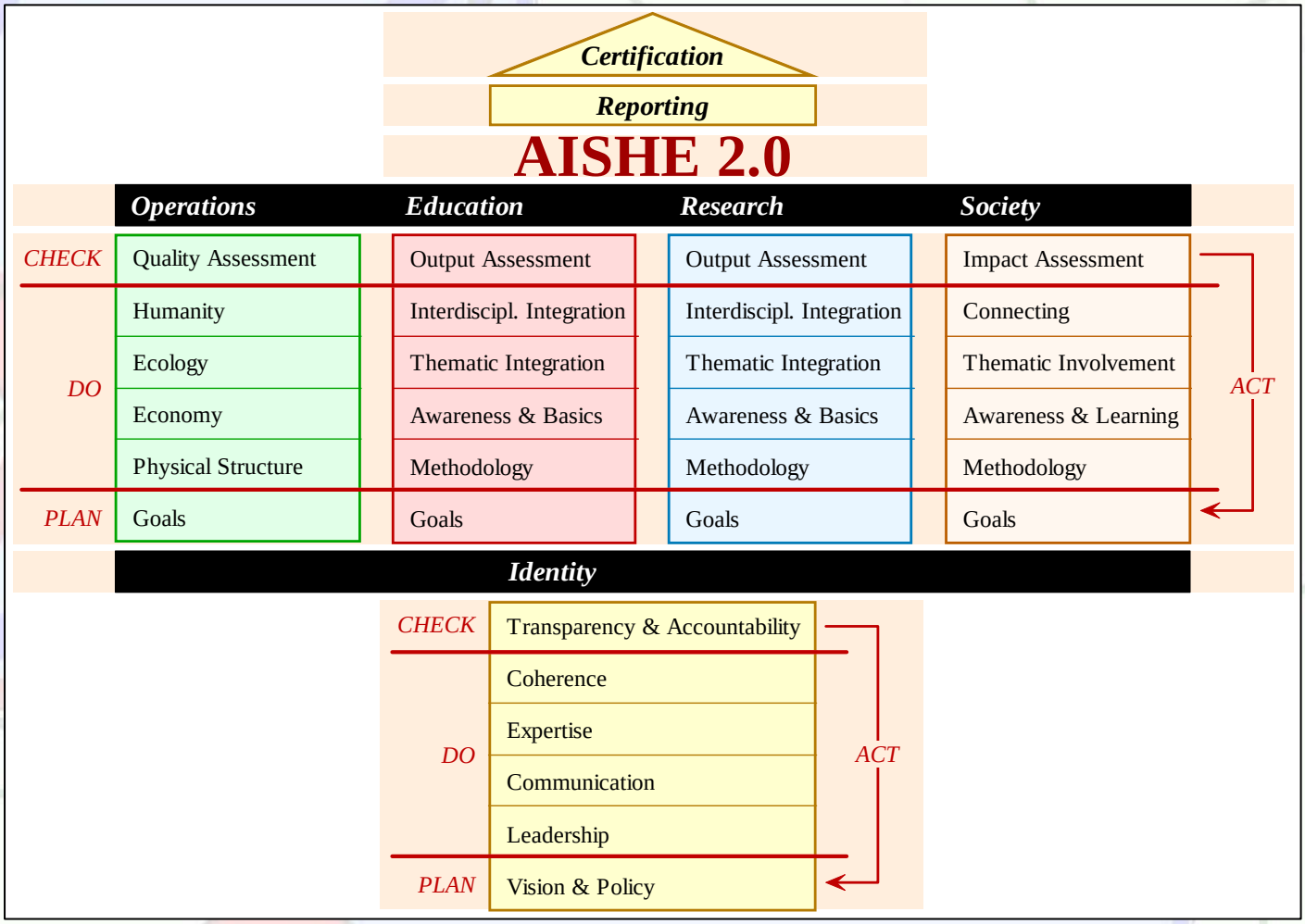
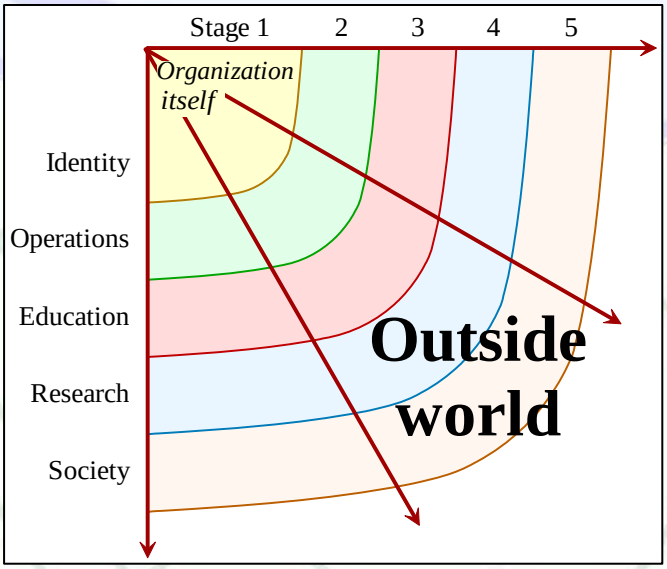
AISHE 2.0 Manual



Assessment Instrument for Sustainability in Higher Education

Edition 2.0

second draft



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***English* text, 2009**

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Colophon

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The website of AISHE 2.0 is www.aishe.info.

Foreword

1. Introduction

The five letters of AISHE stand for Assessment Instrument for Sustainability in Higher Education.
Actually, AISHE is much more. It is also a tool for the development of a policy towards sustainable development: by a university, a campus, a faculty, a school, an academy, an institute, or a separate education or research program. It is a method to raise awareness of, and involvement in sustainable development with people: board members, managers, researchers, educators, other staff members, students. Together with the certification system based on AISHE, it is also a method to express appreciation or even admiration for the results that these people have achieved, often through hard and long work.

Two kinds of application
AISHE can be used in two ways: either as an internal tool, i.e. as an instrument for self-evaluation, or as an external tool, aiming at certification or benchmarking.
The use as an internal tool for self-evaluation is completely free. All necessary materials can be downloaded from the internet or applied directly online. If used in this way, the assessment procedures (described below) can be followed exactly, but it is also possible to redesign these procedures in any way the involved organization desires.
If, on the other hand, AISHE is used as an external instrument, the AISHE assessment is chaired by a certified external AISHE assessor, and the assessment procedures are obligatory. This may lead to the recognition of the international Certificate of Sustainable Development in Higher Education. This certificate is a star system, with levels varying from 1 till 5 stars. Thanks to this, the acquisition of a certificate has proven to be a strong incentive for ongoing organization development.

What you get
AISHE is structured in a modular way. The university can choose which modules it wants to use, and to which university departments it wishes to apply those modules.
If AISHE is applied, the university gets a number of results:

What you get from an AISHE assessment:

- A clear and realistic image of the *present* situation regarding sustainable development in the university. Depending on the selection of modules and departments, this means:
  - the basic *vision* (on sustainable development) of the university or of a part of it;
  - the *education* of one, several or all study programs;
  - the *research* of one, several or all research programs or institutes;
  - the *operations* of a department, a building, a campus, or the entire university;
  - the direct *societal* role of the university.
- A ditto description of the *desired* situation on an agreed later date (e.g. 1 or 2 years later), forming…
- … a basis for the formulation of a coherent policy on sustainable development.
- Support and enthusiasm for this policy from the assessment participants, who together form a representation of the management, the staff members, the students and the external stakeholders.
- If applied as an external assessment instrument (and if the requirements of a Certificate level are met): The international **Certificate of Sustainable Development in Higher Education**.
- A strong incentive for continuous improvement.

What it takes you
Apart from composing a group of participants, and finding a date for them to meet, together with (if you want) the external assessor, no preparations are necessary. No preliminary reports, no gathering documents before the assessment starts.
You will need the **AISHE 2.0 Manual** (*this* document) and the computer application **AISHE 2.0 Reporter**. They are free, and can be downloaded from the website www.aishe.info.

What you invest in an AISHE assessment:

- A group of about 15 participants (or less if the assessed institute is small).
- About five hours in which those people perform the assessment (or more if you choose to do many modules).
- One person who takes notes, and who will have completed the report at the moment the assessment is done.
- A fee for the external certified assessor (if one is involved).

Origins

At the end of 2001, the first edition of AISHE (Roorda, 2001) was published by a Dutch NGO, the Foundation for Sustainable Higher Education (DHO, www.dho.nl), after a development and validation process of two years. Since then it has been used hundreds of times. Mostly in the Netherlands, where it started, but presently also in Germany, Sweden, Finland, Belgium, Spain, Austria and Ukraine. Universities in several Latin American countries and in the USA are interested and may start using the tool within a year. An overview of AISHE 1.0, including some case studies, can be found in Roorda & Martens (2008).

AISHE 1.0 was developed for universities: both academic universities and universities of applied science (Fachhochschüle in Germany, Hogescholen in the Netherlands, etc.). Nevertheless, it has been used occasionally and successfully in secondary schools for vocational education. A separate version for primary education is being developed.

In the Netherlands and Belgium, AISHE 1.0 has been recognized by the Dutch & Flemish Accreditation Organization (NVAO). This implies that study programs that have proved, using AISHE, to belong to the top regarding the integration of sustainable development, receive from the NVAO a special formal recognition.

AISHE 1.0 is based on an instrument for quality management, developed by the European Foundation for Quality Management (EFQM). Based on this 'EFQM Excellence model', the Dutch institute INK had developed the so-called 'Five Stages Model', which added an ordinal, five-point scale to each of the EFQM indicators (INK, 2000). This system was adapted to be used in higher education institutions by a group of Dutch universities of applied science, and published. This latter version was used as starting point for the development of AISHE 1.0.

Comparison between AISHE 1.0 and AISHE 2.0

There are some main differences between AISHE 1.0 and AISHE 2.0.

1. First of all, AISHE 1.0 focused on only one role of universities, i.e. the educational role. Other roles, such as the research, the operations and the relation with the community, did not get much attention. AISHE 2.0 has a much wider scope, as it dedicates explicit attention to all of those roles.
2. AISHE 2.0, being related to all of those four roles, is more complicated than AISHE 1.0. In order to simplify the application, it is designed in a modular structure, which makes it possible to select only those modules in which a university is interested at a certain moment. This implies that the application of e.g. only the educational module is easier and less time-consuming than the use of AISHE 1.0.
3. AISHE 1.0 was applicable only on the level of separate study programs, or of small groups of related study programs within a university. This was directly related to the educational focus of AISHE 1.0. As AISHE 2.0 also assesses other subjects, the application will vary. The operations are in many cases structured around an entire university, a campus or a building, and the application domain of the operations module varies accordingly. Research is often structured in research programs or institutes, and so they are the target of the research module.
4. AISHE 1.0 was developed by a Dutch organization, DHO, and afterwards spread to other countries. AISHE 2.0 however was developed right from the start by an international development group in which about 15 different countries are represented.

2. Higher Education for Sustainable Development

In this chapter, a short overview will be given of the subjects and concepts that are central to AISHE. First, a short description will be given of the concept of sustainable development. Next, the consequences of the integration of sustainable development into higher education will be described, leading to the concept of 'education for sustainable development' (ESD).

It is important to stress that the term 'ESD', as it is used in this publication, refers to *all* aspects of sustainable development within Institutions for Higher Education, i.e. not only to their education itself but also to the university research, operations and societal interactions.

2.1. Sustainable Development

The term "sustainable development" was first introduced in a publication by IUCN, UNEP and WWF in 1980. It received worldwide attention when it was studied thoroughly, on the request of the United Nations, by the World Commission on Environment and Development (WCED), also known after its chair person as the Brundtland Commission. In its final report 'Our common future' WCED (1987), sustainable development was defined as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".
Although this definition has been quite generally accepted as a basic principle, others have elaborated and explained it and added more operational aspects. One example is (Hill et al, 2003):

"Sustainability relates to ways of thinking about the world, and forms of social and personal practice that lead to:
- ethical, empowered and personally fulfilled individuals;
- communities built on collaborative engagement, tolerance and equity;
- social systems and institutions that are participatory, transparent and just;
- environmental practices that value and sustain biodiversity and life-supporting ecological processes."

In 2005, the United Nations Decade of Education for Sustainable Development (UN DESD) started, under the coordination of UNESCO. The draft International Implementation Scheme of the DESD, published in 2004, offered a very clear and inspiring description of the meaning of sustainable development:

"Three interlinked areas are most commonly identified with sustainable development. These are: society, environment, and economy, where political aspects are subsumed under the heading of society. These three elements, reaffirmed at the Johannesburg Summit [in 2002] as the **three pillars of sustainable development**, give shape and content to sustainable learning:
- Society: an understanding of social institutions and their role in change and development, as well as the democratic and **participatory** systems which give opportunity for the expression of opinion, the selection of governments, the forging of **consensus** and the resolution of differences.
- Environment: an **awareness** of the resources and fragility of the physical environment and the effects on it of human activity and decisions, with a commitment to factoring environmental concerns into social and economic policy development.
- Economy: a sensitivity to the limits and potential of economic growth and their impact on society and on the environment, with a **commitment** to assess personal and societal levels of consumption out of concern for the environment and for social justice.

These three elements assume an ongoing and long-term process of change - sustainable development is a dynamic concept, with the recognition that human society is in **constant movement**. Sustainable development is not about maintenance of the status quo, but rather about the direction and implications of change. The emphasis on linking poverty with issues of sustainable development points to the concern of the international community the ending deprivation and powerlessness is as much at the heart of our concern for the future of the world as is environmental protection. **Balancing** this equation is the central challenge of sustainable development."

(UNESCO, 2004b; markings added)

The concept, as it is described here, forms the basis for AISHE 2.0. The **three pillars of sustainable development**, also known as the 'three P's' (people, planet, and profit or prosperity), appear several times in the descriptions of the criteria, especially in the Operations Module.

A few other terms in the citation also play an essential role in AISHE 2.0. The tool is fundamentally based on **consensus** building: consensus about the situation a university concerning sustainable development, and about the direction it wants to go, as higher education is – just as society as a whole – in **constant movement**. This consensus is based on **participation** of staff at all organizational levels, students, and a variety of external stakeholders within society that all may be involved in the assessment process (see chapter 4 for the details).

The effect of the AISHE 2.0 assessment process is not just knowledge and insight, but also **awareness** and **commitment**. Actually, these are probably the most important results.
A university that is able to find the right **balance** between the various pillars of sustainable development, and also between the interests of all its stakeholders, including society as a whole and the natural environment, will eventually grow to be a genuine sustainable university.

2.2. Education for sustainable development (ESD)

In Agenda 21, a major result of the first large UN conference on sustainable development in Rio de Janeiro in 1992, chapter 36 deals with the role of education towards sustainable development. The following citation is from §36.3:

> "Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. (...) Both formal and non-formal education are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education should deal with the dynamics of both the physical/biological and socio-economic environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication."

The text is very clear: sustainable development should be integrated in all disciplines and at all levels. The United Nations Economic Commission for Europe (UNECE) added some detailed demands to this 'Education for Sustainable Development' (ESD). Some of these are (UNECE, 2005):

ESD: more than environmental education
"ESD is still developing as a broad and comprehensive concept, encompassing interrelated environmental, economic and social issues. It broadens the concept of environmental education (EE), which has increasingly addressed a wide range of development subjects. ESD also encompasses various elements of development and other targeted forms of education. Therefore, environmental education should be elaborated and complemented with other fields of education in an integrative approach towards education for sustainable development."

Holistic approach
"Key themes of SD include among other things poverty alleviation, citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, justice, security, human rights, health, gender equity, cultural diversity, rural and urban development, economy, production and consumption patterns, corporate responsibility, environmental protection, natural resource management and biological and landscape diversity. Addressing such divers themes in ESD requires a holistic approach."

Desired characteristics of education and research for sustainable development
Many books and articles were published in which general characteristics are described of education or of research that is suitable to make strong contributions to sustainable development. A systematic overview of these characteristics is presented in table 1. Most of the characteristics in that table are applicable to education, research and societal interactions.

Table 1. Characteristics of Sustainable Development

Principles	Characteristics	Details
Connectivity, complexity	Systems thinking	Connecting parts, subsystems or aspect systems. Connecting an analytic with a holistic approach; the small with the large; and the local with the global.
	Multi-, inter- or transdisciplinary	Connecting disciplines and stakeholders. Balanced regarding Triple P; balanced with disciplinary aspects.
	Life-cycle approach	Connecting phases in the lifecycle. Regarding lifecycles of people, products, companies, habitats, cultures, designs, paradigms, etc.
	Intercultural, international	Connecting people, (sub)cultures, regions, nations. Openness for values and perspectives of others.
	Future orientation	Connecting the past, the present and the future. Concerns both long-term and short-term targets, based on visions of sustainable future developments.
Innovativity	Openness to changing conditions	Flexibility of mind; capability of dealing with uncertainties
	Openness to new solutions	Creativity, non-linearity, out of the box thinking, acceptance of the unexpected.
	Function orientation	Stimulating creative thought and design processes by zooming out from actual products or services to underlying functions or needs, aiming at finding alternatives ways of fulfilling them.
Action learning, social learning	Application of knowledge	Acquisition and application of knowledge, either sequentially or simultaneously (learning by doing). Aiming at finding useful solutions to real problems.
	Multi-methods	E.g. JIT lectures, art, discussions, drama, games, etc.
	Real-life situations	Context-embedded learning, either in simulated or actually existing situations.
	Commitment	Personally engaged towards objectives of sustainable development.
	Cooperation	Teamwork within student groups; cooperation with experts, professionals.
Reflexivity	Learning to learn	Reflection on own learning process, aiming at continuous improvement. Lifelong learning.
	Responsibility	Responsibility for own learning process, and for the definition of learning goals (up to a certain level). Also: responsibility for results of professional activities (stakeholder approach).
	Value-driven	Aware of the relevance and the relativity of embedded values and opinions
	Critical thinking	Critical attitude towards questions, tasks, methods, answers, own functioning
	Robustness of information	Awareness of level of certainty of knowledge, data, conclusions: subjective, intersubjective, objective (opinions, theories, facts)

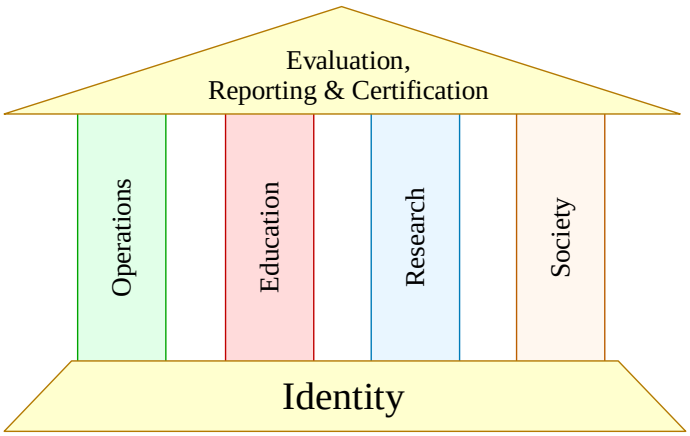
Main sources: Agenda 21 (UNCED, 1992), Orr (1992), De Haan & Harenberg (1999), De Haan (2002),Sterling (2004), UNESCO (2004a, 2005), UNECE (2005), Martens (2006), Van Dam-Mieras (2007), Barth & Burandt (2008), Dieleman and Juárez-Nájera (2008), Roorda (2010).

2.3. The four roles of higher education institutions

Universities can be seen in different ways, depending on the role that is emphasized. The two core activities are no doubt education and research. Apart from that, a university can be seen as an organization in itself. In that role, it performs all kinds of operations, just like companies, government departments, etc.: 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' (see the figure below). In this societal role, which in some countries (e.g. Sweden) is explicitly described in educational laws and regulations, universities 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).
In all of these four roles, a university can contribute to the process of SD in society.
It is important to emphasize that the term 'ESD', as used in this document, refers not only to the educational role but to all four roles of the universities towards sustainable development.

