus on the process of ESD integration, in order to strengthen and encourage this process. Therefore, the qualitative, process-oriented EFQM approach to QM and assessment was better suited than the quantitative, result-oriented ISO approach (see: EFQM, 1991 and Nuland et al, 2000). So, the EFQM model was adopted as a fundament. Another source was a QM model developed by INK, which made use of a five-point ordinal scale based on the EFQM philosophy (see: INK, 2000). This INK model had already been transposed to a general tool for QM in HE (see: HBO Expert Group, 1999 and Van Schaik et al, 1998), which offered a good starting point for the development of AISHE. More details about these and other fundamental choices can be found in Roorda (2002) and Roorda (2004).

### The structure of AISHE 1.0

At the start of the development process of AISHE in 2000, a stakeholder analysis was made. Several kinds of groups and organisations were considered as stakeholders, for instance: HEI's and their managers and staff, students and their organisations, national HE organisations, local and national governments. Also: the professional field, including companies, labour organisations, employer organisations, non profit organisations. Society in general, represented by NGO's like environmental action groups and human rights groups.

For all relevant stakeholders, representative organisations were selected, and within those organisations representative experts were invited to become a member of a 'stakeholder forum'. This forum, consisting of about 25 people, commented on each development step of AISHE.

First, a list of criteria was designed. After several adjustments, finally this list consisted of 20 criteria (see table 2). Next, the five-point ordinal scale (see table 3) was explicated for each of the 20 criteria, thus resulting in an array of 5 × 20 descriptions. The five stages are graphically shown in figure 2. To this system a set of procedures for the performance of an assessment was added, after which the tool was ready for practical tests which took place in 2001.

More details about the structure of AISHE can be found in the AISHE book itself (Roorda, 2001) which can be downloaded (in English or Dutch) from [www.dho.nl/aishe](http://www.dho.nl/aishe).

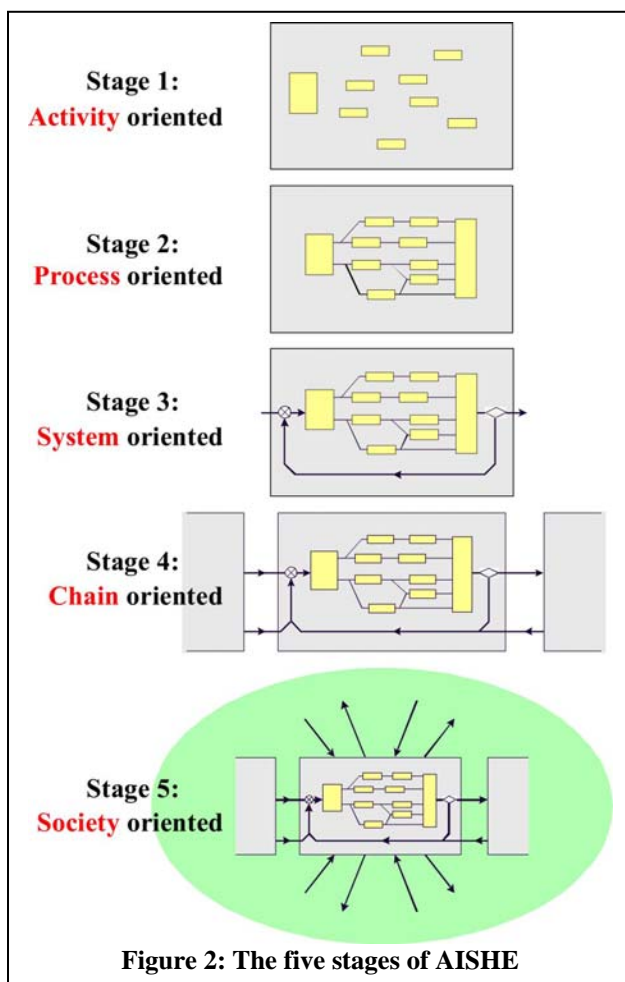
**Table 2: The 20 criteria of AISHE 1.0**