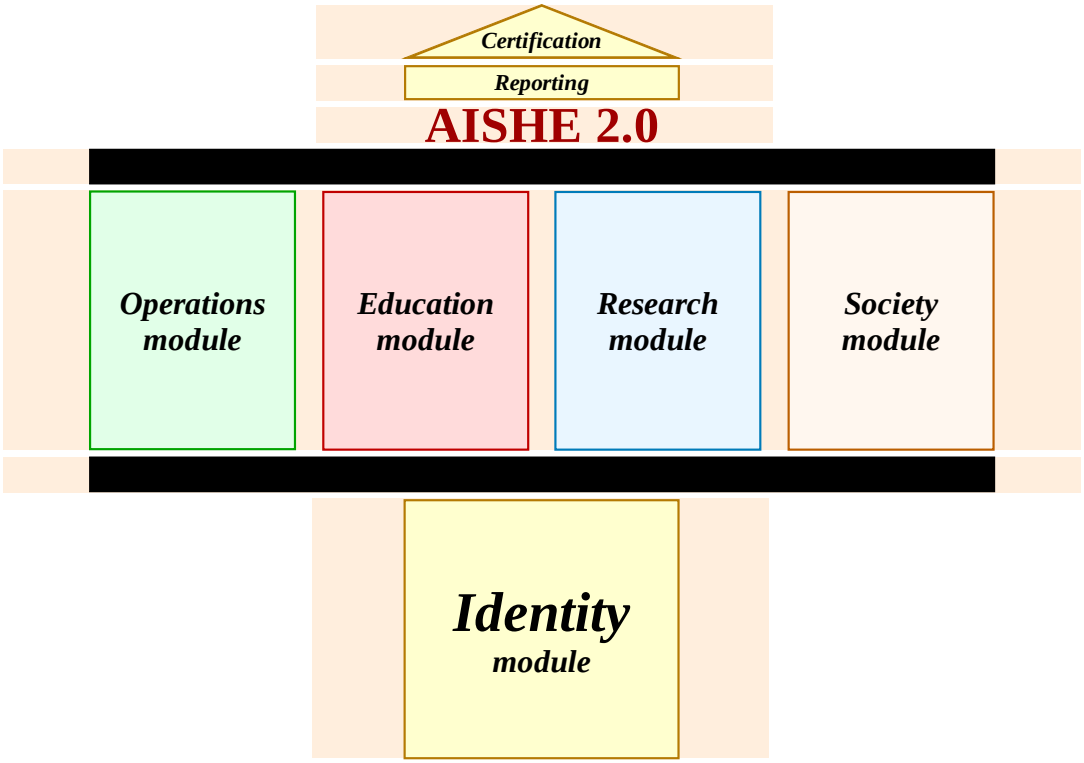


Ideally, all of those four roles are based on a common fundament, a shared vision about the identity and the character of the university, usually expressed in a mission statement.
That is why this identity gets special attention in AISHE 2.0. Actually, a separate module is dedicated to the identity and its relations with sustainable development, as will be shown in the next chapter.
The counterpart of the identity in the above figure is the system of evaluation and reporting, in which the results of the organizational processes in the four roles are compared with the identity in a regular evaluation. In general, this is the internal quality management process, in many countries fortified by a national or regional system of external quality control. Regarding ESD, AISHE 2.0 is such an evaluation and reporting system.

3. The structure of AISHE 2.0

3.1. AISHE consists of 5 modules

As mentioned before, AISHE consists of a number of separate modules, making it possible to use only a selected part of the instrument.
The modular structure is based on the four roles of universities in society. For each of these four roles, there is a module which makes use of an ordinal five-point scale, which will be described in detail in the next paragraph.
The starting point of the system is the Identity module.

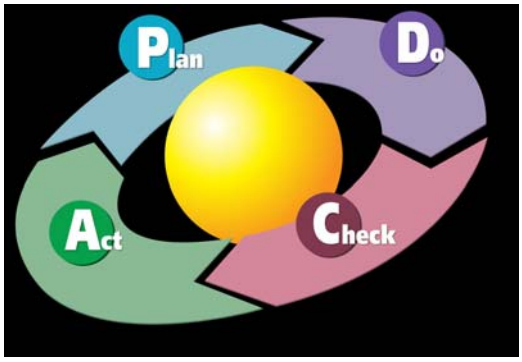


Based on the outcomes of the five modules of the assessment instrument, a reporting tool is available to make a suitable overview of the results. The resulting report also makes it possible to judge immediately whether a university, or a part of it, qualifies for certification.
The protocols and procedures for this certification form the top stone of AISHE 2.0.

3.2. Each module consists of 6 criteria

The philosophy of the AISHE model is based on the 'EFQM Excellence model', a model for quality management, developed by the European Foundation for Quality Management (EFQM, 1991; Nuland et al, 1999). Following this EFQM model, the structure of AISHE is based on the concept of continuous improvement. This process can be described with the so-called 'Deming Cycle' or 'PDCA Cycle', which is shown to the right (Deming, 1986). This cycle consists of four steps:

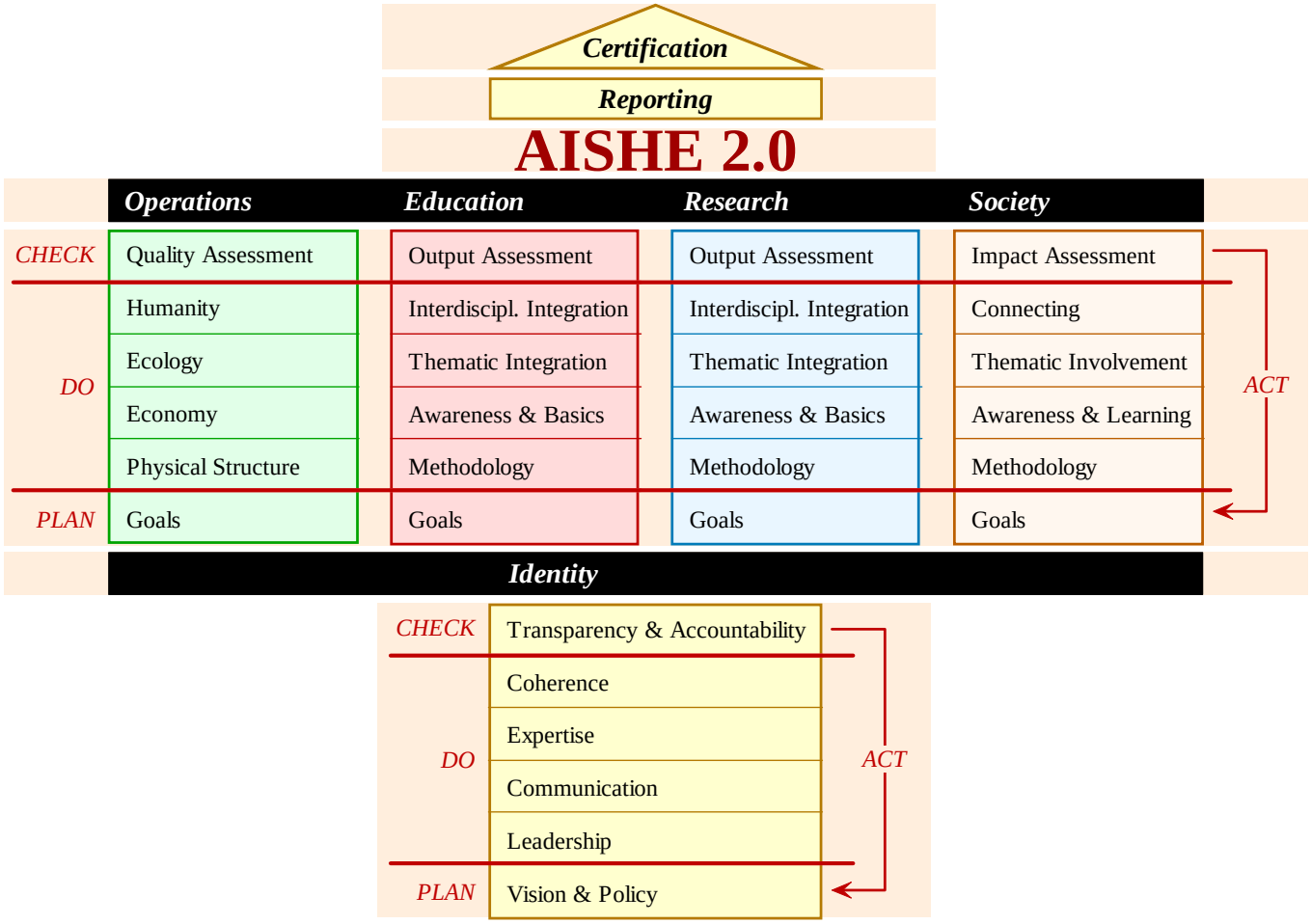
1. ***PLAN:*** prepare for actions. That is: define the goals, select the processes, make sure that you have the appropriate expertise, tools and resources.
2. ***DO:*** perform the activities you have planned.



Deming Cycle
Source: http://commons.wikimedia.org/wiki/File:PDCA_Cycle.svg

3. ***CHECK:*** evaluate the results of these activities.
4. ***ACT:*** Compare the results of 'CHECK' with the goals of 'PLAN', and decide upon actions to correct for differences.

Ideally, this cycle is completed and started again in a never-ending movement.
Just as the EFQM model, AISHE makes use of criteria that are distributed along three of the four elements of the PDCA cycle: Plan, Do and Check.
Each of the five AISHE modules consists of six criteria. For every module, the first criterion defines the 'Plan' aspect. The next four criteria together define the 'Do'-aspects, while the sixth and last criterion defines 'Check'.
The detailed structure of AISHE, consisting of 5 × 6 criteria, is shown in the figure below.



3.3. *Each criterion is described by 5 development stages*

As stated, the criteria of the AISHE model are based on the 'EFQM Excellence model'. To this model was added a so-called 'Five stages model' by INK, a Dutch Institute for Quality Management (INK, 2000).
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.
A further development was made by a group of Dutch Universities of Applied Science, which made it suitable for Higher Education (Expertgroep HBO, 1999; Kemenade & Vermeulen, 2004). Instead of themes concerning e.g. 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.
Below, a short description is given for each of the five stages, as they are defined in the EFQM-HE version.

Table 2. General description of the five stages				
Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Goals are subject oriented. - The processes are based on actions of individual members of the staff. Decisions are usually made ad hoc.	- Goals are related to processes. - Decisions are made by groups of professionals, and supported by the management.	- The goals are stakeholder oriented instead of internally oriented. - There is an organization policy related to (middle)long-term goals. - Goals are formulated explicitly, and they are measured and evaluated. There is feedback from the results.	- The internal processes are seen as part of a chain. - There is a permanent network of contacts with direct stakeholders. - The activities and processes are based on formulated external goals.	- There is a long-term strategy. The policy is aiming at constant improvement. - Contacts are maintained, not only with direct stakeholders but also with other stakeholders, all over society. - The organization fulfils a prominent role in society.

The five stages can be depicted graphically, as is shown on the right.

Cumulative character

The descriptions of the consecutive stages are meant to be cumulative. This means that the demands formulated in the first stage are again demands for the second and higher stages, although they are not mentioned again. In the same way, the demands of stage 2 are again demands for the third and higher stages; etc.

The principle is shown in the table on the next page.

The cumulative character implies that it is only allowed to conclude that the demands of a certain stage have been met if all demands of the lower stages have been, too.

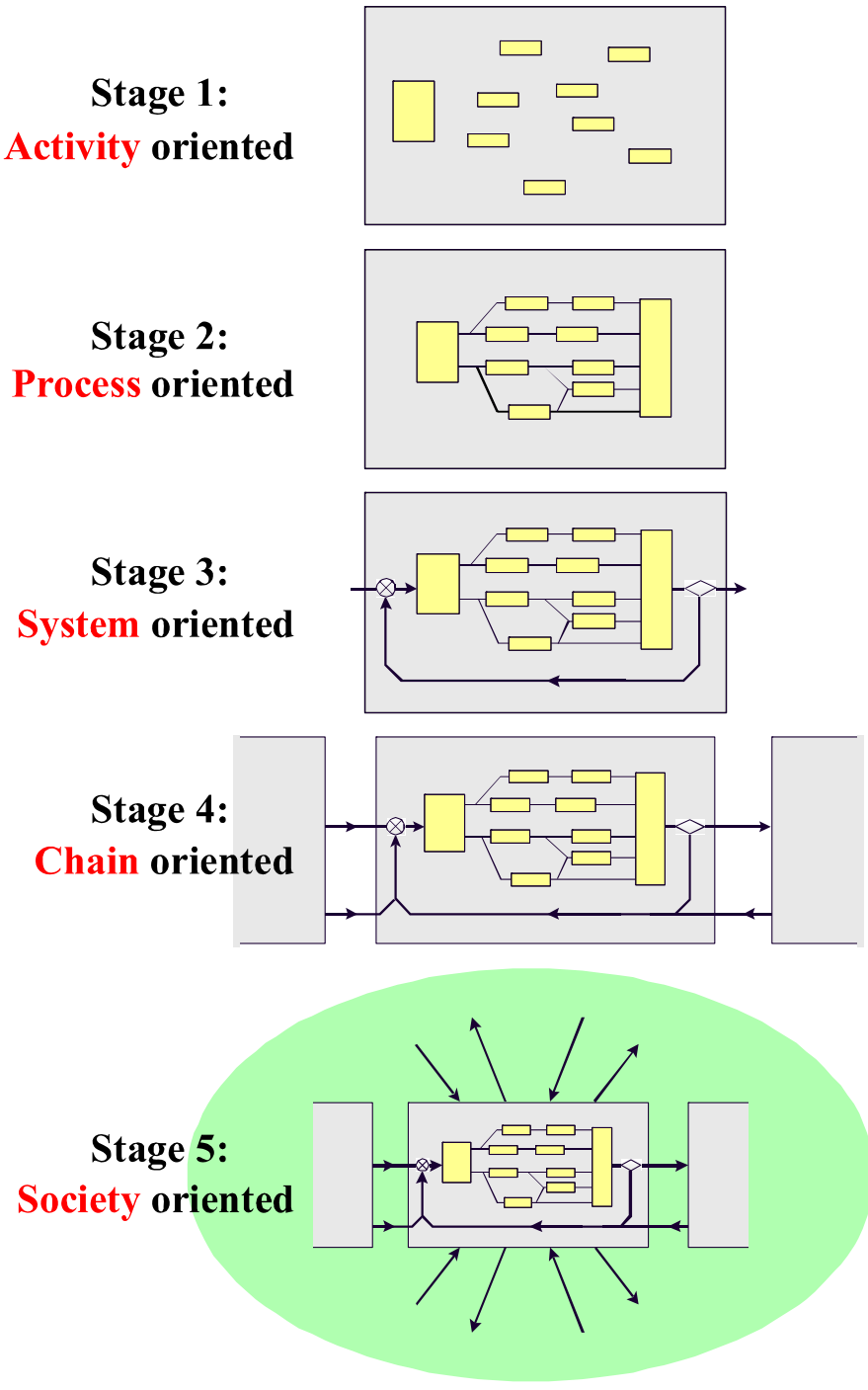


Table 3. Cumulative character of the five stages				
Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Demands of stage 1	- Demands of stage 1 *(not mentioned again)* - Demands of stage 2	- Demands of stage 1 *(not mentioned again)* - Demands of stage 2 *(not mentioned again)* - Demands of stage 3	- Demands of stage 1 *(not mentioned again)* - Demands of stage 2 *(not mentioned again)* - Demands of stage 3 *(not mentioned again)* - Demands of stage 4	- Demands of stage 1 *(not mentioned again)* - Demands of stage 2 *(not mentioned again)* - Demands of stage 3 *(not mentioned again)* - Demands of stage 4 *(not mentioned again)* - Demands of stage 5

3.4. The various dimensions of the five stages

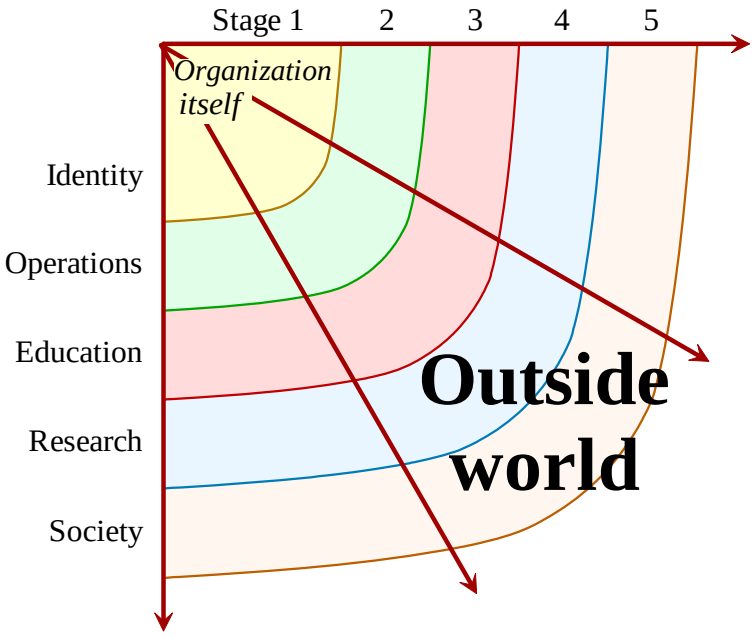
The criteria to which these five development stages are applied are of various natures. For instance, there are themes like the organization policy and the strategy; human resources; management of processes; and the achieved results.
In the ordinal scale from stage 1 to stage 5, there are several kinds of differences: several *dimensions*. These dimensions may be characterized as follows (indicating only the extremes of stage 1 and stage 5):

Dimension:	***goes from …..***	-	***….. till:***
• ***Concerns:***	individual …	-	… society
• ***Scale:***	organization itself …	-	… outside world
• ***Policy:***	ad hoc decisions …	-	… strategic, pro-active
• ***Time perspective:***	this year …	-	… long term
• ***Quality:***	incidental evaluation …	-	… systematic evaluation by all stakeholders
• ***Result assessment:***	once at most …	-	… comparison with the best

A more thorough overview is shown in the table on the next page.

Table 4. Some dimensions of the five stages				
Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Concerns Individual staff member	Team, study program, research institute	Whole organization	Chain: Secondary education – university – direct stakeholders (e.g. professional field)	All of society
- Scale: Organizational identity	Organizational staff and processes	Organizational staff & students	Organization and its direct stakeholders	Organization and the entire world
- Ambition Good in own eyes	Good according to the management	Good according to the organization	Good according to the customers	Excellent in comparison with colleague institutions
- Policy Ad hoc decisions	Operational policy	Tactical, passive policy	Strategic, active policy	Strategic, pro-active policy
- Time perspective Now (= e.g. this semester)	Short term (1 to 2 years)	Middle long term (up till 5 years)	Long term (up till 10 years or more)	Long term (up till 10 years or more)
- Quality Incidental evaluations	Beginning of quality management	Systematic evaluations plus feedback: Policy circle	Evaluation involvement of customers (students, professional field, other direct stakeholders)	Evaluation involvement of all external stakeholders[1]
- Result assessment Performed maximally once	Performed several times, trends are known	Result comparison with targets posed	Result comparison with colleague organizations: *Benchmarking*	Result comparison primarily with excellent colleague organizations

One of these dimensions – the scale – goes from the organization itself till the entire outside world, in other words: from internal to external, or from small to large. This dimension has a parallel to the structure of the five modules, as they have this same dimension, from the Identity module till the Society module. Although no strong consequences of this parallel should be drawn, it is interesting to consider it as a part of the AISHE 2.0 structure, as it is shown in the figure on the right.

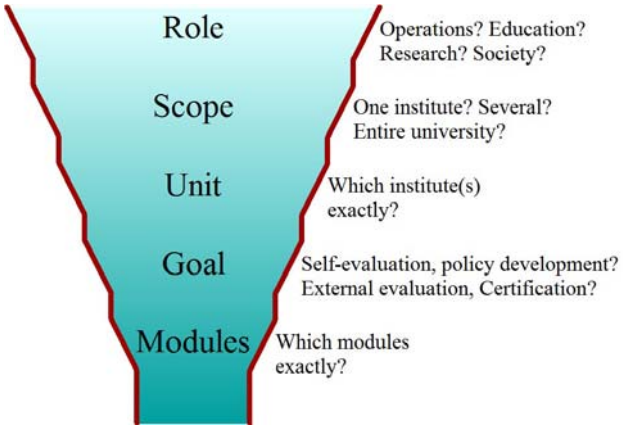


[1] E.g. by a Visitation- or Accreditation Commission

4. The assessment procedure

In this chapter, the procedures will be described that are to be followed in order to do an AISHE 2.0 assessment. The chapter starts with a number of questions about *what* is going to be assessed, *how* it will be done, and *why*.

4.1. Preliminary decisions



Before an assessment can be organized, five basic decisions have to be made:

- The university *role*. What kind of role is going to be assessed: its societal interactions? Its education, research, operation? 'Just' its identity?
- The application *scope*. On what organizational level will the assessment take place, and for how many units? Just for a single unit? For a combination of units, or the entire university?
- The application *unit*, i.e. the precise institute(s) that will be assessed.
- The application *goal*: is the assessment only meant as an internal self-evaluation, aiming at policy development, or also as an external assessment aiming at certification?
- The exact application *modules*: perhaps not only the 'proper' module (e.g. the research module for a research institute) is interesting but also the identity module, applied to that institute. (For external assessments the use of the Identity module is obligatory, as is explained below.)

Some of these decisions are self-explanatory. Some others will be clarified in the next paragraphs.

4.2. The application level

Every module of AISHE 2.0 can be applied on several organizational levels. As an example, the Operations module can be applied e.g. to a building, a campus, or the entire university.
For each module, there is a minimum level, an optimum level, and a maximum level at which it can be applied.

Minimum level
The minimum application level for each module is the lowest level at which the unit that is assessed can be seen as a separate organization. The indicators and their five stages have been formulated in such a way that it would not make sense to apply them to a smaller element. This means:

- **Operations module**: the smallest physical and logical unit at which there is a unity of operation. This may be a building, a campus or perhaps the entire university. If e.g. an environmental management system is designed and in use for one entire building, is does not make much sense to apply the operations module to just one floor of this building. So, the minimum application depends on the actual situation, and this should be investigated by studying the various criteria in the operations module, including the descriptions of their five stages, and comparing them to the actual situation within the university and its parts.
- **Education module**: a separate study program (e.g. a complete bachelor's or master's program), including all years and units of the program.
  It is not possible to apply AISHE to just a part of the study program, e.g. an educational module of a few credit points or just one year of the program.
- **Research module**: a research institute, or perhaps a research program that has been defined having its own staff, budget, goals, etc. and so really functions as an institute for some years.
  It is not possible to apply AISHE to just one individual research project (unless of course an entire institute is just performing this one project).
- **Society module**: this depends on the way a societal interaction, cooperation or partnership is organized. As far as the university is involved, it may be a faculty, a study program, a research institute, a campus, or perhaps the entire university. Each of these can be the target of an AISHE assessment.
- **Identity module**: every level at which any of the other modules can be applied.

Optimum level
The application of AISHE 2.0 renders the most specific information about the present and the desired situation if it is applied at the minimum level. So, in a way you might say that this is also the optimum level.
On the other hand, if a university wants to gain insight in a lot of its buildings, study program or research institutes, it may be very expensive and time consuming to assess all these parts separately. For reasons of efficiency and speed, a combination may be more ideal.
This means that e.g. a group of mutually related physical locations, study programs or research institutes may be combined in one assessment. Although this clearly has the advantage of a higher efficiency, it also has some disadvantages. One of these is the fact that such an assessment will render more superficial and less specific information.
In order to guard against attempts to raise the efficiency up to an extremely high level, there are guidelines that – only for external assessments – limit the possibility of combining several institutes or programs into one assessment. As these guidelines differ for each module, they are presented in the chapters that deal with the separate modules (chapter 5 - 9).
Experiences with AISHE 1.0 (which focused specifically on the education) show that it is quite common to combine two or three highly related study programs into one assessment, so in many cases that is probably the optimum application level. For the other modules, results of new experiences will be published as soon as they become available.

Maximum level
The maximum application level clearly is the entire university. If the university is large and has a lot of disciplinary sectors, departments, study programs or research institutes, it may be difficult or even practically impossible to do an AISHE assessment in this level, but in smaller universities this may be successful, especially if it operates in just one disciplinary sector (e.g. teacher, arts or business education).
It is certainly not possible to combine more than one university into one AISHE assessment.

The term 'organization'
In a number of places in this manual, the term 'organization' will be used. This general term refers to the part of the university that is being assessed, i.e. a faculty, a research institute, a campus, a study program, etcetera., or perhaps the entire university. The reader is asked to substitute the proper name of the relevant institute wherever the term 'organization' is used.

4.3. The application goal

The only goal of an AISHE 2.0 assessment may be, to do a self-evaluation in order to get insight in the present situation concerning sustainable development within the organization, to develop a policy on it, and to create enthusiasm and support within the management, the staff and the students. If this is the case, the use of AISHE is an internal assessment.
In many cases, an organization hopes to be awarded with the international Certificate of Sustainable Development in Higher Education. In this case the use of AISHE is an external assessment.
There is no difference between internal and external AISHE 2.0 assessments. The two uses of AISHE are identical, only the purpose is different.
The only practical difference is that, in the case of an internal assessment, it is possible to deviate from the proper procedures. This will be described now.

4.3.1. The internal assessment

If AISHE 2.0 is applied as an internal assessment, i.e. as a self-evaluation, there are no strict rules to how it should be done. So, you are free to make any kind of changes to the proper procedures.
The only thing that is required in that case is that, if you report the results publicly through presentations, publications, websites etc., you describe the procedural changes you made. This way, you make clear how the results were produced, and so you make it possible to have correct interpretations of your results.

Nevertheless, it is recommended to follow the proper procedures that are obligatory to the external assessment, as described below. These procedures have been thought through and studied carefully, and they have been adapted and improved on the basis of many actual assessments. So, if you follow these procedures, you have a guarantee that the process will be optimal and the results will be valid. This also guarantees that the results can be compared directly with those of other AISHE assessments – e.g. an assessment of the same institute, one or two years later, in order to evaluate the improvements that have been realized in the meantime.

The internal assessment may be chaired by anybody. Nevertheless, it would be good to invite an assessor who has acquired the AISHE 2.0 Assessor Certificate. This will cost you some money, but this money will easily be compensated for by having a more valuable and efficient assessment.
If however you decide to ask a chair person for the assessment who does not possess the AISHE 2.0 Assessor Certificate, it is recommended that this chair person has ample experience chairing assessments or audits in the field of quality management or environmental management, preferably possessing some auditor certificate in that field.

4.3.2. Regulations for the external assessment

If the assessment aims at acquiring a Certificate of Sustainable Development in Higher Education, the procedures have to be followed exactly. The same is true if the results will be used in any other way to formally compare the results to other assessments (e.g. for benchmarking or for special awards).
The demands for the proper procedure are:

1. **Certified assessor:**
   The assessor has to be certified by one of the institutions that are licensed to grant the AISHE 2.0 Certificate. A list of these institutions can be found on the website www.aishe.info. Besides, a list of all certified AISHE 2.0 assessors can be found on the same website.

2. **Independent assessor:**
   The certified assessor is not allowed to be a member of the staff of the university in which the assessment takes place, neither as a permanent staff member, nor as someone who has a temporary working relation. Besides, the assessor is not allowed to have any other kind of professional or personal relation with the university involved. Examples are: a close relative who works or studies there; a membership of an advisory board; etc. In other words: the assessor must be completely independent from the university involved.
   If, at a later stage, it appears that the assessor was not completely independent, an eventual certificate will be withdrawn.

3. **Selection of the assessor:**
   The university in which the assessment will take place is not allowed to select the assessor itself. The assessor will be selected by one of the institutions that are licensed to grant the AISHE 2.0 Certificate. This means that, if a university would like to receive a certificate, the first step, before planning an assessment, is to contact such an institution.
   If such an institution exists in the country in which the university is located, the university should contact this institution. If there is no such institution in the university's country, the nearest institution should be contacted.

4. **Combination of institutes:**
   If more than one institute (e.g. several campuses, study programs or research institutes) should be assessed together in one assessment, these institutes have to be of a similar type: i.e. no combinations of e.g. a research institute and a study program are allowed. Besides, the various institutes must be sufficiently similar. Indications for this similarity are given in the next paragraph. The organization can propose such combinations, after which the assessor decides whether or not to allow the proposed combination.

5. **Size and composition of the group:**
   The group of participants exists of at least 15, and at most 20 persons. Together, these persons must be representative of the assessed organization. Aspects to look at are:
   - A fair distribution of functions (e.g. in an educational assessment: the management, the teaching staff, the non-teaching staff, the students).
   - A fair distribution of departments. (e.g. in an combined educational assessment of 3 study programs: representatives of all 3).
   - A fair distribution of opinions 'for' and 'against' sustainable development, if such a range exists.
   - A fair distribution of personal characteristics, like age, gender, etc.
   - If it is expected that quite a few stage 4 scores (chain oriented) will result, then also a number of representatives of the direct stakeholders (e.g. for the education: the professional field) should be present.
   - If it is expected that quite a few stage 5 scores (society oriented) will result, then also a number of representatives of society in general should be present.
   - The same is true if the society module is used.

   The assessor will receive (at least a few weeks before the assessment) a proposal for the composition of the group of participants. Only if the assessor approves the composition, the assessment may proceed.

6. **Management:**
   Under all circumstances, the management must be present during the entire assessment.
7. **No replacements:**
   All, or at least nearly all, other participants must also be present during the entire assessment. It is not allowed to 'replace' participants by others during the assessment.
8. **Module selection:**
   During the assessment, two full modules must be completed: the Identity Module, and the module that is appropriate for the assessed organization (e.g. the Research Module for a research institute). Both modules are applied to the assessed organization, and not to a higher or lower level of the university.
9. **Report:**
   The use of the computer application 'AISHE 2.0 Reporter' is obligatory. This application can be downloaded for free from the website www.aishe.info. It can also be used online. The report is made during the assessment, by a person who does not participate in the assessment. At the moment the assessment is finished, the report is completed. Apart from some eventual text editing, it cannot be changed afterwards.
10. **No documents:**
    During the assessment, no (printed or digital) documents are permitted, apart from the AISHE 2.0 manual.

The last rule may seem strange, but it can be explained easily. For instance, if a mission statement is discussed, it is prohibited to take the actual mission statement and read from it. In order to get a 'live' description of the organization instead of a theoretical one, the assessment is based on what the participants can tell without consulting documents. Besides, if all kinds of documents are consulted during the assessment or even have to be collected from somewhere else…), the assessor will have trouble to manage the time properly.

If the assessment indicates that the assessed organization meets the demands of the certificate of one or more stars, other regulations describe the procedures that have to be followed in order to receive the certificate. One of these rules is that all assertions that have been made during the assessment (without using any documents) have to be proved to a Certificate Commission, this time supported by all necessary documents.
The certification procedure is described in chapter 10.

4.3.3. A combination of institutes

As one of the above regulations describes, institutes can be combined if they are sufficiently similar. The assessor decides whether or not the proposed combination is approved. In order to do that, the assessor will need to have answers to the following questions:

1. Are the institutes all part of the same organizational unit (e.g. a faculty)?
2. Are the institutes all of the same type (e.g. all research institutes, or all study programs, etc.)?
3. Do the institutes demonstrably have a shared vision on its core activities (e.g. research, operations) and of the relation of it with sustainable development? Is this expressed in a common policy?
4. Do the institutes demonstrably use comparable methodologies?
5. Are the direct stakeholders of the institutes identical or at least comparable?
6. Do the institutes share the same staff, or else are there demonstrably intensive and continuous professional contacts between the several staff groups?
7. Are there no reasons to expect that the institutes will receive very different results if they would be assessed with AISHE 2.0 separately?

If all questions are answered with 'yes' or with 'probably', the combination will be approved by the assessor. If one or more questions are answered with 'no' or 'probably not', the combination will not be approved.

If two or more institutes are assessed in one assessment, this has the advantage of a greater efficiency and lower costs. However, there are also some disadvantages:

- It may be more difficult to form a group of participants that together are representative of all institutes involved;
- The discussions during the consensus meeting (see below) may be more complicated and last longer;
- If the various institutes are not in the same stage regarding some criteria, all involved institutes will receive the lowest of the scores that are concluded (just like a chain is as strong as its weakest link). This implies that the achievements of institutes that perform better than the others will not be recognized properly, and this may be a disappointment for those who are involved. In other words:

It must be stressed that if, during the assessment, the assessed institutes appear to score differently for some criteria, the result score in the report will always be the *lowest* of the scores that are present. In some cases this may result in a situation in which *no* institute will receive a certificate (of a certain star level), just because only *one* of the assessed institutes does not meet the demands of this star level.

Entire university
In principle, the various modules can be applied to an entire university. However, there are some risks.
The stage descriptions of the various modules primarily aim at separate institutes, e.g. individual research institutes or study programs. If a small university contains just one such institute, the application at the university level is not complicated. The same is true if e.g. the research of the university is not organized in separate institutes but spread out over the university, or if all operations take place within one building or campus. There may be some difficulty in finding a fair group of representatives of all the research, operations, etc.

If a large university, having many different buildings, research institutes or study programs, wants to gain insight into all of its activities, the proper way to do it is to organize a series of separate AISHE assessments. It may be attempted to combine all institutes of one type (i.e. operations, education, etc.) in one assessment. But in that case, the disadvantages that were mentioned concerning the combination of just a few institutes in one assessment will no doubt be experienced more strongly, and the results may be partly or completely invalid.
Eventual experiences with such use will be published in separate documents.

Institutes of a different type can *never* be combined in one assessment. For instance, a study program and a research institute cannot together be a part of one assessment.

4.4. The selection of modules

If the assessment is an internal self-evaluation, of course the organization is completely free in the selection of the modules that will be used.
If however the assessment is external, the module selection is not free, as one of the rules in §4.3.2 already indicated.
The *Certificate of Sustainable Development in Higher Education* can only be awarded to an institute (or to a combination of institutes) if not only the appropriate module (e.g. the education module for a study program) is part of the assessment, but also the identity module. Both of these modules should be applied completely.

External assessment = Identity Module + Appropriate Module

In the application of both modules, the stage descriptions have to be interpreted in relation with the individual institute (or combination of institutes) that is assessed. As an example, one of the demands of stage 2 of the first criterion of the Identity Module states:

> "The vision and the policy on sustainable development have been formulated in documents."

In order to interpret this, there are two options. Supposing that one study program is being assessed:
1. The management & team of the study program itself have such a vision and policy, and have formulated this in their own document(s).
2. Such a vision, policy and documents exist on a higher organizational level, e.g. a faculty or the entire university to which the program belongs. Formally, this means that the study program shares them, so at first glance it seems that this requirement is met. Nevertheless, the assessor will investigate if the management & team of the study program actively share and use the vision, policy and documents, and 'translated' them to their particular situation. If not, then they don't really 'own' them, and the requirement is *not* met.

This important principle of AISHE illustrates that the tool tries to assess the 'live' situation and not some theoretical or formal situation. Again, this is the main reason why no official documents are allowed during the assessment, apart from the AISHE 2.0 Manual.

4.5. Practical preparations

After all necessary decisions have been made about what the university wants to be assessed, how it will be done and to what purpose, an AISHE 2.0 licensed organization can be contacted in order to invite the certified assessor. If it is an internal assessment, nevertheless a certified assessor can be invited, but this is not necessary.

If the organization finds it difficult to make the above decisions, the order of steps can be turned around: first, an assessor can be invited through the licensed organization, and next this assessor will help making the relevant decisions.

The assessor will also discuss with the organization about the start situation concerning sustainable development. Do the managers and staff members, and – if relevant – the students, the external direct stakeholders, or the representatives of society, have enough knowledge about sustainable development to discuss it during an assessment? Do the eventual external participants know enough about the organization to be assessed? If any of those questions should be answered with 'no', problems will probably occur, and the assessment might be troublesome and perhaps even fail completely.

If such a situation occurs, it is strongly recommended not to use AISHE as a first step. It is much better first to have an introducing event, e.g. a workshop, in which the lacking knowledge is added.

If the assessor estimates that this is the case, he / she will certainly recommend this, and either offer to organize such an event together with the organization and contribute to it, or else offer help in finding someone else who can do so.

If no such preparatory event is necessary, or after it has taken place, a number of preparations should be made.

Checklist

1. Set a date, together with the assessor (a whole day is recommended; it should take less, e.g. from 9 AM till 3 PM including breaks, but this leaves some spare time & some room for celebration afterwards, etc.).
2. Select a location (a room in which the participants can sit and face each other around e.g. a large table) with *more than* enough space for everybody.
3. Invite the participants, including some extra in case some of them don't show up. Use an official letter to do this.
4. Make clear to the participants that they are all really expected. (In one actual assessment in the past, everybody thought that it would just be *nice* if they would come. Only three of them appeared, and the assessment was cancelled).
5. Make clear to the management that its presence during the entire assessment is necessary. (It once happened that an assessment was cancelled due to the absence of the management. By the way, in such a case the assessor still has to be paid…)
6. Download the AISHE 2.0 Manual (*this* document) from www.aishe.info, in case you don't have it yet.
7. Make a copy *on paper* for every participant. In spite of the environmental impact, this is absolutely necessary: every participant will need it during the assessment, and it cannot be done with a bunch of computers instead of papers, since the participants have to face each other. They should not be staring to each other over some monitor, since non-verbal communication is about as important as verbal. (Please, print double-sided. The modules that are not used can be left out. The introductory chapters should *not* be left out.)
8. Send the paper copy to every participant, at least one week before the assessment. (Some of them will actually read it as a preparation.) Ask them to bring it to the assessment. (This is why you should make a few extra copies and keep them, because some participants will forget to bring theirs.)
9. Set the starting time one half hour earlier than you really want to begin, and tell the participants that there will be coffee, tea and snacks at the announced starting time.
10. Organize the catering, including a good lunch (the assessment takes a lot of personal energy). It is recommended to have a drink with everybody at the end. It is also recommended to let this be known to everybody when you invite them, otherwise most will disappear and you will end up with a lot of drinks, just for yourself.
11. Make name tags for all participants, to be put on the table in front of everybody, so the assessor can call them by name.

12. Install the computer application 'AISHE 2.0 Reporter' on at least one computer, and test whether it functions properly. Alternatively: have an online computer ready, and check that the online application functions properly. (This is however a risk, since it might occur that the internet suddenly is not available at some moment during the assessment.)
13. Arrange someone who is going to take the notes, and see to it that this person spends a little time exercising with 'AISHE 2.0 Reporter'.
14. Select a way in which the individual scoring (see below) will be done. There are two options. One option is to use paper. In that case you have to have the score form (see below) copied for every participant. (Don't hand them out yet, the assessor will do it on the day of the assessment.) The other option is to use computers. In that case, as many computers are necessary as there are participants (plus a few extra: always some of the computers will not function properly, even if you test them *right* before the assessment.) All computers have to be connected through the internet. The participants will use 'AISHE 2.0 reporter', which will gather the information automatically.
15. Consider who should receive the assessment report afterwards.