	Certificate levels:			
	1	2	3	4
1.1. Vision on ESD	1	2	3	4
1.2. ESD policy	1	2	3	4
1.3. Communication on ESD	1	2	3	4
1.4. Environmental management	1	2	3	4
2.1. External network for SD		1	2	3
2.2. SD expert group		1	2	3
2.3. ESD in staff development plan	1	2	3	4
2.4. SD in research, external services			1	2
3.1. SD in profile of the graduate	1	2	3	4
3.2. Educational methodology	1	2	3	4
3.3. Role of the teacher		1	2	3
3.4. SD in student examination	1	2	3	4
4.1. SD in curriculum	1	2	3	4
4.2. Integrated Problem Handling	1	2	3	4
4.3. SD in traineeships, graduation	1	2	3	4
4.4. SD speciality			1	2
5.1. Appreciation by staff		1	2	3
5.2. Appreciation by students		1	2	3
5.3. Appreciation by professional field		1	2	3
5.4. Appreciation by society		1	2	3
<i>Number of Certificate demands</i>	11	18	20	20



**Table 3: General description of the 5-point ordinal scale of AISHE 1.0**

Stage 1: <b>Activity oriented</b>	Stage 2: <b>Process oriented</b>	Stage 3: <b>System oriented</b>	Stage 4: <b>Chain oriented</b>	Stage 5: <b>Society oriented</b>
<ul style="list-style-type: none"> <li>- Educational goals are subject oriented.</li> <li>- The processes are based on actions of individual members of the staff.</li> <li>- Decisions are usually made ad hoc.</li> </ul>	<ul style="list-style-type: none"> <li>- Educational goals are related to the educational process as a whole.</li> <li>- Decisions are made by groups of professionals.</li> </ul>	<ul style="list-style-type: none"> <li>- The goals are student oriented instead of teacher oriented.</li> <li>- There is an organisation policy related to (middle)long-term goals.</li> <li>- Goals are formulated explicitly, are measured and evaluated. There is feedback from the results.</li> </ul>	<ul style="list-style-type: none"> <li>- The educational process is seen as part of a chain.</li> <li>- There is a network of contacts with secondary education and with the companies in which the graduates will find their jobs.</li> <li>- The curriculum is based on formulated qualifications of professionals.</li> </ul>	<ul style="list-style-type: none"> <li>- There is a long-term strategy. The policy is aiming at constant improvement.</li> <li>- Contacts are maintained, not only with direct customers but also with other stakeholders.</li> <li>- The organisation fulfils a prominent role in society.</li> </ul>



In order to streamline and standardise the application of AISHE 1.0, a number of items have been added.

- The detailed assessment procedure was published.
- A checklist was made to investigate whether a combination of educational programmes may be assessed together.
- A computer application, 'AISHE Reporter', was made for the automatic production of the report of the assessment. The application (functioning in English and in Dutch) can be downloaded from [www.dho.nl/aishe](http://www.dho.nl/aishe).
- A 3-day training course for assessors was designed and is organised annually.
- For the participants in this course, a follow-up practical training and examination programme was set up, leading to the possibility of acquiring the 'AISHE assessor certificate'. This guarantees the quality of the assessments.

#### Testing and validation

The AISHE method has been tested in several ways in order to validate the tool. The evaluation made use of:

- Feedback by the stakeholder forum;
- Questionnaires for several groups, like the management, the teaching and the non-teaching staff and the students, on several moments, e.g. before the assessment, halfway during the assessment, immediately after and two months after the assessment;
- Test and retest within one organisation with several disjoint groups of participants.

Tested were:

- **Validity:** concept validity (criterion validity), representativity (content validity)
- **Reliability:** internal consistency
- **Applicability:** unambiguousness, practicability, investments, efficacy, acceptability.