The following does not belong to the preparations:

- ✕ Try to find all relevant documents.
- ✕ Make a preliminary self-evaluation report.
- ✕ Train or exercise doing the assessment with the participants.
- ✕ Check the requirements for the certificate level you hope to receive.
- ✕ Compare with earlier AISHE results (if this is not the first one).

It is exactly the fact that you don't have to do such things that makes the AISHE assessment so efficient. Apart from the above administrative actions, everything takes place within one day.

4.6. The assessment

The assessment consists of three parts.

Part 1. Introduction and date selection (ca. 30 – 45 minutes):
Explanation of the tool and the procedure by the assessor. (Some assessors prefer using a computer presentation, others don't.) The assessor will go through the AISHE 2.0 manual together with the participants: another reason why it is important that they have it on paper.
During the 3rd part of the assessment (described below), for every criterion not only the *present situation* will be discussed, but also the *desired situation* that the group – based on consensus – decides to set as a target that is to be realized in e.g. one or two years. It is important to discuss for each of those targets whether it is realistic to expect they can realized within a certain amount of time. For this reason, at the end of part 1 the participants together decide on the amount of time they want to give themselves for it. This time period is made concrete by setting an *exact date* for the desired situation.
(The selection of this date is obligatory and cannot be left out. Sometimes the date is set on beforehand, by the management and the assessor together; this is allowed.)

Part 2. Individual scoring (ca. 30 – 45 minutes):
Every participant decides, *without consulting others*, for every criterion in the modules that are used, which stage offers the best description of the present situation in the assessed organization. This can either be done using paper copies of the score form (see §4.7), or by using the computer application 'AISHE 2.0 Reporter'. In order to have enough computers available, the participants can walk away, as long as they know at what time to be back. (The assessor will tell them.)

Coffee break for those who are ready. In the meantime the assessor will gather the information of all individual score forms and put them together on one overview, either by hand or by computer (see the preparation checklist above, no. 14). When this is ready, a copy of the overview will be printed for every participant. (Don't use an overhead projection; you want the participants to face each other, not the big overhead screen. Use paper.)

Part 3. Consensus meeting (ca. 3 – 4 hours):

This is the main part. All criteria of the selected modules will be discussed one by one. (Usually the number of criteria will be 12, i.e. 2 × 6.)

The meeting is chaired by the assessor, who will invite the participants to clarify the reasons why he or she selected a certain stage as best suiting the present situation within the organization. Viewpoints will be exchanged, and consensus will be sought.

All participants, regardless of their function or position, have an equal weight in the discussions and in the decision making. The assessor will see to it that

- all concepts and texts are clear to everybody
- all participants have about the same speaking time
- critical reflections are made as reactions to the explanations of the opinions of the participants
- everybody speaks respectfully about the others' opinions
- decisions are made carefully and on correct grounds
- no participants try to push forward to decisions by using their position within the organization
- decisions are made by consensus, never by voting.

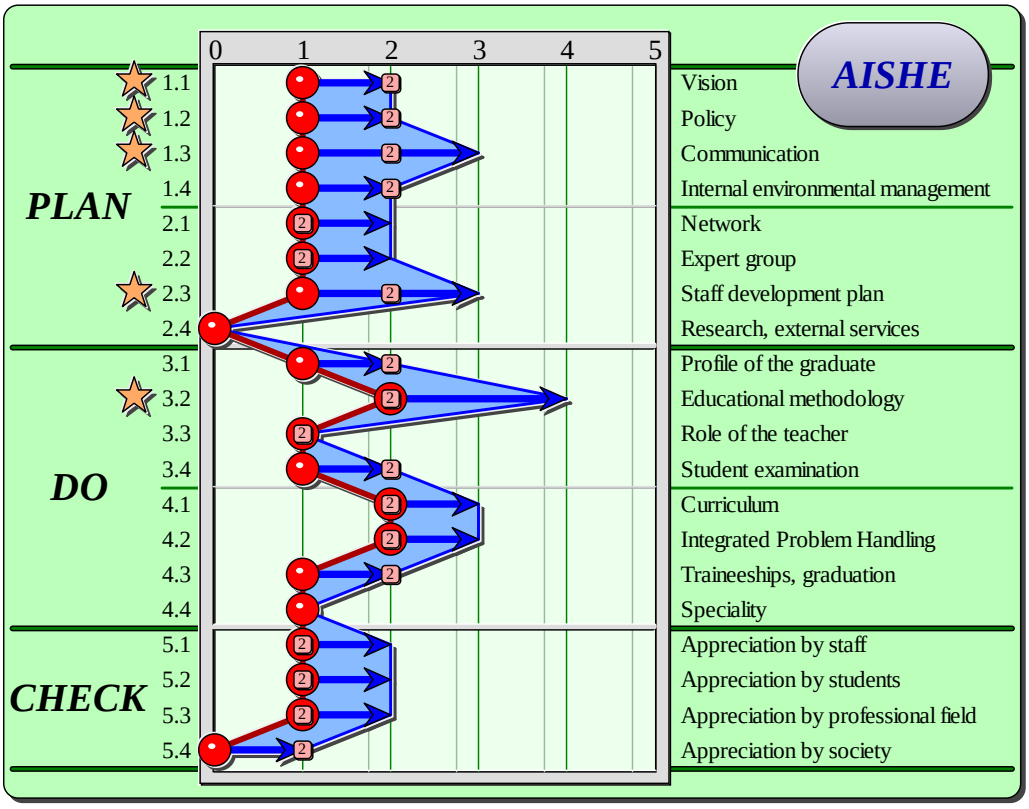
In principle, decisions are made based on consensus. This appears to be successful in at least 99.5% of all cases. If however for some criterion no consensus can be reached, the assessor will decide. Usually the decision will be that, of all proposed scores, the *lowest* is the result, since no agreement could be made on a higher score. Again:
In no case decisions are made by voting.

Desired situation

During the discussion of the criteria, naturally a number of possible improvement proposals will come forward. This will enable the group – for each criterion – to formulate 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 associating activities that will lead to the desired stage.

In order to guarantee that a proposed target really is sufficiently concrete and realistic, it is compared with the agreed date for the desired situation, which may e.g. be a half, one or two years from the present. Proposals for a longer time are also admitted, and – if agreed by consensus - they will be entered in the text of the assessment report, but they will not contribute to the stage scores of the desired situation.

The result of the assessment will look like the figure below, where the present situation is visible as red balls, and the desired situation as blue arrowheads.



NB this is not yet the right picture; it is a result of AISHE 1.0. For the right picture we will have to wait until 'AISHE 2.0 Reporter' is ready.

Priorities

When for all criteria, or for a

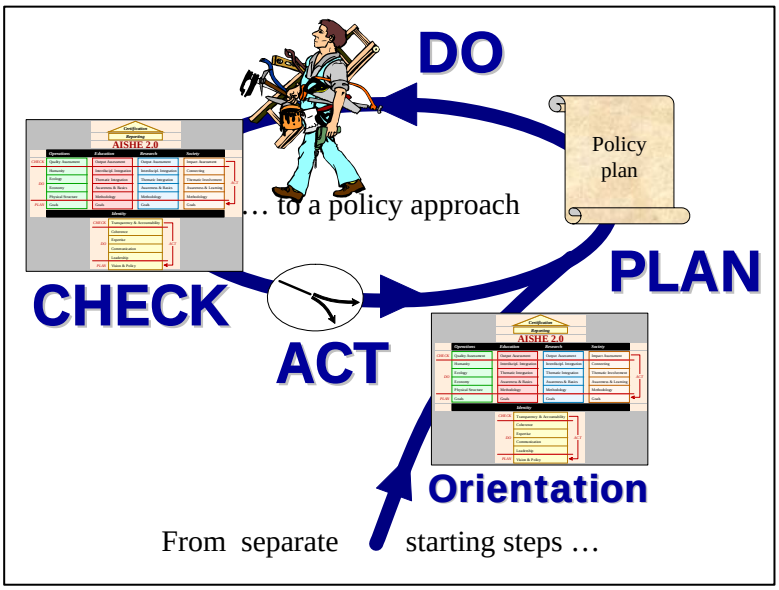
major part of them, the desired improvements have been formulated in this way, a long list of goals and activities will result on which work can be done in the coming period. The risk of such a long list is that many of them will not have much chance to be realized, as usually a policy plan with more than 3 to 5 priorities has a high risk of failing.
This is why the meeting ends with the assignation of those elements in the list of desired improvements that, according to the group, are crucial to success. Those elements receive the highest priority. In the image above, these priorities are shown as stars on the left side.

At the end, the result is:

- A description of the *present* situation, in the form of a number (the stage) for each criterion plus a description for each criterion in words;
- A ditto description of the *desired* situation;
- A *date* on which this desired situation should be realized;
- A list of first priorities that are considered to be crucial.

4.7. After the assessment

The resulting list of desired improvements and priorities forms a package that has the status of 'recommendations to the management'.
It is rather likely that this set of recommendations will be acceptable for many, while at the same time it is realistic, since this has been tested during the assessment, in which – among others - the management participated.
Therefore it is recommended that the management decides about a formal policy plan on sustainable development, immediately after the assessment (i.e on the next day, or at least within a few days). The plan should contain essential elements, like the division of responsibilities and facilities among members of the staff, guidelines for reporting and evaluation, etc.
If this is done, the chances are maximal that, at the date of the desired situation, many of the improvements will be realized.
The natural next step will be to organize another AISHE assessment around the date of the desired situation, in which the completed policy plan is evaluated. In this way, a first Deming cycle of quality management is completed, as the figure below illustrates.



If AISHE 2.0 is used systematically in this way, sustainable development will naturally become integrated in the Total Quality Management of the university, and consequently become a part of the mainstream of the university activities, its strategy, and finally its identity.

4.8. The AISHE 2.0 Score Form

(see next page)

AISHE 2.0 **Score Form**		Organization	
Name		Department	
Function	Manager / Researcher / Teacher / Student / Other	Date	

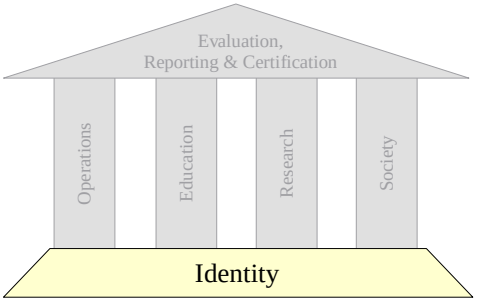
Identity	0/?	1	2	3	4	5	Remarks
I-1. Vision & Policy							
I-2. Leadership							
I-3. Communication							
I-4. Expertise							
I-5. Coherence							
I-6. Transparency & Accountability							

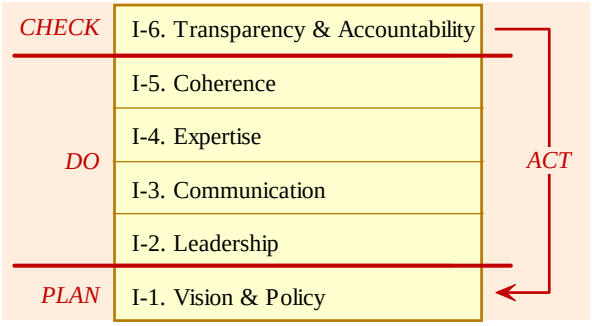
Operations	0/?	1	2	3	4	5	Remarks
O-1. Goals							
O-2. Structure							
O-3. Economy							
O-4. Ecology							
O-5. Humanity							
O-6. Quality Assessment							

Education	0/?	1	2	3	4	5	Remarks
E-1. Goals							
E-2. Methodology							
E-3. Awareness & Basics							
E-4. Thematic integration							
E-5. Interdisciplinary integration							
E-6. Output assessment							
Research	0/?	1	2	3	4	5	Remarks
R-1. Goals							
R-2. Methodology							
R-3. Awareness & Basics							
R-4. Thematic integration							
R-5. Interdisciplinary integration							
R-6. Output assessment							

Society	0/?	1	2	3	4	5	Remarks
S-1. Goals							
S-2. Methodology							
S-3. Awareness & Learning							
S-4. Thematic involvement							
S-5. Connecting							
S-6. Impact assessment							

5. The Identity Module





5.1. Introduction

The Identity Module describes a number of fundamental characteristics of the organization. Together they describe the essence, or the nature of the organization.

Relevant questions for this module are:

- Who are we?
- Why do we do the things we do?
- How can we make a real difference concerning sustainable development?
- Would it be correct to describe us as a 'sustainable organization'?

Ideally, the vision of the organization about itself plays an active role in all kinds of activities of the organization. This is not the main subject of the Identity Module, as it is assessed in each of the other modules, from Operations till Society.

Directions for the application

This module can be applied on several levels:

- a department, faculty or school (i.e. an organizational unit);
- a campus or building (i.e. a physical unit);
- a study program (i.e. a basic education unit) or a group of related study programs;
- a research program or institute;
- the entire university.

Wherever the term 'organization' is used, it should .be interpreted accordingly. For advantages, disadvantages and directions regarding the various application levels, see chapter 4.

An example: in several texts, the term 'vision' is used. If it is not the entire university that is assessed, but e.g. a study program, this term refers to the vision of the study program, i.e. of the management, the staff and possibly the students of the program. Probably this vision will not be independent of the vision of a larger organizational unit (a faculty or even the entire university). During the assessment it will be investigated whether this vision is 'alive' within the study program, i.e. the management & team of the program have its own ideas, opinions and specifications, based on the vision of the larger unit.

5.2. The criteria

Text that is marked *refers to an explanation below.*

I-1. Vision and Policy

The organization has a vision on sustainable development and on corporate social responsibility 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 policy. This policy translates the vision in concrete plans for action. Goals are formulated, and activities are designed aiming to realize these goals.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- The management has a vision on sustainable development and CSR related to the activities of the organization. - The policy with respect to sustainable development is developed mainly top-down by the management. - This vision and policy are formulated implicitly.	- Main elements in the vision are the basic values and ethics of the organization. - The staff is actively involved in the continuous development and improvement of the vision and policy on sustainable development. - The vision and the policy on sustainable development have been formulated in documents. - The management offers facilities to work out the vision and the policy as concrete actions, mainly focusing on short term developments.	- The organization visions itself as a key player for sustainable development, at least on the level of adaptations and improvements. - The students are actively involved in the continuous development and improvement of the vision and policy on sustainable development. The organization can be characterized as a learning organization. - The vision has been expressed in the mission statement, and it has been worked out into a policy containing assessable goals, which are evaluated and adjusted regularly. - The sustainability policy is mainly focusing on middle long term developments.	- The organization is recognized by its direct stakeholders as a key player for sustainable development, acting in an intensive cooperation with these direct stakeholders on the level of long term developments and sustainable innovations. - This cooperation is the basis for the continuous improvement of the vision and policy on sustainable development, both of the organization and its direct stakeholders.	- Within society at large, the organization is recognized as a leading key player for sustainable development, acting pro-actively on the level of systemic change. - Society is actively involved in the continuous development and improvement of the vision and policy on sustainable development - The vision is integrated with the vision on long term development of society and the role in it of the organization.

Sustainable development: A generally accepted 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.*

See also §2.1.

Goals: Wrongly, goals are often formulated as a series of activities. A goal is a description of the situation that will have to be realized at the end of a policy period. Goals are operationalized by formulating activities which are to lead to the goals that have been appointed.

CSR: Corporate Social Responsibility.

Mainly top-down: Although the ordinal scales of AISHE are cumulative, which means that the demands of lower stages are applicable to the higher stages as well, a restricting demand like this is of course not again a demand at higher stages. The same is true e.g. for the term 'implicitly'.

Implicitly: i.e. is not formulated explicitly in documents.

The staff: i.e. (at least) a representative part of the teaching staff.

Actively involved: this means more than just commenting on a draft version of the graduate profile. Instead, it implies a direct involvement from the very beginning of the (re)development process.

Documents: can relate to internal documents, e.g. meeting notes, but may also mean that a generally accepted declaration has been signed, for instance the World Declaration on Higher Education for the Twenty-first Century, the Copernicus Charter, or the Talloires Declaration.

The **Copernicus Charter** says about this in the preamble:

> *Universities are increasingly called upon to play a leading role in developing a multidisciplinary and ethically oriented form of education in order to devise solutions for the problems linked to sustainable development. They must therefore commit themselves to an on-going process of informing, educating and mobilising all the relevant parts of society concerning the consequences of ecological degradation, including its impact on global development and the conditions needed to ensure a sustainable and just world.*

Facilities: Think of: time, budget (e.g. for course- and travelling costs), timetable consequences, supervision, authorities, communication tools, etc.

Short term: about 1 to 2 years, mainly operationally oriented.

Adaptations and improvements: as opposed to **systemic change** (q.v.), i.e. less intensive changes.

The students: i.e. (at least) a representative part of the students.

Learning organization:

Mission statement: This may either be a part of the overall mission statement of the university or of a department, or a separate official text that is directly linked to the mission statement. An example:

Mission Statement of Aichi University of Education (abbreviated):

> *The university declares that its universal mission is to contribute to world peace, human welfare, and the advancement of arts, culture and sciences.*
> *Aichi University of Education ensures academic freedom with confidence that research in sciences, arts and humanities created out of free will contributes to world peace and the sustainable development and improvement of society.*
> *Aichi University of Education strives to be fully responsible and accountable to society through public information and public relations, and by constantly responding to the voices of communities, nations and global society.*
> *Every member of Aichi University of Education respects the fundamental human rights and the equality of the sexes, and is committed to the proscription of any form of human rights abuse such as discrimination and oppression.*
> (Source: http://www.aichi-edu.ac.jp/eng/mission_e.html, 2008)

If the AISHE assessment is performed to an entire university, its mission statement (or a comparable document) may be used for this criterion. If the assessment is related to a part of a university (e.g. a school, faculty, study program), the same is true if this part possesses its own particular mission statement (or a comparable document). If it does not, then the mission statement of the entire university is relevant; besides, the interpretation, eventual addenda, and the application of this mission statement within the assessed part is even more relevant.

Assessable goals: goals that have been formulated in such a way that it is possible to investigate in an objective or intersubjective way whether they have been reached or not. The "assessment" does not necessarily mean the determination of quantitative values on a ratio scale: e.g. performing an AISHE assessment, using ordinal scales, is an assessment too.

Middle long term: 3 to 5 years, with a tactical emphasis.

Direct stakeholders: those persons or institutions that are explicitly mentioned as stakeholders of the activities and results of the organization. For the education this is the professional field. For the research and for the societal interactions it is either the persons or institutions that ordered or asked for the activities, that cooperate in implementing them, or a focus group that may benefit from the activities, e.g. a category of patients for whom a medical research takes place.

Long term: 5 to 10 years or even more, on a strategic level.

Systemic change: large-scale innovations in which fundamental structures are redesigned. This may involve physical structures as well as organizational or social structures.

Society: i.e. a representative delegation from societal organizations, *not* belonging to the direct stakeholders, which are otherwise stakeholders of the assessed organization in any (positive or negative) way. Examples are: the local community, ngo's, governmental organizations, primary, secondary or informal education, museums, festivals, consumer organizations, trade unions, interest groups, etc.

I-2. Leadership

The management is not only formally responsible for the integration of sustainable development in the organization vision and activities. It also takes leadership for it, i.e.: it shows personal involvement. It inspires the staff, the students and possibly the other stakeholders. It listens actively to them, knows and uses their ideas and opinions, and asks feedback about its functioning. Thus, it uses its authority in a genuinely participatory way.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Occasionally, the management pays attention to and appreciates activities concerning sustainable development by staff members.	- The management promotes the relevance of sustainable development for the organization actively and regularly. - The management listens actively to the opinions of staff members and students about sustainable development. - The management supports initiatives from staff members or students.	- The management systematically stimulates, motivates and supports the processes of integration of sustainable development and the staff members who perform those projects. - The management systematically encourages an active participation and shared responsibility of the staff and the students in the development and improvement of the organization vision, strategy, policy, activities and result assessments. - This encouragement is based explicitly on the vision of the organization concerning sustainable development, and on a (middle-)long term strategy. - Corporate governance is a cornerstone of the organization strategy and policy.	- Based on a visible personal commitment, the management, the staff and the students together support and expand relations with the direct stakeholders and with centers of expertise, with the explicit aim of strengthening the process of integration of sustainable development into the organization. - These efforts take place on the basis of a long-term vision of the organization.	- The management, the staff and the students together stimulate and realize a pro-active and excellent role of the organization within society and the educational and professional field. - In this way, the entire organization shows leadership towards society concerning sustainable development.

Management: Every person or group with a formal managing, coaching or tutoring role. This includes e.g. teachers who give lessons and guidance to students, staff members who lead self-responsible teams or staff members who coach students in their internships.

Active listening: not just hearing what the other says, but also trying to understand what the other says. Besides, listening skills enable you to let the other know that you listen, to let the other tell his story, and, whenever necessary, to let him clarify. (Source: RUG, 2008)

Supports: i.e. not only mentally, but also with real facilities, e.g.: budget, time, work schedules, information, training programs, authorizations, supervision.

Encourages: i.e. instead of waiting for initiatives of staff members or students, the management stimulates their involvement in a variety of ways.

I-3. Communication

Communication about sustainable development in relation to the organization takes place, both within the organization and with the outside world. The communication is used to strengthen the organization vision about sustainable development, to develop new initiatives, and to inform and get feedback from all sorts of stakeholders, e.g. staff, students, the professional field and other direct stakeholders, and society in general.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Efforts of individual members of the staff or of parts of the organization to enlarge the attention for sustainability take place. - Staff members are informed about sustainability initiatives of the management on an ad hoc basis, often at their own request.	- Sustainable development is a regularly appearing subject in meetings and in internal and external publications and presentations.	- The communication about sustainable development is based on a structured communication plan. - The staff and the management are well-informed about each other's opinions and aspirations concerning sustainable development.	- The direct stakeholders are actively involved in the communication about sustainable development. - This communication is in both directions, not only aimed at the interests of the organization itself but also of the direct stakeholders. - Publications by staff members and/or students with a clear relation to sustainability appear regularly in scientific journals or public media.	- A wide variety of societal actors is involved in the communication about sustainability - This communication is in both directions, not only aimed at the interests of the organization itself but also of society in general. - Publications by staff members and/or students, are leading.

Subject in meetings: not just because, as a habit, the subject of sustainable development is put on every agenda, but rather because there really is something to discuss.

Publications: These may be scientific publications in journals. But also: books, proceedings of meetings, annual reports, university magazines, brochures, PR posters, press releases, web pages, etc.

Structured communication plan: In this plan, at least an overview is given of:
- Reasons to communicate (e.g. inform, being informed, generate information, raise awareness or involvement, stimulate, reward, etc.);
- Persons or groups with whom the communication takes place (e.g. teaching staff, staff in general, students, professional field, clients, patients, other direct stakeholders, press media, procurers, society in general, etc.)
- Means of communication (e.g. letters, e-mail, sms, meetings, debates, brainstorms, newspapers or -letters, informal conversation, symposia, etc.)
- A time schedule.

I-4. Expertise

The expertise available to the organization about sustainable development is kept up-to-date and is sufficient to enable to work actively on the integration and improvement of sustainable development in the vision and the activities of the organization. Partly, this expertise is available within the organization staff. Besides, an external network is functioning in order to utilize the expertise available in the outside world.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Staff development in sustainability depends on individual initiatives. - Individual staff members have contacts with the direct stakeholders and with centers of expertise, in order to enlarge their knowledge and experience about sustainability.	- There is a staff development plan in sustainability. This plan is mainly short term related. - For the execution of the plan, facilities are made available by the management. - On a regular basis, the organization benefits from the expertise about sustainability that is present with the direct stakeholders.	- There is a systematic staff development plan related to sustainable development, aimed at a middle long term. - The expertise of the direct stakeholders is used systematically for the realization of this plan. - For this goal, the external network is maintained and expanded systematically.	- The regular contacts with the external network not only contribute to the expertise within the organization, but also to the expertise of the network partners.	- The organization is or has an (inter)nationally recognized center of expertise concerning sustainable development. - Characteristics of this center are terms like: excellent, innovative, pro-active, long-term future-oriented. - Society and the process of sustainable development benefit clearly from this expertise.

Staff development plan: This is either a separate plan dedicated to sustainable development, or a part of a more general staff development plan.

Benefits from: either directly, e.g. through appearances of visiting teachers, or indirectly, through enlargement of the knowledge of the teaching staff.

Systematic staff development plan: The plan is systematic, thanks to:
- A systematic and regularly repeated investigation into the needs of the organization of expertise concerning sustainable development;
- A systematic and regularly repeated investigation into the present expertise on sustainable development of individual staff members and their ambitions to enlarge this expertise;
- An optimal combination of both kinds of information, aimed at a middle long- or long-term perspective, including e.g. refresher courses, continuing education, job descriptions for vacancies.

Contribute to: I.e. information is passed between all members of the network; and besides, the accumulated expertise is used in an interdisciplinary way to generate new knowledge and experience.

I-5. Coherence

A university can contribute to sustainable development in a variety of roles: through its education, its research, its own operations and its direct contribution to society. These various roles may strengthen each other if there is cooperation between them. For instance, the campus may be used as a tool for the education, the research or societal interactions. Students may contribute to sustainability research or to community development. Coherence between the roles enables the institution to act according to its own standards ('practice what it preaches').

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Occasionally, mostly ad hoc, actions of designing or implementing sustainable development in several roles of the organization are clearly in mutual interaction.	- Many examples can be given where several of the four roles strengthen each other with respect to subjects or actions that are explicitly related to aspects of sustainable development.	- Policies and actions related to sustainable development in the four roles are related to each other in a systematic way. - This creates a strong synergy, which inspires and is evidently beneficial to the people and institutes working on all four roles. - This synergic structure is explicitly based on the vision of the organization about sustainable development.	- The organization functions as a holistic entity of which all departments, institutes and study programs are organic parts that interact continuously. - The synergic relations of policies and actions are not only existent between the four roles of the organization, but it also involves a range of direct stakeholders.	- The organization has a strong 'open doors' policy, and through the societal synergy this creates, it forms an organic whole with many actors in society. - Thanks to this, the organization contributes to sustainable systemic changes of society, including itself.

Several roles: This refers to the four roles that a university can have: education, research, operations and society (see §2.5). The division into these four roles is the basis for the modular structure of AISHE 2.0.
Within the four role modules, only subjects are assessed that are related to that separate role. The present criterion asks for the relations between the four roles.

Explicitly related: i.e. not just related to sustainability aspects with hindsight during the assessment, but with an explicit and planned reference to sustainability.
(An example of a 'relation with hindsight' is a remark that 'our human resource management is well-designed and people-friendly; I think I can call this sustainable!' Opinions like these don't score.)

I-6. Transparency and accountability

The institution reports to its stakeholders about its activities and results concerning sustainable development in a transparent way, and thus it renders account to those stakeholders, including society as a whole.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Occasionally, the management provides information about individual goals, processes and results related to sustainable development. - This happens mainly only if asked. - The information is mainly provided to a limited group of staff members within the organization.	- Periodically, the management provides structured information about goals, processes and results concerning sustainable development and CSR. - The information is mainly provided to all staff members and students.	- The sustainability & CSR reporting is systematically integrated in the annual public reporting. - The reporting is based on a complete stakeholder analysis. - An (inter)nationally accepted reporting standard is used that explicitly aims at transparency and public accountability.	- The organization gathers systematic feedback on the sustainability & CSR reporting from the direct stakeholders. - In this way, the organization holds itself accountable for all of its goals, actions and impacts. - This feedback is used systematically to improve the goals, processes and results.	- The external accountability is a cornerstone of the CSR and sustainability vision of the organization. - In order to implement this, the organization gathers systematic feedback on the sustainability & CSR reporting from a wide variety of representatives of society. - This feedback is used systematically to improve the goals, processes and results.

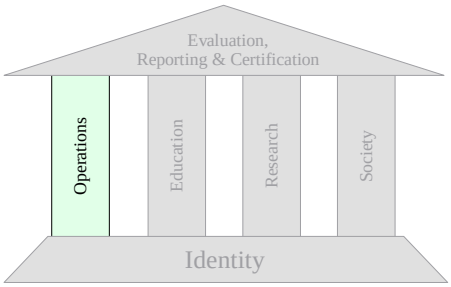
Stakeholder analysis: Based on an analysis of the consequence reach and the consequence period of the organizational goals, processes and effects.
This implies that the stakeholder analysis not only includes the present but also future generations.
The stakes can either be positive or negative.

Consequence reach: The total size of the people, the organizations, nature and the environment that experience the consequences of a decision, a behavior or a lifestyle.

Consequence period: The time it takes before the consequences of a decision, a behavior or a lifestyle have disappeared.

Reporting standard: A standard that is based on principles of sustainability and CSR. An example is the Global Reporting Initiative (GRI) standard (GRI, 2002).

6. The Operations Module



6.1. Introduction

The Operations Module describes a number of practical characteristics of the organization. As far as this module is concerned, the university (or a part of it) is not fundamentally different from any other organization, as all of them deal with comparable subjects, like: procurement, environmental management, infrastructure, buildings, financial resources, human resources, labor circumstances, human respect.

The most relevant questions for this module are:

- How do we do the things we do?
- How do we check whether we do it right?

Directions for the application

In principle, this module can be applied on the level of the entire university, or of separate physical or organizational units:

- a campus or a building (i.e. a physical unit);
- a study program (i.e. a basic education unit) or a group of related study programs;
- a research program or an institute.

Wherever the term ‘organization’ is used, it should .be interpreted accordingly. For advantages, disadvantages and directions regarding the various application levels, see chapter 4.

Whether the application on a desired level or unit is really possible, depends on the actual structure and organization of the university. As there is a wide variety on this, no general rules can be given here. It is recommended to investigate the six criteria on beforehand to check the applicability to the desired unit(s). The external assessor may assist with this.

6.2. The criteria

Text that is marked *refers to an explanation below.*

O-1. Goals

The organization has set goals to its operational performance, in order to meet the demands of sustainable development or even to positively contribute to sustainable development.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- At least for some aspects of the operations, the relation with sustainable development is clearly recognizable. - The operational goals and policy are clearly used as a tool to increase a sustainable attitude of staff and students.	- The goals, strategy and policy of the organization operations are formulated explicitly in one or more guidance documents. - Sustainable development is mentioned explicitly in these documents, and the documents contain all or most relevant aspects of sustainable development. - The staff is actively involved in the determination, evaluation and improvement of the sustainable elements in the guidance documents.	- Sustainable development in the operational guidance documents is multidisciplinary, and it is explicitly based on the vision of the organization about sustainable development. - Systematic evaluations and adjustments of the guidance documents take place. - The students are actively involved in these evaluations and adjustments.	- The operational policy is maintained, evaluated and improved in an interdisciplinary way, in which the direct stakeholders are active participants.	- The operational policy is maintained, evaluated and improved in an transdisciplinary way, in which representatives of society are active participants. - Compared with comparable institutions the organization fulfils a leading role with respect to its sustainable operations.

Aspects of the operations: i.e. structural, economic, ecologic, and human / societal / cultural aspects.

Clearly recognizable: Score only if the involved aspects are clearly interpreted in a sustainable way. (The literal term 'sustainable development' does not have to be mentioned in stage 1.)

All or most: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the direct stakeholders). This can only be scored if either the organization itself, or the involved external forum possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the operations of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

Multidisciplinary: Generally. in a multidisciplinary approach, subjects are treated from several different disciplines, by experts or students in just one discipline.
In relation to the operations, it means an integrated approach to all aspects of the operations, in which all those aspects clearly influence each other in a positive way.

Interdisciplinary: Generally, in an interdisciplinary approach, experts or students of various disciplines cooperate as a team. A common methodological approach and theoretical fundament is looked for, as a synthesis of the represented disciplines. Participants try to speak "one language".

Direct stakeholders: This may be persons or institutions that ordered or asked for the research, but also a focus group that may benefit from the research, e.g. a category of patients for whom a medical research takes place.

Transdisciplinary: In a transdisciplinary approach, not only co-operation takes place between experts or students of various disciplines in an interdisciplinary team, but also others are members of this team, as they are relevant stakeholders: e.g. users, problem owners, clients, etc. (transdisciplinary = (literally:) beyond the disciplines).

Society: i.e. a representative delegation from societal organizations, *not* belonging to the direct stakeholders, which are otherwise stakeholders of the assessed organization in any (positive or negative) way. Examples are:

the local community, ngo's, governmental organizations, primary, secondary or informal education, museums, festivals, consumer organizations, trade unions, interest groups, etc.

O-2. Physical structure

The large and long-lasting physical elements of the organization, such as the buildings, the infrastructure and the natural habitat, function well from a sustainability viewpoint, because they are maintained sustainably or even designed that way.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In the use and maintenance of the buildings and the technical installations of the organization, some aspects of sustainable development are taken into account. - This is usually based on individual initiatives.	- In the use, maintenance and improvement of the buildings and the technical installations of the organization, many aspects of sustainable development are taken into account. - The same is true for the whole area of the organization, including the natural landscape. - This is supported by the management and based on an explicitly formulated policy. - Many staff members are involved in the implementation of this policy.	- The organization has an integrated and sustainable structure policy concerning the buildings, the infrastructure, the technical installations and the green areas on its entire area. - The policy is developed and continuously improved in a systematic way. - The policy and its sustainable elements are explicitly based on the operational goals regarding sustainable development of the organization. - Many students are involved in the implementation of this policy.	- The structure policy contains a long-term policy on new or renovated buildings. - The buildings are state-of-the-art concerning sustainable development. - The natural habitat on the areas of the organization is physically connected to the regional ecosystem. - The infrastructure is regionally connected in such a way that the negative impact on the environment is minimized. - Locations of the organization are selected in such a way that traffic and transport are minimized, and public transport is encouraged.	- The sustainable structure policy is an integrated policy of the organization and the regional environment. - Through this policy, the organization contributes to the regional sustainable development, considering the regional human inhabitants and the regional natural habitat.

State-of-the-art: e.g.
- designed for optimal reuse of components after the lifetime of the building;
- designed for a minimum of energy consumption and contribution to climate change, or even a net producer of energy and a contributor to inverse climate change;
- a healthy environment for people;
- optimized concerning the environment, e.g. through use of 'grey water'

Minimized: this may e.g. be realized by connecting roads, electricity cables, water pipes, sewers, energy producing units, etc., with those of surrounding organizations and residential areas, with the aim of saving energy, reusing heat or water, reducing traffic, minimizing transport waste, etc.

O-3. Economy

In situations where economic or financial subjects are relevant, demands based on sustainable development are considered as an aspect: for strategy or policy development, operational decisions and activities, for communication and reporting on finances.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- A certain part of the procurement is sustainable. - Incidentally, decisions are made to increase the efficiency of e.g. energy consumption or materials use. - This is usually done on an ad hoc basis.	- A considerable percentage of the procurement is sustainable. - There is a policy on the increase of the efficiency of e.g. energy consumption or materials use.	- At least 90% of the procurement is proved to be sustainable. - With all middle-long term investments, all relevant aspects of sustainable development are explicitly considered in a systematic way. - This systematic approach is explicitly based on the formulated goals towards sustainable operations.	- If necessary due to sustainability reasons, the payback times of investments are allowed to be significantly longer than usual. - There is an explicit link between the annual financial reports and the reporting on sustainable development and CSR.	- For all short, middle-long and long-term investments, all relevant aspects of sustainable development are a decisive factor.

Procurement is sustainable: according to (inter)nationally accepted standards. This is more than 'green procurement', which is related to the natural environment, as it also is related to issues like child labor and fair rewards for suppliers.

Considerable percentage: expressed in money (i.e. not in kilograms, quantities, volume, etc.). As a matter of magnitude, think of e.g. 50%, although exact measurements are not required (in stage 2).

Short term: about 1 to 2 years, mainly operationally oriented.

Middle long term: 3 to 5 years, with a tactical emphasis.

Long term: 5 to 10 years or even more, on a strategic level.

CSR: Corporate Social Responsibility.

O-4. Ecology

The organization minimized its negative impact to the natural environment, or in some respects even has a positive contribution to it.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Environmental management activities depend on individual initiatives.	- Separate plans exist for some environmentally related subjects. - Many staff members and students are actively involved in the implementation of these plans.	- All environmentally related are part of an integrated environmental management system (EMS). - This EMS is fully functional within all parts of the organization. - The environmental reporting is an integrated part of the annual reporting of the organization.	- The EMS is an integrated part of a chain oriented environmental management system including suppliers and waste processing companies. - An essential part of this chain oriented system is the optimization of reuse and recycling.	- The organization is certified according to an (inter)nationally accepted system for environmental certification. - The EMS is an integrated part of an integrated regional environmental management system including all surrounding companies, houses, infrastructure and nature.

Environmentally related subjects: such as: environmental management, risk management, use of energy and water, emissions of greenhouse gases and polluting substances, use of equipment, mobility, waste separation, toxic chemicals, etc.

Reuse: Regaining components out of discarded products with the aim of (after cleaning checking and eventually repair) using them again in other products

Recycling: Regaining materials from discarded products with the aim of reusing them as a resource for new products.

System for environmental certification: such as EMAS, ISO 14001, or BS 7750.

Surrounding companies, houses: if they exist, of course.

O-5. Humanity

The organization sees to it that the working and living circumstances for its staff and students are safe, fair and healthy.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Occasionally, attention is given to subjects concerning human respect and labor circumstances. - This usually takes place on an ad hoc basis.	- The management has a continuous attention to equity and labor circumstances. - The staff is actively involved in this process.	- There is an explicit standard on equity and labor circumstances, guaranteeing protection against any kind of threat against equity, harassment or health threatening labor. - Besides, the standard contains initiatives to improve health, well-being and freedom of speech of staff and students. - The standard is fully functioning. - The staff and the students are actively involved in maintaining and continuously improving this standard.	- This standard is also applied to suppliers: if there is any doubt about the equity or labor circumstances with a supplier, it is not allowed to supply. - The direct stakeholders are actively involved in maintaining and continuously improving this standard.	- The standard of the organization regarding equity and labor circumstances is internationally seen as exemplary: the organization is considered as excellent, and its standard is studied and copied.

Human respect: e.g. equity, (anti-)discrimination based on gender, age, religion, origin, sexual orientation, etc., including: equal opportunities for evaluations, promotion, financial reward. Besides: freedom of speech; recognition of human rights, privacy.

Labor circumstances: e.g. occupational health and safety (OHS), promotion, fair reward, free time and vacations, protection against sexual harassment.

Standard: a detailed description in the shape of an officially accepted document, either designed by the organization itself or as an (inter)nationally accepted document.

Any kind: this demands that *all* items of equity and labor circumstances are explicitly guaranteed. If only some are guaranteed, stage 3 is not scored.

Any doubt: Some organizations demand an explicit proof that its high standards are observed by the supplier. For this, checklists may be available. Other organizations only demand that no indications of non-compliance exist.

Direct stakeholders: those persons or institutions that are explicitly mentioned as stakeholders of the activities and results of the organization. For the education this is the professional field, for the research it is either the persons or institutions that ordered or asked for the research, or a focus group that may benefit from the research, e.g. a category of patients for whom a medical research takes place.

O-6. Quality assessment

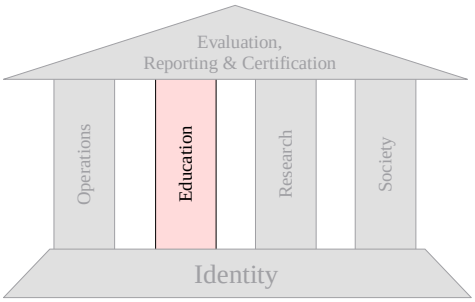
The operational performance is optimized with respect to sustainable development through a system of result measurements, evaluations and continuous improvements.