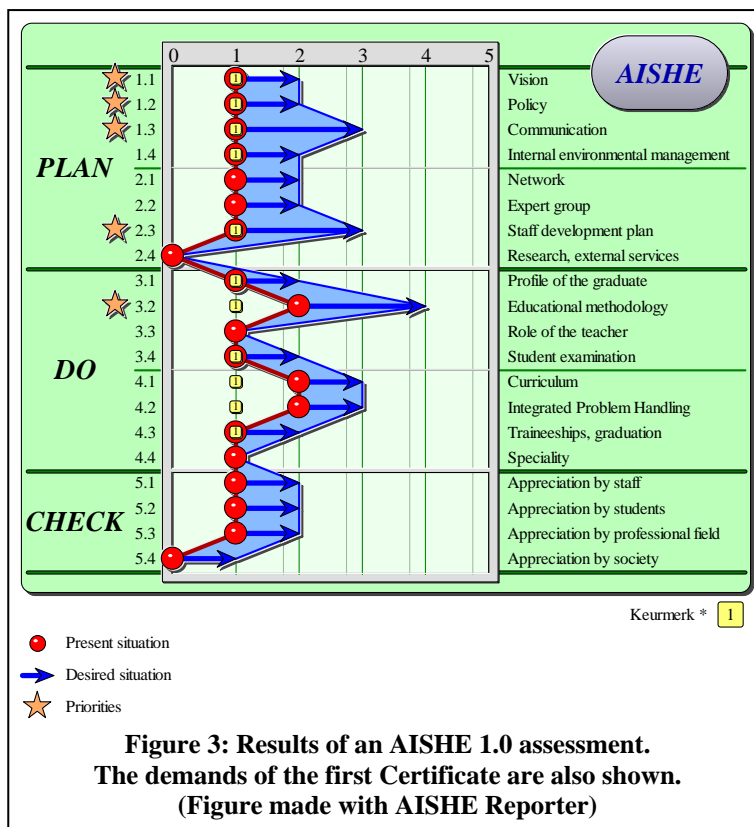
The results of the investigation indicated that AISHE sufficed in most respects. A number of smaller problems that occurred gave rise to suitable adjustments in the course of 2001, after which the instrument was published and put to use. The details of the validation process are described in Roorda & Martens, 2008.

### Desired situation, priorities, policy proposals

During the assessment, all 20 criteria are discussed with a group of about 15 people: management, teaching & non-teaching staff and students. During this so-called 'consensus meeting', naturally a number of possible improvement points will rise. This will enable the group to formulate – for each criterion – a *desired* situation. This desired situation is defined, not only in the form of a stage to be reached, but also in the form of a series of concrete targets and associated activities that will lead to the desired stage.

At the end of an AISHE 1.0 assessment, the results consist of:

- A report containing a description of the *present* situation, in the form of a stage number and a verbal description for each criterion;
- A ditto description of the *desired* situation, giving ample opportunity to the management to formulate an SD policy plan;
- A *date* on which this desired situation has to be reached;
- A list of first *priorities*, that are considered to be crucial in order to be permitted to conclude that the policy will have been successful;
- In practically all cases: a growing awareness, enthusiasm and support for SD within the group of participants;
- Indications for the management about which staff members may be given responsibility for certain aspects of the SD policy plan that is to be designed.



### Quality cycle

In the first year of the use of AISHE (2002) it occurred a number of times that, several months after an assessment was performed, the HEI had not made effective use of the assessment results. As a consequence, the enthusiasm and support that the assessment had raised had disappeared, and most or all of the participants, including the management, had forgotten most of the subjects that were discussed. So, the effects of the assessment were small or nil. From this it became clear that it is vital to use the assessment results soon after the assessment, in order to design a concrete ESD policy plan (either as a separate plan or as a part of a general policy). Therefore, in all cases where a HEI and DHO together prepare an assessment, DHO emphasises that a meeting of the management takes place at most one week after the assessment. Support by DHO is offered, and if accepted, a consultant of DHO assists in the decision process.

Ideally, this leads to a policy plan for the next one or more years, and this plan results in actions that are taken. In this way, the start is made of a quality cycle (Plan – Do – Check – Act). The 'Plan' phase is formed by the assessment and the formulation of the policy plan. The 'Do' phase consists of the activities that follow. The cycle can be closed by repeating the AISHE assessment in order to evaluate the results ("Check"), and by taking next actions for further improvements ("Act"). In this way, AISHE contributes to a continuous improvement with respect to ESD.