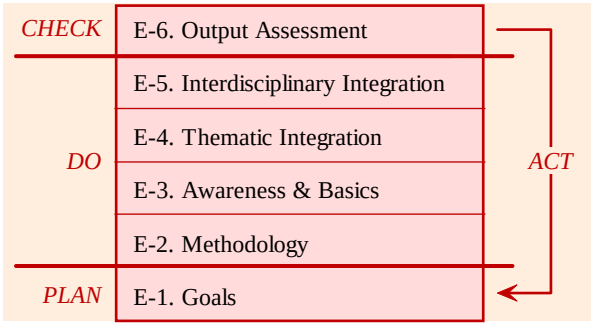
Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- For some operational subjects related to sustainable development, measurable result indicators have been formulated. - On an ad hoc basis, these measurements are used to improve the sustainability of the operational quality.	- For most operational subjects, measurable result indicators have been formulated. - These measurements have been performed several times, and the results have been used for a trend analysis. - The results of this trend analysis are being used to improve the sustainability of the operational quality.	- All relevant aspects of sustainable development of the operational policy are evaluated through systematic measurements. - The results are used, not only to improve the sustainable operational performance, but also to continuously review and adapt the operational policy.	- The operational performance has been compared with colleague-organizations. - The results of this comparison are used to improve the own policy and performance and that of the colleague-organizations.	- From a sustainable viewpoint, the operational quality of the organization is considered as excellent. - This is shown by the fact that it is studied and copied by other organizations.

Result indicators: This does *not* refer to the AISHE assessments, as AISHE assesses process indicators. The result indicators refer to the outcomes of these processes. Examples of systems for result assessment are ISO 14000 and EMAS.

All relevant aspects: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the direct stakeholders). This can only be scored if either the organization itself, or the involved external forum possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the operations of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

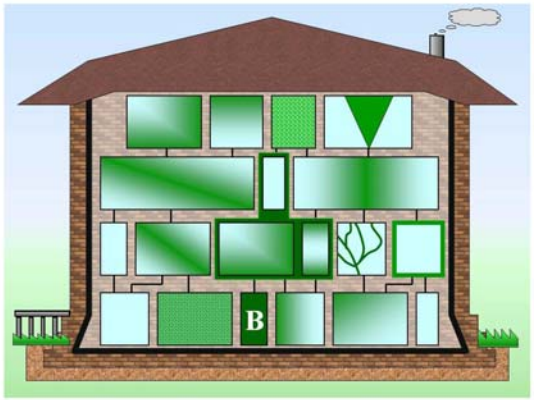
7. The Education Module





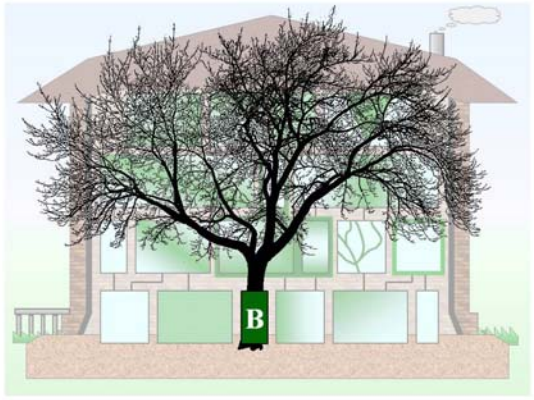
7.1. Introduction

The curriculum of an education program may be drawn as shown in the top image on the right. The separate 'floors' in the education 'building' indicate the consecutive years of the program (with the first year as the ground floor). The 'rooms' represent the education units or subjects.



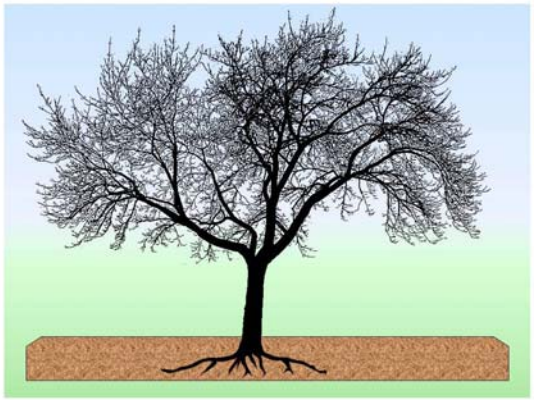
If sustainable development is integrated thoroughly in the curriculum, it will be an aspect of many of the education units, probably in a variety of ways. In the top image, this is represented by the variety of the 'green' coloring of the 'rooms' in the 'building'.

Ideally, early in the curriculum the concept of sustainable development is introduced. In the image this is shown as a 'B' (for 'Basic'). This introduction may take the shape of a basic course, treated in a couple of days or weeks. Alternatively, it may be spread over a longer period ('longitudinally'), either as a separate subject or integrated in one or more existing subjects or units.



In all cases, the introduction of sustainable development together with the integration of more detailed themes or interdisciplinary aspects of sustainable development throughout the rest of the curriculum together form a treelike structure, shown in the middle image. This is the 'Tree Model' of the integration of sustainable development in an education program.

Optimally, the integration of sustainable development is rooted firmly in the graduation profile of the education program, i.e. in its professional competences, its academic profile, or whatever education philosophy is used. Ideally, the graduation profile, the 'roots' in the bottom image, in its turn is based strongly in the vision of the educational institution (described in the Vision Module of AISHE 2.0), shown in the bottom image as the fundament of the building. This means that, ideally, there is a strong connection between the university vision on sustainable development, the graduation profile, and the integration of sustainable development in the curriculum. This connection is the starting point for the Education Module of AISHE 2.0.



There is a clear relation to the parts of the education 'tree' and the six criteria of the Education Module:

- Roots: Criterion E1: Goals.
- Biochemistry & physiology: Criterion E2: Methodology
- Trunk: Criterion E3: Awareness and basic concepts

- Branches: Criterion E4: Thematic integration
- Forest, ecosystem: Criterion E5: Interdisciplinary integration
- Fruits: Criterion E6: Output assessment

Directions for the application
The Education Module can be applied to a study program within a university, a group of such programs, or to an entire university. The frequently used term 'organization' should be interpreted accordingly. For advantages, disadvantages and directions regarding the various application levels, see chapter 4.
The Education Module may also be applied to an education institute that is not a part of a university, e.g. an independent commercial or not-for-profit center for higher education & lifelong learning, or an educational department of a company aiming at the own staff. In those cases some interpretations of the stage descriptions may be necessary. Experiences with such applications will be published in separate documents.

7.2. The criteria

Text that is marked *refers to an explanation below.*

E-1. Goals

The graduate profile determines the end goals of the education, i.e. the characterization of the professional who leaves the educational program and enters the professional field. Various terms are used for the graduate profile, e.g.: "educational program goals"; "professional profile"; "academic qualifications", "professional competencies". etc.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- The graduate profile contains some clearly recognizable aspects of sustainable development.	- Sustainable development is mentioned explicitly in the graduate profile. - Within the own disciplinary context, the profile contains all or most relevant aspects of sustainable development.	- With its education, the organization demonstrably contributes to sustainable development on the level of adaptations and improvements. - Sustainable development in the profile is explicitly based on the vision of the organization about sustainable development. - Systematic evaluations and adjustments of the profile take place. - The profile explicitly demands multidisciplinary capacities.	- With its education, the organization demonstrably contributes to sustainable development on the level of sustainable innovation. - The professional field is actively involved in the determination, evaluation and improvement of the sustainable elements in the profile. - The profile explicitly demands interdisciplinary capacities.	- With its education, the organization demonstrably contributes to sustainable development on the level of systemic change. - Society is actively involved in the determination, evaluation and improvement of the sustainable elements in the profile. - The profile explicitly demands transdisciplinary capacities. - Compared with comparable institutions the organization fulfils a leading role with respect to the determination of the profile.

Graduate profile: Usually, an individual educational institution cannot determine a profile of the graduate in complete freedom: often directions exist on a national level, either from the government or from educational or professional organizations. Nevertheless, the organization itself takes part in the determination of the profile, in two ways:
- formally: by determining the free space that usually exists, because not all 100% is determined on a national level but only e.g. 70%;
- informally, because there will always be opportunities for interpretation or for coloring the nationally determined norms.

Clearly recognizable aspects: Score only if the involved aspects are clearly interpreted in a sustainable way. (The literal term 'sustainable development' does not have to be mentioned in stage 1.)

All or most: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the professional field). This can only be scored if either the organization itself, or the involved external forum

possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the education of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

Multidisciplinary: In a multidisciplinary approach, subjects are treated from several different disciplines, by experts or students in just one discipline.

Interdisciplinary: In an interdisciplinary approach, experts or students of various disciplines cooperate as a team. A common methodological approach and theoretical fundament is looked for, as a synthesis of the represented disciplines. Participants try to speak "one language".

Transdisciplinary: In a transdisciplinary approach, not only co-operation takes place between experts or students of various disciplines in an interdisciplinary team, but also others are members of this team, as they are relevant stakeholders: e.g. users, problem owners, clients, etc. (transdisciplinary = (literally:) beyond the disciplines).

The professional field: the direct stakeholders of education (see criterion V1).

Society: i.e. a representative delegation from societal organizations, *not* belonging to the direct stakeholders, which are otherwise stakeholders of the assessed organization in any (positive or negative) way. Examples are: the local community, ngo's, governmental organizations, primary, secondary or informal education, museums, festivals, consumer organizations, trade unions, interest groups, etc.

Systemic change: large-scale innovations in which fundamental structures are redesigned. This may involve physical structures as well as organizational or social structures.

E-2. Methodology

Some educational methodologies are more suitable than others for acquiring a variety of skills, knowledge and attitudes regarding sustainable development. As an example, raising or strengthening personal responsibility of the future professionals will not be easy when the student activity limits itself to listening passively to professors during lectures. Ideally, the curriculum consists of a variety of educational methodologies, matching the characteristics of the graduate profile.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In some parts of the curriculum, methodologies are used to stimulate some aspects of action learning and reflexivity.	- In many parts of the curriculum, methodologies are used to stimulate many aspects of action learning and reflexive learning. - The methodologies have been selected in such a way that innovativity is stimulated.	- The entire curriculum is designed in such a way that all aspects of action learning, reflexive learning and innovativity are practiced intensively through a variety of methodologies.	- Representatives of the professional field contribute significantly to the practicing of action learning, reflexive learning and innovativity.	- Representatives of society contribute significantly to the practicing of action learning, reflexive learning and innovativity.

Action learning, reflexivity, innovativity: table 1 (§2.2) offers a list of aspects of them, together explaining their meaning.

Contribute significantly: Either to the development of the introduction, or to the implementation, e.g. as a visiting teacher, coach or consultant, as a host for excursions, or as a client of student tasks (or all of those).
Comparable demands will be mentioned with stages 4 and 5 of several other criteria (Ep3, Ep4). If such a significant contribution exists, it is important to carefully consider to which of these criteria it is related.

E-3. Awareness and basic concepts

An introduction to sustainable development is offered, early in the curriculum. The basic sustainability concepts are treated, as well as their interrelations. This introduction may take the shape of a basic course, treated in a couple of days or weeks. Alternatively, it may be spread over a longer period ('longitudinally'), either as a separate subject or integrated in one or more existing subjects.
The introduction is not or just partly limited to the specific discipline.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Basic concepts of sustainable development are studied, early in the curriculum.	- A well-designed introduction to sustainable development is studied, including relations with the own discipline. - This introduction aims explicitly at increasing the awareness about sustainable development of the students.	- The introduction is explicitly based on the graduate profile. - The introduction to sustainable development is used as a basis throughout the curriculum.	- Representatives of the professional field contribute significantly to the introductory study of sustainable development.	- Representatives of society contribute significantly to the introductory study of sustainable development.

Basic concepts: E.g. the Brundtland definition, the Triple P, the place & the time dimension, scenario thinking, problem transfer to other regions or generations, ethical aspects, etc.

Early in the curriculum: Preferably in the first, or else in the second year of the study program.

Well-designed introduction: Paying a balanced attention to at least subjects concerning ecology, economy and humanity, and to the relations between them, using an approach which is characteristic for sustainable development. See e.g. Roorda (2005).

Awareness: As a basis for didactic goals, often a set of four types of goals are discerned, together described as 'KISA': Knowledge, Insight, Skills, Attitude. Raising awareness is an element of attitude change.

Based on the graduate profile: If the graduate profile (criterion E-1) is at stage 3, this profile is explicitly based on the vision of the organization about sustainable development, and so the introduction to sustainable development is, too.

Used as a basis: I.e. other elements in the curriculum refer, wherever possible and useful, to the introduction, thus emphasizing sustainability relations between the subjects. See §5.1: the tree structure.

E-4. Thematic integration

Throughout the curriculum, subjects related to sustainable development are treated. Most of them will have a strong relation with the discipline, although other subjects may be present too.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
Some aspects of sustainable development that have a direct relation with the own discipline are studied as a part of the curriculum.	Many aspects of sustainable development that have a direct relation with the own discipline are studied, spread across the curriculum in a carefully designed way.	- Sustainable development in the curriculum is explicitly based on the graduate profile. - All aspects of sustainable development that have a direct relation with the own discipline are studied in a systematic way.	- Representatives of the professional field contribute significantly to the disciplinary study of sustainable development.	- Representatives of society contribute significantly to the disciplinary study of sustainable development.

Many / all aspects: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the professional field). This can only be scored if either the organization itself, or the involved external

forum possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the education of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

E-5. Interdisciplinary Integration

The various sustainability related subjects in the curriculum are related to each other in various ways: intradisciplinary (within the own discipline), multidisciplinary (combining a number of disciplines by one or more students from one discipline), interdisciplinary (in real cooperation between professionals or students of a number of disciplines), or even transdisciplinary (also in cooperation with stakeholders beyond the disciplines).

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In some parts of the curriculum, connectivity and complexity are explicit goals of, and are realized in the learning process.	- In many parts of the curriculum, connectivity and complexity are explicit goals of, and are realized in the learning process. - The relationship of this connectivity and complexity with sustainable development is made explicit.	- The level of connectivity and complexity increases systematically throughout the curriculum, in a carefully planned way. - The resulting level of complexity and connectivity is sufficient, according to the professional field.	Practical work has been designed in such a way that connectivity and complexity are practiced intensively in an interdisciplinary context.	Practical work has been designed in such a way that connectivity and complexity are practiced intensively in a transdisciplinary context.

Connectivity, complexity: table 1 (§2.2) offers a list of aspects of them, together explaining their meaning.

Made explicit: e.g. through making repeated links with the introduction to sustainable development (see criterion E3).

Practical work: E.g. student group projects, traineeships, graduation projects.

Interdisciplinary context: i.e. as a member of a team consisting of students / experts from various disciplines.

Transdisciplinary context: i.e. as a member of a team consisting of students / experts from various disciplines plus other, non-disciplinary stakeholders.

E-6. Output assessment

The integration of sustainable development in the curriculum results in graduation theses in which sustainable development can be distinguished, thus proving that the program output is contributing evidently to sustainable development.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Every year, in a range of graduation projects and graduation reports, aspects of sustainable development are present.	- Specific demands are formulated to all graduation projects and -reports, explicitly related to sustainable development. - These demands are checked as a part of the assessment of the graduation project of each student.	- A systematic analysis has been made of the demands, based on sustainable development, to graduation projects. - These demands are a part of the examination regulations, in such a way that a student cannot graduate if not all of these demands are met.	- The analysis is evaluated on a regular basis. - In this analysis, the professional field is involved actively.	- In this analysis, representatives of society are involved actively.

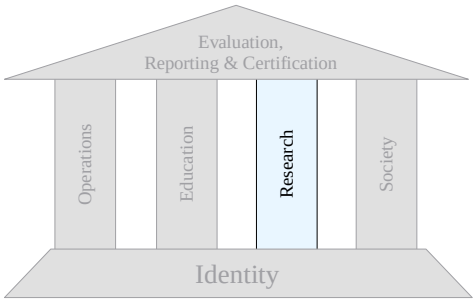
Systematic analysis: an example of such an analysis is shown in table 5. Discipline-based demands may be added.

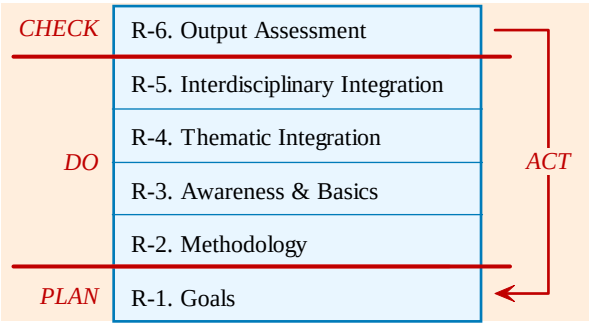
Table 5. Checklist for sustainability demands for an internship or graduation project

Explicit preliminary demands to the project:	Besides, judge final report on:
- Make a stakeholder analysis - Render personal account for own work and conclusions - Zoom in and out: both analytical and holistic approach - Determine consequence reach and consequence period of the project and of the conclusions - Make a future analysis, anticipate - Weigh unweighable aspects, take decisions - Determine rate of (un)certainty or information and conclusions	- Own actions critically evaluated - Respect for values and action perspectives of self and of others - Considered and involved opinions of others - Function orientation, innovativity, creativity - Non-linear processes not treated as linear - Used various timescales; distinguish made between short and long term - Sufficiently considered consequences for people and nature - Applied own conscience as the standard - Showed decisiveness

Source: Roorda (2007)

8. The Research Module

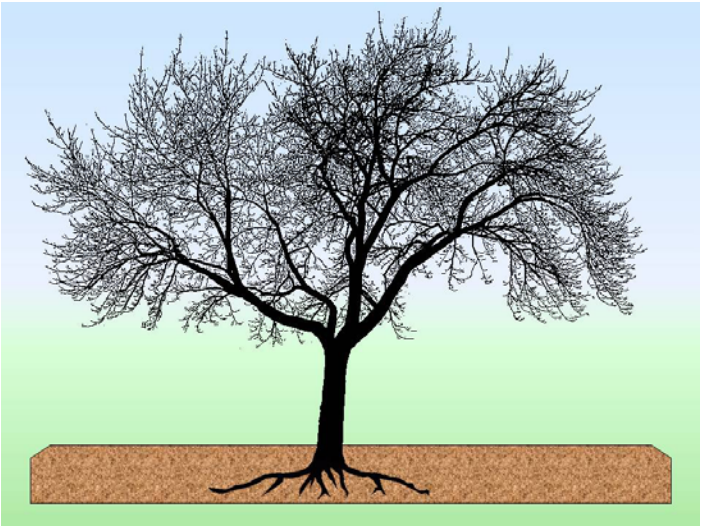




8.1. Introduction

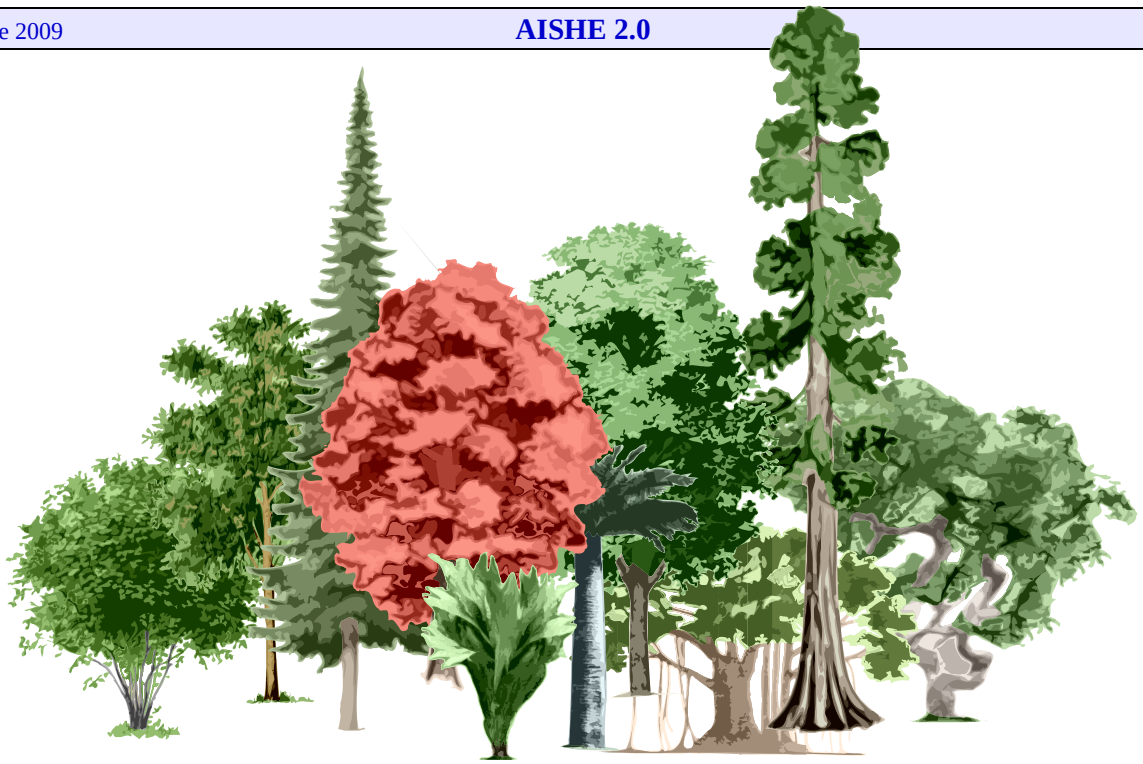
The interactions between scientific or applied research and sustainable development can have several forms. On the one hand there is the research that is done specifically in order to contribute to one or more aspects or themes of sustainable development. On the other hand, every kind of research, whether or nor aiming at sustainable development, does have an impact on it, either positive or negative (or both). Examples are: the materials and energy used; the use of hazardous materials or processes; the use of test animals.
For most of the criteria of the Research Module, the lower stages tend to deal with research in general. The higher the stages, the more demands will be asked concerning a positive contribution to sustainable development, and so the higher stages usually deal with specific research for sustainable development.
Stage three is typical for sustainable developments at the level of smaller adaptations and improvements. Stage 4 aims at real innovative developments, while stage 5 is related to systemic changes and large scale transitions.