### Present situation

So far (halfway 2008), AISHE assessments have been done in the Netherlands, Belgium and Sweden. Assessments in Finland and other European countries are in preparation. Besides, DHO has contacts with interested universities, e.g. in Brazil, Ghana and China.

## 5. Certification and accreditation

A certification system based on AISHE was introduced by DHO. Educational programmes in HEI's can acquire the ESD Certificate on several levels, which together form a 'star system'. The demands of the four different star levels can be seen in table 2 (see also figure 3). In order to acquire the Certificate, educational programmes have to do an AISHE assessment chaired by a certified AISHE assessor selected by DHO. The resulting report is checked by the DHO Certificate Commission. If necessary, an extra visitation to the HEI by this Commission is made. If the Commission confirms the results of the AISHE assessment, the Certificate is awarded.

Between 2002 and 2007, about 60 educational programmes in about 12 HEI's in the Netherlands and Belgium received the Certificate, mostly on the first level; some 10 of them received the second level Certificate. The DHO Certificate is valid for three years.

At the end of 2006, an agreement was made with the Dutch & Flemish national organisation for the accreditation of higher education, NVAO. This resulted in a formal recognition of AISHE by the NVAO, and to the introduction of a 'special recognition' of SD, to be assessed with AISHE, as a formal part of the accreditation of HE in the Netherlands. Educational programmes are awarded this special recognition if they have at least the second level DHO Certificate of Sustainable Development in Higher Education, since the assessment results prove that this is the present level of excellence. DHO and the NVAO have agreed that together they will check this minimum level annually, and if necessary, they will raise the threshold level.

At the beginning of 2007, the first three educational programmes received this special recognition, as a part of their accreditation.

## 6. The need for an update of AISHE

Since AISHE was launched at the end of 2001, many things have changed in HE. One of the changes is the process of internationalisation in Europe and elsewhere. The Bologna agreement introduced the European Higher Education Area, leading to more and more international cooperation between HEI's. This asks for an international cooperation on ESD too, which makes it relevant to compare HEI's across borders. This calls for an assessment and certification system with international recognition and a shared 'ownership' by a group of ESD organisations in various countries. Besides, the EU introduction of HE accreditation brought many changes in the QM of HEI's, and AISHE 1.0 is not optimally adjusted to these new developments. Perhaps even more important: the launch of the UN Decade of Education for SD (DESD) puts ESD on an even higher international level. All these changes (internationalisation and accreditation) are reasons for updating AISHE, this time in an international cooperation.

At the beginning of the 21<sup>st</sup> century, a lot of HEI's were in a pioneering stage with respect to ESD. For this reason, the qualitative, process-oriented EFQM approach of QM was best suited. Since then, more and more HEI's have reached solid results regarding ESD, although much more will have to be achieved, even by the forerunners, in order to meet the goals of the DESD. Therefore, the EFQM approach of AISHE still is successful and cannot be missed, but at the same time a number of result oriented indicators, possibly of a quantitative nature, will be useful. Several HEI's have asked DHO to add a limited number of such quantitative indicators to AISHE. An updated version of AISHE should thus probably consist of a combination of qualitative, process-oriented and quantitative, result-oriented indicators.

The introduction of competency-oriented education in a number of countries has had a major influence on HE. The same is true for the introduction of the major-minor system and the bachelor-master system, both following the Bologna agreement. As a consequence, there is a trend towards individual learning routes, causing the dividing lines between educational programmes to disappear. Some parts of AISHE 1.0 are not adapted to this new development.

### Practical experiences

Other reasons for an update of AISHE are based on the practical experiences with the tool.

Some users appear to object against some AISHE 1.0 criteria, especially 2.2 (expert group), 2.4 (research & external services), and 4.4 (speciality). They experience these criteria as forcing in the direction of a certain prescribed ESD strategy.

Sometimes assessments develop problematically, if the participants have no clear image of the meaning of 'sustainable development'. In those cases, the discussion of for instance criterion 1.1 (vision) is troublesome, and scores may be invalid. Perhaps this can be avoided by the introduction of a short preliminary test in order to check if an AISHE assessment is possible. If not, some introductory workshop on SD and ESD will be necessary.

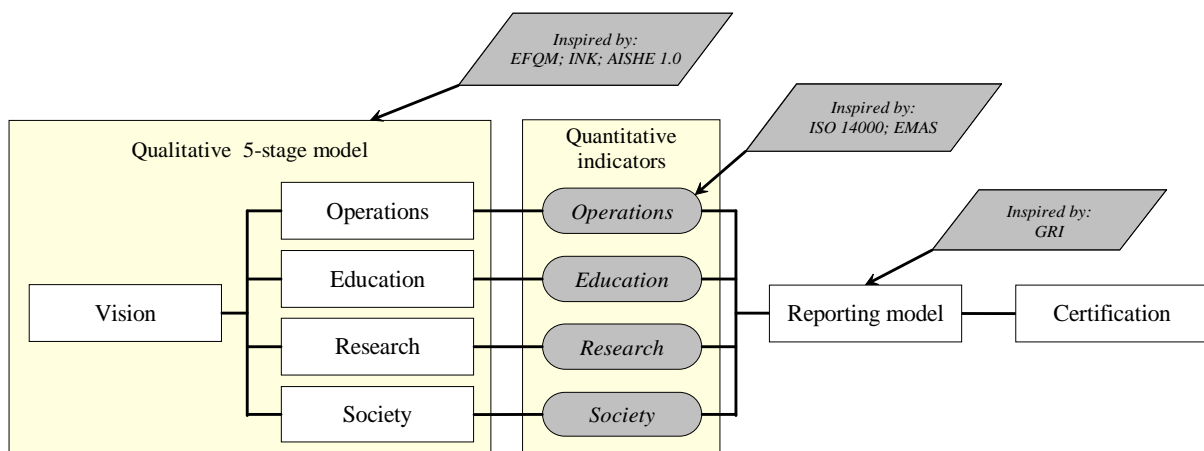
In the eyes of some HEI's, an AISHE assessment takes too much time or requires too many participants. On the other hand, other HEI's would like to enhance AISHE in order to get more detailed results. These conflicting customer wishes can be solved by giving AISHE a modular structure, enabling the HEI's to select the parts they wish. The consequences for the certification system will have to be investigated.

Finally, it would be good if the AISHE reporting tool could be used to enable and tempt universities to publish an annual sustainability report and work on a university-wide sustainability strategy. This would contribute to the transparency and accountability of HE.

## 7. Characteristics of AISHE 2.0

Another request from several universities to DHO concerned the fact that AISHE 1.0 focuses mainly on the education. DHO was requested to develop new AISHE elements aiming at the university research, or at the operations, including the environmental management and the human resource management.

As a consequence, it was decided to develop AISHE 2.0 on a modular basis, based on the 'four roles' philosophy shown in figure 1. This led to a structure that is shown in figure 4.



**Figure 4: the modular structure of AISHE 2.0**

In order to support this instrument, the same set of accessories will be necessary as with AISHE 1.0. That is: a new computer application will be developed; this time, 'AISHE 2.0 Reporter' will be an online application. An annual training programme will be developed, leading to the new AISHE Assessor Certificate, guaranteeing the quality of the assessments. And of course, an international ESD Certification system will be set up.

In order to maintain and 'own' the assessment & certification system, an existing international ESD organisation will be looked for, or if this appears to be impossible, a new such organisation may be founded. Besides, national or regional ESD network organisations will be licensed to organise the assessor training & certification and award the ESD Certificate to HEI's. Obvious candidates for this license are, besides DHO in the Netherlands, e.g. HU2 (*Högre Utbildning för Hållbar Utveckling*, [www.hu2.se](http://www.hu2.se)) in Sweden, Forum Umweltbildung ([www.umweltbildung.at](http://www.umweltbildung.at)) in Austria, the Baltic University Programme ([www.balticuniv.uu.se](http://www.balticuniv.uu.se)), the Catalan Research Network of Education for Sustainability ([www.edusost.cat](http://www.edusost.cat)) and the recently formed DHO Vlaanderen ([www.dhovlaanderen.be](http://www.dhovlaanderen.be)) in Belgium; they all participate in the AISHE 2.0 project. Other ESD network organisations will be very welcome.