The chapter of the Education Module (chapter 7) describes a metaphor of a tree representing the various elements of education. The same metaphor can be used for the research. This entails that the research goals are like the roots of the trees, which – ideally – are vested firmly in the 'fundament' or the 'soil' of the identity of the entire university.
The tree trunk may then be compared with the basics and the awareness of the research institutes and its researchers. The branches represent the various research themes, while the interdisciplinary integration – i.e. the cooperation between various disciplinary experts or institutes – may be compared to the natural habitat which the tree is an integrated part of.



Just as with the Education Module, there is a clear relation to the parts of the research 'tree' and the six criteria of the Research Module:

- Roots: Criterion E1: Goals.
- Internal biology & biochemistry: Criterion E2: Methodology
- Trunk: Criterion E3: Awareness and basic concepts
- Branches: Criterion E4: Thematic integration
- Forest, ecosystem: Criterion E5: Interdisciplinary integration
- Fruits: Criterion E6: Output assessment



The forest or ecosystem that the research 'tree' is an integrated part of, is represented in Criterion E5: Interdisciplinary integration

Directions for the application

The Research Module can be applied to a research institute within a university, a group of such institutes, or to an entire university. For advantages, disadvantages and directions regarding the various application levels, see chapter 4. The frequently used term 'organization' should be interpreted accordingly.

The Research Module may also be applied to a research institute that is not a part of a university, e.g. an independent research center or an R&D department of a company. In that case some interpretations of the stage descriptions may be necessary. Experiences with such applications will be published in separate documents.

8.2. The criteria

Text that is marked *refers to an explanation below.*

R-1. Goals

In its goals, strategy and policy, the organization pays attention to sustainable development. At lower stages, this attention is just one among other focuses of attention. At higher stages, sustainable development is the main focus (or at least one of the main focuses) of the research, as the research is designed with the explicit purpose of contributing to sustainable development.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- The research goals contain some clearly recognizable aspects of sustainable development.	- Sustainable development is mentioned explicitly in the research goals, formulated in guidance documents. - The goals contain all or most relevant aspects of sustainable development.	- With its research, the organization demonstrably contributes to sustainable development on the level of adaptations and improvements. - Sustainable development in the research goals is explicitly based on the vision of the organization about sustainable development. - Systematic evaluations and adjustments of the goals take place. - The research goals explicitly demand multidisciplinary capacities.	- With its research, the organization demonstrably contributes to sustainable development on the level of sustainable innovation. - The direct stakeholders are actively involved in an interdisciplinary way in the determination, evaluation and improvement of the sustainable elements in the research goals.	- With its research, the organization demonstrably contributes to sustainable development on the level of systemic change. - Society is actively involved in a transdisciplinary way in the determination, evaluation and improvement of the sustainable elements in the research goals. - Compared with comparable institutions the organization fulfils a leading role with respect to the research goals.

Clearly recognizable aspects: Score only if the involved aspects are clearly interpreted in a sustainable way. (The literal term 'sustainable development' does not have to be mentioned in stage 1.)

All or most: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the direct stakeholders). This can only be scored if either the organization itself, or the involved external forum possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the education of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

Multidisciplinary: In a multidisciplinary approach, subjects are treated from several different disciplines, by experts or students in just one discipline.

Interdisciplinary: In an interdisciplinary approach, experts or students of various disciplines cooperate as a team. A common methodological approach and theoretical fundament is looked for, as a synthesis of the represented disciplines. Participants try to speak "one language".

Transdisciplinary: In a transdisciplinary approach, not only co-operation takes place between experts or students of various disciplines in an interdisciplinary team, but also others are members of this team, as they are relevant stakeholders: e.g. users, problem owners, clients, etc. (transdisciplinary = (literally:) beyond the disciplines).

Direct stakeholders: This may be persons or institutions that ordered or asked for the research, but also a focus group that may benefit from the research, e.g. a category of patients for whom a medical research takes place.

Society: i.e. a representative delegation from societal organizations, *not* belonging to the direct stakeholders, which are otherwise stakeholders of the assessed organization in any (positive or negative) way. Examples are: the local community, ngo's, governmental organizations, primary, secondary or informal education, museums, festivals, consumer organizations, trade unions, interest groups, etc.

Systemic change: large-scale innovations in which fundamental structures are redesigned. This may involve physical structures as well as organizational or social structures.

R-2. Methodology

The scientific methodology is designed in such a way that it enables or strengthens contributions to the science of sustainability.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In some research projects, methodologies are used that have some characteristics of mode-2 science.	- In many research projects, methodologies are used that have most characteristics of mode-2 science. - These methodologies have been selected with the explicit aim of contributing to sustainable development.	- Mode-2 science is used as a paradigm for all research of the organization. - The implementation of this paradigm is explicitly related to the research goals towards sustainable development.	- The sustainable research paradigm and methodology is shared with a range of other research institutes and forms the basis for a 'common language' in order to contribute strongly to sustainable development. - This cooperation is used to continuously clarify the scientific paradigm and to improve the methodology.	- The organization is involved in an intensive communication with society about the characteristics of the scientific methodology. - This communication is used to continuously clarify the scientific paradigm and to improve the methodology.

Mode-2 science: "A new research paradigm is needed that is better able to reflect the complexity and the multidimensional character of sustainable development. The new paradigm must be able to encompass different magnitudes of scale (of time, space, and function), multiple balances (dynamics), multiple actors (interests) and multiple failures (systemic faults). This paradigm emerges from a scientific sub-current that characterizes the evolution of science in general – a shift from mode-1 to mode-2 science (see table 6; Gibbons, 1994). Mode-1 science is completely academic in nature, mono-disciplinary and the scientists themselves are mainly responsible for their own professional performance. In mode-2 science, which is at core both inter- and intra-disciplinary, the scientists are part of a heterogeneous network. Their scientific tasks are components of an extensive process of knowledge production and they are also responsible for more than merely scientific production." (Martens, 2006)

Table 6. Properties of mode-1 and mode-2 science

Mode-1 science	Mode-2 science
Academic Mono-disciplinary Technocratic Certain Predictive	Academic and social Trans- and interdisciplinary Participative Uncertain Exploratory

Source: Martens (2006)

R-3. Awareness and basic concepts

The organization and its researchers all have a clear awareness of the relevance of sustainable development, both in relation to society and nature, and in relation to the own research. The researchers possess a clear knowledge and insight in the basic concepts of sustainable development, and have the ability to relate them to their own work.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Some researchers have a detailed understanding of the concept of sustainable development, its basic concepts, and the relevance for the research of the organization.	- Most researchers have a detailed understanding of the concept of sustainable development, its basic concepts, and the relevance for the research of the organization. - There is a general awareness within the research staff and management of the relation between its research and sustainable development.	- Awareness of sustainable development in relation with the research fields of the organization form a bottom line for every research project, explicitly based on the research goals. - Basic concepts of sustainable development are used systematically to describe the research goals and activities.	- The organization contributes to the awareness and basic knowledge of sustainable development with the direct stakeholders. - This in turn contributes to a sustainable formulation, in cooperation with the direct stakeholders, of the research goals, methods and procedures.	- The organization contributes to the awareness and basic knowledge of sustainable development within society. - This in turn contributes to a sustainable formulation, in cooperation with representatives of society, of the research goals, methods and procedures.

Basic concepts: E.g. the Brundtland definition, the Triple P, the place & the time dimension, scenario thinking, problem transfer to other regions or generations, ethical aspects, etc.

R-4. Thematic Integration

Themes and issues of sustainable development are integrated within the research.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In a limited number of research projects, themes and issues of sustainable development are clearly recognizable. - Most of this attention to sustainable development is based on individual initiatives.	- Themes and issues belonging to all three dimensions of sustainable development are clearly recognizable in most of the research projects, referring explicitly to the concept of sustainable development. - The research policy of the organization explicitly supports research for sustainable development.	- Sustainable development in the research is explicitly based on the research goals of the organization. - For every research project, all themes and issues of sustainable development that have a direct relation with the research project are involved in the research in a systematic way.	- Representatives of the direct stakeholders contribute significantly to the thematic research of sustainable development.	- Representatives of society contribute significantly to the thematic research of sustainable development.

Clearly recognizable: Score only if the involved aspects are clearly interpreted in a sustainable way. (The literal term ‘sustainable development’ does not have to be mentioned in stage 1.)

Three dimensions: The social-cultural, ecological and economic dimension, also referred to as ‘people’, ‘planet’ and ‘profit’ or ‘prosperity’.

Direct relation: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the professional field). This can only be scored if either the organization itself, or the involved external forum possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the research of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

R-5. Interdisciplinary Integration

The various sustainability themes and aspects are integrated into the research in their full complexity of mutual relations and interactions. Integration is also achieved through cooperation with other research institutes and with societal organizations.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In some research projects, connectivity and complexity are explicit goals, and are realized effectively.	- In many research projects, connectivity and complexity are explicit goals, and are realized effectively. - The relationship of this connectivity and complexity with sustainable development is made explicit.	Connectivity and complexity are explicit goals of all research projects. - Interdisciplinary research is realized through the composition of the research team, in which a variety of disciplines is represented.	- Interdisciplinary research is realized through an intensive cooperation with other research organizations which, together, operate on a wide variety of disciplines.	- Transdisciplinary research is realized through an intensive cooperation with a wide variety of societal organizations.

Connectivity, complexity: table 1 (§2.2) offers a list of aspects of them, together explaining their meaning.

Made explicit: making use of basic concepts of sustainable development (see criterion R3).

R-6. Output assessment

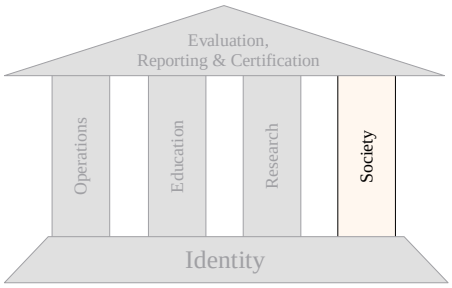
The integration of sustainable development in the research results in scientific reports and presentations in which sustainable development can be distinguished, thus proving that the research is contributing evidently to sustainable development.

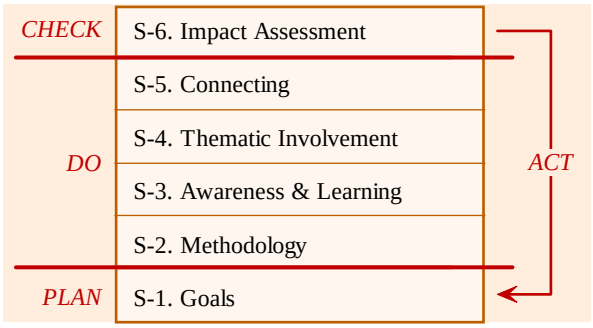
Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In some scientific reports and presentations, aspects of sustainable development are clearly and intentionally recognizable. - This is usually based on individual initiatives.	- In many scientific reports and presentations, a variety of aspects of sustainable development are clearly and intentionally recognizable. - This is explicitly supported by the management.	- In all scientific reports and presentations, all relevant aspects of sustainable development are present in an integrated and multidisciplinary way, evidently based on the vision of the organization on research and sustainable development.	- Through its scientific reports and presentations, the organization contributes strongly to the international dissemination of sustainability science to other research organizations. - This concerns the goals, the contents as well as the scientific methodology of the research. - Besides, the organization regularly contributes to popular scientific publications and presentations aimed at the direct stakeholders.	- Within the international scientific community, the organization is seen as an excellent organization regarding sustainability science. - Through its regular contributions to popular scientific publications and presentations, aimed at society at large, the organization actively contributes to the public discussions about a range of sustainability subjects.

Scientific reports: in peer reviewed scientific journals or books.

Popular scientific publications and presentations: e.g. in magazines, books on a popular scientific level, public lectures, radio and TV programs, websites, weblogs.

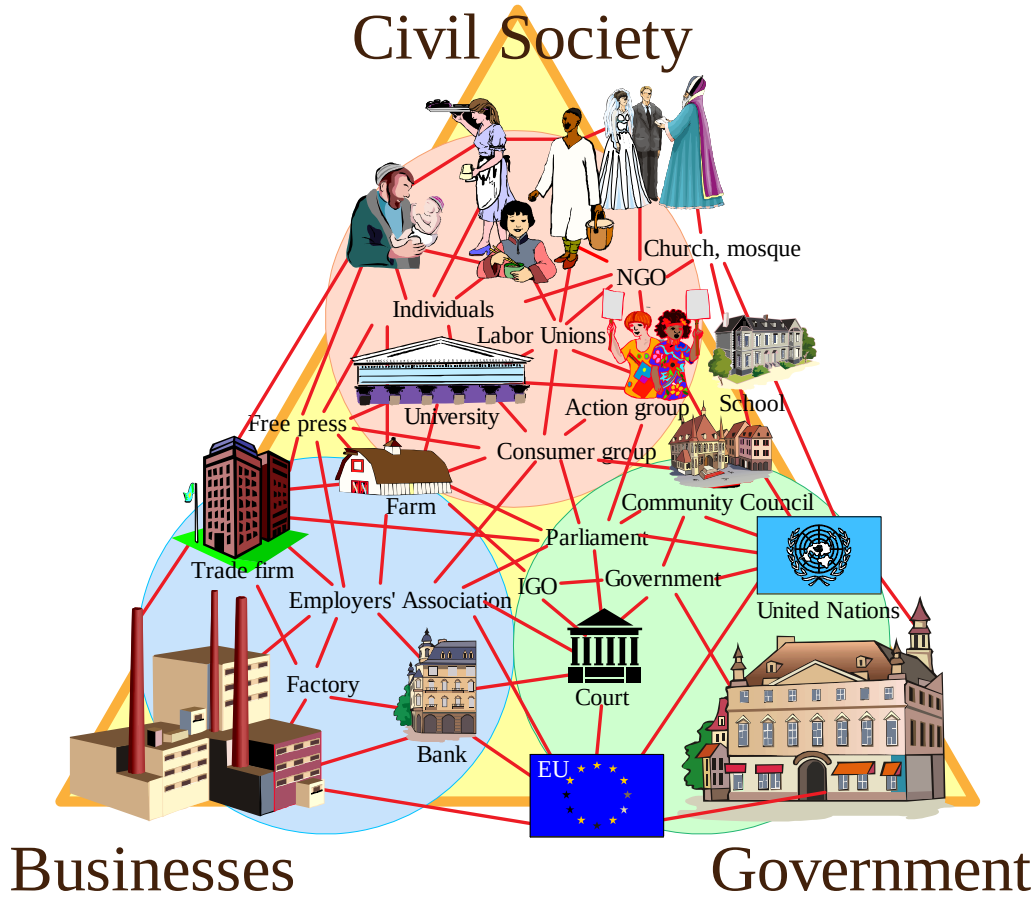
9. The Society Module





9.1. Introduction

If a research institute, in its interdisciplinary orientation amidst other institutes, may be compared to a forest with its ecosystem (see chapter 8), then the right metaphor for a university which is active in a range of ways within society might be the image below.



Numerous different interactions are thinkable. One way to make a list of them is to look at the *methods*. The explanation of criterion S-2 mentions a number of them: e.g. workshops, seminars, presentations, training courses, discussions, social work, assistance, coaching, student projects, internships.

A second way to distinguish societal interactions is to look at the *themes and issues* that are involved. Here, the explanation of criterion S-1 offers a list: general themes, e.g. humanity (people), ecology (profit) and economy (profit or prosperity), the place or space dimension and the time dimension. Or more particular issues, e.g. human rights, democracy, peace, participation, empowerment, health, climate change, deforestation, nature conservation, child labor, fair incomes, sustainable investments.

A third way of distinguishing societal interactions is an overview of the possible partners. This is what the above image does.

Directions for the application
The Society Module can be applied to any level or unit at which either the Education Module or the Research Module can be applied (see §7.1 and §8.1). For advantages, disadvantages and directions regarding the various application levels, see chapter 4. The frequently used term 'organization' should be interpreted accordingly.

The Society Module may also be applied to an institute that is not a part of a university, e.g. an independent NGO (non-governmental organization). In that case some interpretations of the stage descriptions may be necessary. Experiences with such applications will be published in separate documents.

9.2. The criteria

Text that is marked *refers to an explanation below.*

S-1. Goals

The organization aims to be involved in a range of societal activities, and thus supports the attention to, knowledge of, and activities concerning sustainable development throughout society.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Occasionally, the organization interacts with representatives of society with the aim to support societal efforts towards some themes and issues of sustainable development. - This is usually based on individual initiatives.	- The organization maintains regular interactions with society, with the explicit goal to support societal efforts towards a range of aspects of sustainable development. - The staff is actively involved in the determination and improvement of the interaction goals, which is supported by the management. - The sustainable goals of these interactions are formulated explicitly in one or more guidance documents.	- Societal interactions for sustainable development are a main element of the identity of the institution, and are explicitly mentioned in the mission statement. - The societal interactions are based on a stakeholder analysis. - Students and representatives of societal interaction partners are actively involved in the systematic and continuous improvement of the societal interaction goals. - The goals aim at structural and continuous interactions for sustainable development with societal partners.	- The societal interactions explicitly aim at contributing to sustainable development on the level of sustainable innovation. - The composition of the group of societal interaction partners is kept up to date with a continuous stakeholder management.	- The societal interactions explicitly aim at contributing to sustainable development on the level of systemic change. - In the societal interactions, the organization has a pro-active, anticipatory role, based on a deep expertise and experience with sustainable development.