## 8. The AISHE 2.0 project

The preparation for the AISHE 2.0 project took place in 2006 and 2007. The group of participating organisations was formed, and at the moment it consists of the above mentioned network organisations plus circa 20 individual universities, together representing 16 countries.

As a result of the project, a number of concrete products will be delivered.

- #1. An assessment instrument called 'AISHE 2.0', shaped in the form of a book which will be made freely available for download as a pdf file.



- #2. An online virtual meeting and discussion point ('Sharepoint') where all necessary documents and applications can be downloaded.
- #3. An online computer application for reporting assessment results.
- #4. An internationally recognised system for the certification of higher education institutions with respect to sustainable development.
- #5. A standardised method for the production of annual sustainability reports.
- #6. A training programme for the training of AISHE 2.0 assessors.
- #7. An internationally recognised certification system of assessors for sustainable development in higher education.
- #8. An explicit relation between the assessment & certification system and the national systems for quality assurance in higher education in a number of countries, thus guaranteeing a strong relation between sustainable development and the quality management of higher education.
- #9. A permanent international network of cooperation between higher education institutions and education organisations in many countries in and outside of Europe, responsible for maintaining the high quality of the instrument and of the assessments. (I.e. either an existing network organisation or a newly founded one.)
- #10. A licensing system, formally allowing and checking members of this network to perform assessments and award certificates.
- #11. A scientific and societal validation of the above.
- #12. A series of publications in international journals and presentations at international conferences.

It is estimated that these results will be available in 2010.

## 9. Invitation to join

The project is coordinated by four partners, each focusing on one of the four main roles of HEI's: DHO (Netherlands), FORUM Umweltbildung (Austria), Mälardalen University (Sweden) and Tampere Polytechnic University of Applied Sciences (Finland). Although all of these are European, the scope of the project certainly is not, and therefore universities and ESD organisations on other continents, as well as within Europe, are invited to join the project.

The project operates at the moment without any kind of financial support or sponsorship. This will probably remain so for the rest of the project. Therefore, it is performed in a 'lean and mean' way, with a minimum of costs and time to be spent. All participants are asked to pay for their own expenses. The minimum participation consists of:

- #1. Join the project meetings with at least one person once a year (September – October). The first of these is in Barcelona on October 14, 2008, as a side event of the EMSU Conference on ESD ([www.emsu.org](http://www.emsu.org)).
- #2. Perform at least one assessment using the presently existing AISHE 1.0. All necessary tools and instruments are available and can be downloaded from the project portal and also from [www.dho.nl/aishe](http://www.dho.nl/aishe). Using these materials, the institute is able to perform the assessment all by itself, or – if preferred - with the assistance of DHO.
- #3. Evaluate the draft elements of the AISHE method, as they are designed in a series of steps during the project. This can be done completely by online communication through the project portal, and requires no travelling.
- #4. Perform at least one assessment using the new AISHE 2.0 assessment tool during the test phase of the project (probably September – December 2009); and participate in the evaluation of these tests by answering a series of questionnaires at different moments and by various staff members and students.
- #5. Delegate at least one staff member to the assessor training course, which is the first step in acquiring the AISHE Assessor Certificate, followed by all necessary further steps leading to this Certificate.
- #6. Join the AISHE 2.0 Conference at the end of the project with at least one person, who is able to report about the AISHE 2.0 assessment(s) and the proceedings of the ESD process within the own institute.
- #7. Actively participate in the dissemination of the project results, the use of AISHE 2.0, and the AISHE Certificate, primarily within its own country.

Universities and network organisations wanting to join the project, or wishing more information about participation, can send an e-mail message to the project coordinator, [nikoroorda@dho.nl](mailto:nikoroorda@dho.nl).

## References

- Onderwijs en UCM/Katholieke Universiteit Nijmegen, Netherlands
- Calder, W., Clugston, R.M. and Rogers, Th. (1999): *Sustainability Assessment at Institutions of Higher Education*. ULSF: The Declaration, Vol. 3, No. 2, 1999. The Sustainability Assessment Questionnaire (SAQ) is downloadable from <http://www.ulsf.org>
- Clugston, R.M. and Calder, W. (2000): *Critical Dimensions of Sustainability in Higher Education*. In: W. Leal Filho, (ed.): *Sustainability and University Life*. Peter Lang, Frankfurt 2000, pp. 31 - 46
- Delakowitz, B. and Hoffman, A. (2000): *The Hochschule Zittau-Görlitz: Germany's first registered environmental management (EMAS) at an institution of higher education*. International Journal of Sustainability in Higher Education, Vol. 1, No. 1, 2000, p. 35 - 47
- Deming, W.E. (1986): *Out of the crisis*. Cambridge, MIT Press 1986
- Dröge, F. and Schoot Uiterkamp, T. (2000): *Higher environmental education and the environmental labour market in the Netherlands – a survey of the influence of internal and external factors on higher education environmental programmes and the labour market for environmental professionals in the countries of the European Union*. ICM/ESSENCE Network, Country Report, VSNU, Utrecht, 2001.
- EFQM (1991): *EFQM Model*. European Foundation for Quality Management. See: <http://www.efqm.org>
- EMAS – *Environmental Management Systems* (1993). European Commission, Council Regulation 1836/93
- Fisher, R.M. (2003): *Applying ISO 14001 as a business tool for campus sustainability: a case study from New Zealand*. International Journal of Sustainability in Higher Education, Vol. 4, No. 2, 2003, p. 138 - 150
- HBO Expert Group (1999): *Method for improving the quality of higher education based on the EFQM model*. 3rd version, Hanzehogeschool (representative), Groningen, Netherlands. Translation of: Expertgroep HBO (1999)
- HBO-Raad (2000): *Van milieu tot duurzaamheid. Eindrapport van de Verkenningcommissie Milieuopleidingen*. HBO-Raad, Den Haag.
- INK (2000): *Gids voor toepassing van het INK-managementmodel*. INK, 's Hertogenbosch, Netherlands. See: <http://www.ink.nl>
- ISO 9000 and 14000 series: International Organisation for Standardisation (ISO), see <http://www.iso.ch>
- Megerle, A. and Megerle, H. (2000): *University support to local and regional agenda initiatives for sustainable development*. In: W. Leal Filho, (ed.): *Sustainability and University Life*. Peter Lang, Frankfurt 2000
- Nuland, Y. van, G. Broux, L. Crets, W. de Cleyn, J. Legrand, G. Majoor, G. Vleminkx (2000): *Excellent, a guide for the implementation of the EFQM-Excellence model*. Comatech, Blanden (Belgium)
- Roorda, N. (2001): *AISHE – Assessing Instrument for Sustainability in Higher Education*. Stichting Duurzaam Hoger Onderwijs (DHO), Amsterdam.
- Roorda, N. (2002): *Assessment and Policy Development of Sustainability in Higher Education with AISHE*. In: Walter Leal Filho (ed.): *Teaching Sustainability at Universities*. Peter Lang Publ., Frankfurt, 2002, pp. 459-486
- Roorda, N. (2004): *Policy development for sustainability in higher education – results of AISHE audits*. In: P.B. Corcoran, A.E.J. Wals (eds.): *Higher Education and the challenge of sustainability*. Kluwer, Dordrecht, 2004, pp. 305 – 318.
- Roorda, N & Martens, P.: *Assessment and Certification of Higher Education for Sustainable Development*. Sustainability: The Journal of Record, Vol. 1 No. 1, February 2008.
- Schaik, M. van, Van Kemenade, E., Hengeveld, F. and Inklaar, Y. (1998): *The EFQM based method for continuous quality improvement adapted to higher education*. Proceedings of the EAIR Forum, San Sebastian, Spain, 1998.
- Shriberg, M. (2002): *Institutional assessment tools for sustainability in higher education*. International Journal of Sustainability in Higher Education Vol. 3 No. 3, 254 – 270.