Themes and issues: General themes, e.g. humanity (people), ecology (profit) and economy (profit or prosperity), the place or space dimension and the time dimension. Or more particular issues, e.g. human rights, democracy, peace, participation, empowerment, health, climate change, deforestation, nature conservation, child labor, fair incomes, sustainable investments.

Stakeholder analysis: Based on an analysis of the consequence reach and the consequence period of the organizational goals, processes and effects.
This implies that the stakeholder analysis not only includes the present but also future generations.
The stakes can either be positive or negative.

Consequence reach: The total size of the people, the organizations, nature and the environment that experience the consequences of a decision, a behavior or a lifestyle.

Consequence period: The time it takes before the consequences of a decision, a behavior or a lifestyle have disappeared.

S-2. Methodology

A careful selection is made of the methods that are used for the interactions with societal partners.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In most cases, the methods that are used for the interactions with society are selected ad hoc by individual staff members. - Usually these interactions are one-time events.	- The selection of the methods is coordinated by the management. - There is a clear relation between the selected methods, the sustainable aspects of the interactions, and the societal groups with which the interaction takes place. - Some of the interactions are repeated events.	- The selection of the methods is based on a middle-long term relationship with societal partners. - Both the organization and the societal partners build a considerable experience with the used methods, and use them as learning tools for themselves. - Many of the interactions have the form of a continuous cooperation.	- Together, the organization and the societal partners develop new and innovative methods for societal interactions. - Many interactions are designed as a long-term intensive cooperation.	- The innovative interaction methods draw public attention, and are taken over by other interacting groups of organizations.

Methods: e.g. workshops, seminars, presentations, training courses, discussions, social work, assistance, coaching, student projects, internships.

S-3. Awareness & learning

The societal interactions are used to raise awareness of sustainability subjects, both with the staff and the students, and with individuals, groups and institutions within society. Thus, the interactions are a basis for social learning and for designing new views on sustainable development.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- The societal interactions clearly contribute to the awareness and basic knowledge of sustainable development of some of the people who are involved.	- Staff members and students, as well as representatives of the societal interaction partners, are continuously involved in a process of social learning.	- The societal interactions are systematically used as a way to continuously increase the awareness, knowledge and involvement within the organization and the interaction partners.	- The interactions clearly function as a way to develop a common ground between the organization and its societal partners on issues and themes related to sustainable development. - This common ground is used to develop innovative approaches and philosophies regarding society, the natural environment and sustainable development.	- The innovative approaches and philosophies are used as a starting point to design or contribute to systemic changes and transitions towards sustainable development. - Thanks to this, the cooperation is internationally seen as excellent.

Systemic change: large-scale innovations in which fundamental structures are redesigned. This may involve physical structures as well as organizational or social structures.

Transition: a systemic change in which crucial paradigms are replaced, and which have an impact on all of society.

Paradigm: a word, image or concept that is fundamental to explaining and understanding life and the world.

S-4. Thematic involvement

In a variety of current themes and issues concerning sustainable development, the organization actively participates in public discussions and other public activities.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- In a limited number of interactions with society, themes and issues of sustainable development are clearly recognizable. - Most of this attention to sustainable development is based on individual initiatives.	Themes and issues belonging to all three dimensions of sustainable development are clearly recognizable in most of the interactions with society, referring explicitly to the concept of sustainable development.	- Sustainable development in the societal interactions is explicitly based on the societal goals of the organization. - For every societal interaction, all themes and issues of sustainable development that have a direct relation with the interaction are involved in the interaction in a systematic way. - The interactions are based on a range of middle-long term relations.	- The organization and its societal partners participate on an equal level in the interaction, and serve as a continuous learning process for all of them. - For the organization this is a major and strategic element in the acquisition and dissemination of knowledge and expertise about sustainable development. - The interactions are based on a range of long-term relations.	Through its pro-active societal interactions aiming at systemic change, the organization is considered as excellent.

Clearly recognizable: Score only if the involved aspects are clearly interpreted in a sustainable way. (The literal term 'sustainable development' does not have to be mentioned in stage 1.)

Three dimensions: The social-cultural, ecological and economic dimension, also referred to as 'people', 'planet' and 'profit' or 'prosperity'.

Direct relation: According to the assessed organization itself, or to an external forum (e.g. an advisory board from the professional field). This can only be scored if either the organization itself, or the involved external forum possesses the expertise to make such a judgment, and if it has enough knowledge and insight about the research of the assessed organization. If such a judgment has not yet been made, it may be done during the assessment.

S-5. Connecting

A basic aim of the societal interactions is to connect people, institutions and themes with each other, with the objective to strengthen the societal participation of individuals and societal groups, and to be able to effectively contribute to complex issues of sustainable development.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Some of the societal interactions clearly contribute to an active participation of the involved people to society.	- Many of the societal interactions clearly contribute to an active participation of the involved people to society, and to their emancipation and empowerment. - Many of the societal interactions contribute to an increase of the awareness of, and respect for different social and cultural values.	- The range of societal interactions is designed to contribute to an active participation of many people or large societal groups to society, and to their emancipation and empowerment. - The range of societal interactions has a multidisciplinary and multi-cultural approach.	- Intrinsic characteristics of the societal interactions are: connectivity and complexity, innovativity, social learning, reflexivity. - The range of societal interactions clearly contributes to the strength and the wealth of the cultural and social variety within a local, regional or national society.	- The societal interactions are a major contributor to the socio-economic and cultural development of entire regions or countries.

The range: i.e. all interactions together, not necessarily every individual interaction, has to meet the demands that are mentioned.

Multidisciplinary: In a multidisciplinary approach, subjects are treated from several different disciplines.

Characteristics: see table 1 (§2.2).

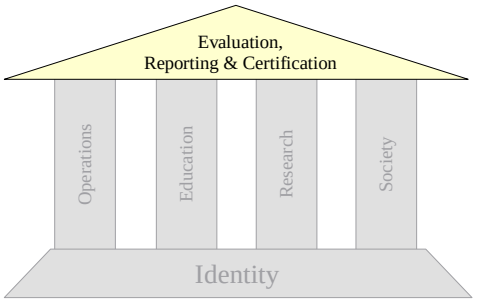
S-6. Impact assessment

The organizations and its societal partners investigate the impact of their interactions, not only on themselves but also on the rest of society and the natural environment.

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Some members of the staff have an overview of most societal interactions of the organization. - In some of the interactions, feedback from the societal partners is gathered.	- The management sees to it that it has an overview of all or most societal interactions of the organization. - For most of the interactions, feedback is gathered from the involved staff members, students and societal partners. - This feedback is frequently used to improve the interactions.	- The organization has a continuous and complete overview of all societal interactions. - It uses this overview to gather systematic feedback from all involved people and institutions about the processes, the quality and the effects on themselves and on the natural environment. - This feedback is used, not only to improve the existing interactions, but also to find 'blind spot' where new societal interactions could or should be started, or where relevant new societal partners or regions may be involved.	- Together with its societal partners, the organizations gathers information about the impact, not only on the directly involved people or institutions, but also on society as a whole. - This is based on a stakeholder analysis of the societal interactions. - Based on the insight of the consequence reach resulting from the stakeholder analysis, the impact of the societal interactions on future generations and on the future development of our planet is explicitly investigated. - The results of the impact analysis are published openly.	- In the systematic impact analysis, all kinds of representatives of society are involved, i.e. not only those that are directly involved in the interactions themselves.

10. Certification

In this chapter, the details will be described of two different certificates.
The *Certificate of Sustainable Development in Higher Education* is awarded to units within universities, like study programs, research institutes, or campuses. It is also possible for entire universities to be awarded this certificate, but for most universities this will not be easy, especially if the university is large and complex.



The *AISHE 2.0 Assessor Certificate* is an essential element of the quality control system of AISHE 2.0. In order to guarantee that the assessments aiming at sustainability certification are done in a proper way, the external assessments can only be chaired by a person who possesses the Assessor Certificate, guaranteeing that he or she is qualified.

10.1. The Certificate of Sustainable Development in Higher Education

The international *Certificate of Sustainable Development in Higher Education* is awarded to a unit within a university, like a study program, a research institute, or a campus, of which has been proved that it meets all demands for this Certificate. The only way to prove this is through the application of AISHE 2.0.
(This implies that, from the date at which AISHE 2.0 is officially in use – January 1, 2010 – AISHE 1.0 cannot be used for the awarding of the Certificate anymore.)

The star levels and their demands
The Certificate is available at five levels, indicated as a 'One Star' till a 'Five Star' Certificate. In order to qualify, the institute has to have done an AISHE 2.0 assessment, using two modules: the Identity Module, and the appropriate module for the institute: e.g. the Research Module for a research institute. Both modules are applied to the institute itself, not to a higher organizational level (see chapter 4 for the details).

Consequently, 12 criteria have to be investigated. For the one-star level, all of these 12 criteria will have to be at least at stage 1. In the same way, for every other star level, the according stage has to be realized for all 12 criteria.

Certificate level	1	2	3	4	5
Demand: All 12 criteria of the Identity Module and the appropriate module are at least at stage	1	2	3	4	5

No compensation is allowed: if the score of one criterion is too low, this cannot be compensated with extra high scores of other criteria.

The procedure
In order to qualify, the following has to be done:

1. Before the assessment, the institute contacts an AISHE 2.0 Licensed Institution. The list of these institutions is available on the website www.aishe.info. If such an institution exists in the country in which the university is located, this institution has to be selected. If not, the nearest institution has to be selected. The involved Licensed Institution will select a certified AISHE 2.0 assessor.
2. An external AISHE 2.0 assessment is done, in complete accordance with the regulations that are formulated in chapter 4 of this manual.
3. If the assessment indicates that the institute fully qualifies for the Certificate at a certain level, the institute can set the *next step*. If it nearly qualifies, it may be allowed to follow the 'special procedure' (see below.)
4. *Next step*: The institute sends a formal request to grant the Certificate to the involved Licensed Institution. The request has to be received by the Licensed Institution within four weeks after the assessment, or – if the special procedure is followed – within four weeks after finishing this procedure. The request should specify:
    a. The exact and official name of the university;

   b. The exact and official name of the institution(s) for which the Certificate is requested, and if possible the number(s) or code(s) under which the institute(s) are registered officially;
   c. The type of Certificate that is requested (e.g. operations, education, etc.)
   d. The level (i.e. the number of stars) of the Certificate that is requested;
   e. The date on which the assessment took place;
   f. The name of the assessor, and the name and contact information of the person who made the assessment report.

5. Together with the formal letter, a number of documents has to be sent, either in a digital or a paper version:
   a. The report of the AISHE 2.0 assessment, signed for approval by the assessor;
   b. All documents that are necessary to prove that every claim in the assessment report is true. It is the responsibility of the requesting institute to decide which documents are necessary, although the assessor may offer assistance. (Examples are, depending on the situation: a mission statement; examination regulations; plans and reports of societal interactions; a list of citations by others of produced scientific publications; an environmental management plan.)
   c. A short guide that helps to find the right places within the documents where the claims of the assessment report are proved. (This is to avoid that the check takes more time than necessary.)
   d. Documents to show the output of the institute(s). If the institute is a (combination of) study program(s), this is a number of reports of graduation projects. For a research institute: a number of scientific publications, etc.
6. After the Licensed Institution has received the request and all the necessary documents, it will send them to its Certifying Commission.
7. If the assessor has serious doubts about the verity of the claims in the assessment report, he or she is entitled to send a personal and confidential report to the Certifying Commission. The institute is not informed about this, nor does it receive a copy of this confidential report.
8. The Certifying Commission investigates the request, the assessment report, the eventual personal report by the assessor, and the other documents. In case of doubt, the Certifying Commission is entitled:
   a. To ask further documents or explanations from the applying institute; or even, if there is still serious doubt:
   b. To visit the institute, after a date and time is chosen together with the applying institute.
9. The Certifying Commission makes a decision, and sends it in a formal letter to the applying institute. Three kinds of decision are possible:
   a. The Certificate is granted at the requested level;
   b. The Certificate is granted at a lower level than requested;
   c. The Certificate is not granted.
10. If the Certificate is granted at a lower level than requested, or not granted at all, the Certifying Commission will formulate in its letter to the institute a detailed argumentation of this decision.
11. The applying institute has the right to protest against a decision by the Certifying Commission with the central organization of AISHE. The contact information and the specifications for such a protest can be found on the website www.aishe.info.
12. If the assessment was applied to a combination of several institutes, only one Certificate will be awarded, on which the names of all certified institutes are mentioned.
13. If a Certificate is granted, the Licensed Institution will contact the requesting institute to discuss the way in which the institute wishes to receive the Certificate. This can e.g. be done by mail, or in some official event in which a representative of the Licensed Institution hands over the Certificate. For the latter, the Licensed Institution is allowed to charge a financial fee which is shown on the website www.aishe.info.

The 'special procedure'

A special procedure is possible, if and only if an assessment shows that an institute *nearly* qualifies for a certain star level. This means that at most **two** of the 12 criteria are only **one** stage lower than demanded. (If the reverse is true, i.e. that only one criterion is two stages lower than demanded, this does not give access to the special procedure.)

The special procedure allows the institute to make a 'quick repair'. The procedure for this is as follows:

1. The institute expresses the wish to the certified assessor who chaired the AISHE 2.0 assessment, to follow the special procedure.

2. The institute formulates a detailed plan of action in order to improve the situations regarding the one or two criteria of which the scores were not sufficient.
3. This repair plan has to enable the institute to reach the required scores within three months, counted from the date of the assessment. If, in that period, the institute is closed for at least two weeks (due to e.g. vacations), the period of three months may be increased with the length of the closing period, with a maximum of six weeks.
4. The document containing the plan is sent as soon as possible to the assessor. The institution has to see to it that the document is received by the assessor at most one week after the assessment.
5. The institute agrees with the assessor about the date – at the end of the repair period – when a meeting takes place during which a result document, containing the results of the repair plan, will be presented and explained to the assessor, and all necessary proofs will be delivered.
6. During this meeting, the assessor judges whether – to his or her opinion – the repair plan was sufficiently proved to be successful. If so, the assessor will sign a copy of the result document, which from now on will be treated as an appendix to the original assessment report.
7. If the result document was signed for approval by the assessor, the institute is entitled to follow the standard procedure from the *next step* (step 4). If the repair plan was not successful, the institute may proceed from the *next step* with a request for a Certificate of a lower star level, if such a level exists.
8. The Licensed Institution is wed to charge a financial fee for the special procedure which is shown on the website www.aishe.info

The significance of the Three Star Certificate

There is a major difference between the three star Certificate in comparison with the lower levels.
If the institute is, for a number of criteria, in stage 1 or 2, this means that the institute and its staff are working on the integration of sustainable development, probably in a variety of ways, and probably in a continuous improvement process. However, this process is mainly 'on its way'. Sustainable development is not yet a part of the essence of the organization.
When stage 3 is reached for many criteria, this proves that sustainable development has become a part of the nature of the institute. If this is true for all twelve criteria of the AISHE assessment, this shows that the institute may rightfully call itself a 'sustainable institute'.
An easy way of describing the essential importance of the three star Certificate is: If an institute has a one-star or even a two-star Certificate, constant efforts will have to be made to conserve the level of integration of sustainability. But, if the three-star Certificate is reached, efforts would have to be made if someone wished to lower the level of integration of sustainability. The sustainability within the institute is anchored and will not vanish all by itself. For this reason, the three-star Certificate can be seen as an ultimate goal. The higher levels – four or five stars – are only desirable for institutes that want to reach a unique level of excellence.

The Certificate for an entire university

An entire university can receive a Certificate on a certain level and for a certain type, if and only if it has been proved that all of its parts of this type are certified at this level or higher.

Example 1: A university will receive the Certificate on a one-star level for its research, if all research institutes have this Certificate at least at level 1. (Of course, several research institutes may have been combined in one assessment.)
Example 2: A (probably small) university has only one study program. This program possesses the three-star Certificate. The university is now entitled to carry the three-star Certificate for its education.
Example 3: All research institutes, all education institutes, all campuses or buildings, and all societal interaction programs are certified at level 2 or higher. In other words: all parts of the university are certified in any possible way. The university may now carry the two-star Certificate for the entire university, without specification.

Using the Certificate

An institute or university is entitled to present the possession of the Certificate in any way it wants, e.g. for its marketing or PR, including the logo, on condition that it is used in a proper way. Improper ways would e.g. be:
- A Certificate is possessed by one institute, while it is suggested that it is awarded to other institutes or the entire university.
- The star level is not mentioned.
- The Certificate is not valid anymore.

Keeping or losing the Certificate

Every Certificate is valid for exactly three years. This period starts at the date on which the Certifying Commission made its decision to certify the institution.

After these three years, the Certificate is automatically not valid anymore. The Licensed Institution is not obliged to send any warning before or after this moment (though it may probably do so).
If an institute wishes to renew its Certificate, either before or after it has lost its validity, it has to follow the standard procedure again. The former Certificate will not be used in any way during this new procedure.

10.2. The AISHE 2.0 Assessor Certificate

Any person who wants to receive the AISHE 2.0 Assessor Certificate, has to follow a three-step procedure.
First, he or she should participate in an official assessor training program, which is organized regularly by the central organization of AISHE, together with one or more Licensed Institutions. The training program lasts three or four days. Announcements for such training programs can be found on the website www.aishe.info.
Next, after finishing the training program, the candidate has to get practical experience. In order to do so, he or she has to participate in a series of actual AISHE 2.0 assessments. During this series, the candidate plays a role of increasing importance: first perhaps only as an observer or taking the notes, next as a chair person for e.g. one half module, etc. The exact route depends on the former experiences and on the learning capabilities of the candidate.
The final step is the examination. This time the candidate acts as the assessor of an entire assessment, including all preparations, the assessment itself, and the aftercare. The candidate is observed by a member of the Examination Commission of the central AISHE organization. If this examiner judges that the candidate is able to handle the entire procedure at a sufficient level, the candidate receives the Assessor Certificate. From that moment, he or she may be invited by a Licensed Institution to perform AISHE assessments, and receive a suitable financial reward.
During the trajectory leading to the Assessor Certificate, including the examination, the candidate will receive no financial fee or reimbursement of travel expenses, even if he or she chairs the entire assessment, unless otherwise decided.

Characteristics of the 'ideal' AISHE assessor
Of course, the 'ideal' AISHE assessor does not exist. But the real assessor should at least have a fair level of capacity of the following:

1. Expert on Sustainable Development:
   - Broad, multidisciplinary knowledge about social, economic and ecological aspects of sustainable development;
   - Expertise on relevant sustainable development processes;
   - Insight in consequences of sustainable development for education.
2. Expert on Education:
   - Experienced teacher;
   - Experienced education developer;
   - Experienced education manager.
3. Experienced chair person:
   - Experienced discussion leader;
   - Capacity for critical reflection;
   - Respect, neutrality, open-mindedness;
4. Experienced assessor:
   - Knowledge and experience with Quality Management, preferably as an auditor;
   - Knowledge & experience with AISHE 2.0;
   - Experience with assessment reporting.

Every AISHE assessor is expected, not to possess all these qualities on a perfect level, but to analyze his or her weaknesses and to continuously work on the improvement of them.

Keeping or losing the Assessor Certificate
The certified assessor will lose its Assessor Certificate, if:

- he or she did not perform any assessments in a period of two years or more;
- he or she appears to lack the necessary qualities of an AISHE assessor;
- he or she acts during, before or after an assessment in a way that is in flagrant contrast with what can be expected from an AISHE assessor. Examples are: misuse of confidence, rude or indecent behavior, violating the truth.

Decisions about this will be made by the central AISHE organization, on a proposal of a Licensed Institution. Details can be found on the website www.aishe.info.

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