## Appendix: Possible elements of ESD assessment

*This list is no attempt to be complete, it just offers some ideas and suggestions.*

---

### Mission

- Mission and vision on ESD
  - Policy on ESD
  - Leadership
  - Communication on ESD (internal and external)
  - SD and quality management
  - Stakeholders' appreciation of ESD policy
  - Assignment of a sustainability coordinator (staff function related to the Board)
  - Transparency: SD and CSR reporting
- 

### Operations

#### *People:*

- Care for personnel, human resource management
- Working conditions
- Staff and student policy regarding women, immigrants, disabled
- Protection against sexual intimidation, violence, discrimination
- Policy regarding health of staff and students
- Employment policy, relation with mission
- Appreciation assessment among staff and students (in general, as well as regarding ESD policy)

#### *Planet:*

- Sustainable building (new and existing buildings)
- Energy consumption (savings, use of sustainable energy)
- Water consumption (incl. 'grey' water system)
- Effects on the neighbourhood (smell, sound, safety, traffic and parking nuisance)
- Traffic (of staff, students, goods)
- Procurement (paper, laboratory equipment, catering, etc.)
- Waste (separation, prevention, reuse)
- Garden management
- Communication on environmental management (inventory of wishes and complaints; appreciation assessment)
- Effectiveness of environmental policy
- Overall (environmental reporting, environmental management system, certification based on e.g. ISO 14000 or EMAS)

#### *Profit:*

- Investments for SD; possibly longer cost recover periods
  - Savings (e.g. through reuse or economical use of energy and materials)
  - Long term strategy
  - Accreditation: realisation of the HEI mission; special recognition or certification
  - Effects of SD on image, PR, marketing
- 

### Education

#### *Staff:*

- Basic knowledge of staff about SD; staff development plan
- Specialist SD expertise of members of staff
- ESD 'Frontrunner team'
- Use and anchoring of relations with professional field
- Allocation of facilities for ESD development (e.g. time, competences, responsibility, timetable freedom, training)

**Curriculum:**

- SD in professional competencies / academic targets; relation with institutional mission
  - SD in curriculum related to professional competencies / academic targets
  - Educational methodology: suitable for ESD (e.g. self responsible learning, problem oriented learning, project education, individual learning routes, etc.)
  - Basic module on / introduction to SD
  - Integration of SD within existing curriculum parts (SD as a leitmotiv)
  - Which SD subjects are obligatory, which are optional? (e.g. major – minor)
  - Interdisciplinary and transdisciplinary education
  - Professional responsibility of the student (as a future professional)
  - SD as an element of examination / evaluation of student performances
  - SD as an element of traineeships
  - SD as an element of graduation
- 

**Research****Researchers:**

- Research dedicated to aspects of SD and CSR
- SD as a main subject or as an aspect of the job description
- Interdisciplinary / transdisciplinary cooperation between researchers
- Transfer of SD expertise of researchers to specialist SD teachers and to teachers in general
- Contributions by researchers of SD aspects in curriculum development

**Students and alumni:**

- SD as an aspect during traineeship research and graduation projects
- Interdisciplinary / transdisciplinary graduation projects
- Assessment of need for SD and CSR within professional field

**Institution, board:**

- Stimulating PhD research on SD by employees
  - Cooperation with external centres of SD expertise, for instance with a *Regional Centre of Expertise* (RCE)
  - International cooperation between HEI's on ESD
- 

**Society**

- Implementation of societal role, based on the mission, through an institutional centre of SD expertise
- SD Consultancy for companies, governments, NGO's, general public
- Participation in national DESD implementation programmes
- Participation in local Agenda 21 programmes
- Participation in public discussions on SD related subjects
- Participation in Third World development programmes
- Subsidising local or global development programmes
- Assistance with education development on SD in primary and secondary education
- Training of teachers in primary and secondary education in own and foreign countries