

TEACHING SUSTAINABLE DEVELOPMENT AT UNIVERSITY LEVEL: CURRENT TRENDS AND FUTURE NEEDS

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Introduction: Sustainability as a Concept

Sustainability as a concept as a way of thinking or as a subject, has found its way into university programmes. Fifteen years ago, a pioneering book outlined how sustainable development can be implemented at universities (Leal Filho, MacDermitt and Padgham 1995). In addition, over ten years ago, in a set of volumes on sustainability in the context of university education (Leal Filho 1988, Leal Filho 1999a, Leal Filho 1996b, Leal Filho 1996c), the author discussed the fact that, since Rio, a lot has been said, written and published on the broad subject of sustainability at various levels, from curriculum (Creighton 1996) to planning (Blowers 1993) to the broad field of policy (e.g. Selman 1996, Baker, Kansis, Richardson and Young 1997, Brown 1997) and local environmental initiatives (Whittaker 1995, ICLEI 1997), also including at the university level.

Within the tertiary sector, there have been various landmarks in the process of design of approaches and mechanisms to bring in environmental concerns and matters related to sustainable development to university policies - some of which set in motion well before UNCED-, which include many important documents such as:

- the Magna Charta of European Universities (1988)
- the Talloires Declaration of University Presidents for a Sustainable Future (1990)
- the Halifax document "Creating a Common Future: an Action Plan for Universities" (1991) (Lester Pearson Institute for International Development 1992)
- the "Urgent Appeal from the CRE" to the Preparatory Committee of UNCED (1991)
- the COPERNICUS "Universities Charter or Sustainable Development" (1994)
- the Lüneburg Declaration on Higher Education for

Abstract. Sustainable development is a matter of great concern to both countries and individuals alike. Whereas in the late 1980s sustainable development was perceived as a matter of concern only to nations, there has been an increased awareness about the fact that it permeates all parts of our lives. Some of the trends related to the evolution of sustainable development can be seen among various sectors, also at universities. Due to their relevance, universities are uniquely placed to pass on the messages of sustainable development to a wide audience. Yes, this potential has not yet been fully realised. This paper describes the evolution of the concept of sustainable development and process behind the its establishment at university level, including an analysis of the problems related to it and their roots. It also states what universities need to do in order to claim excellence in the field of sustainable development, listing a set of criteria that need to be fulfilled in order to achieve this goal.

Key words: sustainable development, education, universities, research, publications.

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- Sustainable Development (2001)
- The Ubuntu Declaration on Education and Science and Technology for Sustainable Development (2002)
- Graz Declaration on Committing Universities to Sustainable Development (2005)
- G8 University Summit Sapporo Sustainability Declaration (2008)
- G8 University Summit: Statement of Action (2010)

Moreover, in a further reflection of the maturity of the topic at a scientific level, a specialist journal was launched in the year 2000. Titled "The International Journal of Sustainability in Higher Education" (IJSHE), this unique periodical has established a prestigious international network of practitioners, academics and legislators working on sustainable development in higher education. IJSHE is the world's first journal to specifically focus on the subject of sustainability and sustainable development at universities, especially the 600 or so of them worldwide which have committed themselves towards sustainability by signing international agreements and convention such as the Bologna Charter, The Halifax Declaration, the Talloires Declaration and the Copernicus Charter for Sustainable Development, among others. IJSHE is important in the sense that:

- · it provides up-to-date information on new developments and trends
- it reports on international experiences, especially from Europe and North America, but also from other parts of the world (e.g. Africa, Latin America, Asia, Oceania)
- it is a tool for the dissemination of reliable information
- it enables networking and information exchange on a global basis

Last but not least, IJSHE represents a step forward in the provision of a peer-reviewed journal, which may promote the work of the people working in the field and disseminate their work and their own institutions, on an international basis. Now on its 11th volume (2010), IJSHE has already provided a significant contribution towards addressing the lack of specific scientific articles on sustainability in higher education, addressing matters such as misconceptions, comparison of policy and practice, overcoming barriers to campus greening and promoting approaches such as back-casting or a university's role in promoting sustainability in health care. IJSHE has already many awards for its innovative focus, including the Aurelio Puccine Award, conferred in a special ceremony held in Rome, Italy in the summer of 2001. The medal states "the challenge of current generations is to make sure that a better world will be here waiting for the new ones".

Moreover, over the course of the past ten years, the literature has registered various works which have attempted to throw some light onto the ways by which sustainability -seen as both a process and as a goal- may be effectively implemented, emphasising what can be done at university level. For example, a publication outlining **practical** examples of the introduction of sustainability components into university activities titled "Sustainability and University Life" (Leal Filho 1999a), provides concrete examples of action at various fronts such as administration, planning, teaching, extension and research. The ultimate aim of the book is to show the "hows" of sustainability and the practical problems experienced as part of the process" at the time. Since then much progress has been made and many publications have provided a solid basis for the development of sustainability as a research topic and as an area of importance in university programmes, as seen in Appendix 1.

They illustrate the fact that topic has become mature and is the subject of much scholarly attention on a worldwide scale.

An Overview of Misconceptions on Sustainability

Despite the progress here outlined there is still a deficiency, in the literature, of empirical works which have tried to ascertain, first hand, what is hoped, expected or otherwise among those in charge of sustainability policies, from attempts to promote sustainability in the framework of institutions of higher education. On the basis of the need to fill in such a gap, an informal study was performed among some European institutions in the year 2000 (Leal Filho 2000b) and repeated again in early 2010.

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The hypothesis was simple: if sustainability is so important and so useful, why only a few universities are active in this area?

Box 1. Costing less.

A proposal was made, in a university in northern England, to replace ordinary paper used in administration and stationary, with recycled one. After comparing the prices of both modalities of papers, the administration decided that it should continue to purchase non-recycled paper, since it would cost less. The fact that bulk purchases would substantially lower the costs and that the use of recycled paper would be a good example of environmental concern, were ignored.

Another rationale of the study was the intention to build up a rough profile of the reasons why universities may be reluctant to actively pursue efforts towards sustainability. To this purpose, an informal set of consultations was performed with the Rectors, Vice-Rectors, Presidents, Vice-Presidents and Deans of Faculties of Natural Sciences of a sample of forty randomly chosen European universities, in January 2000 and again in January 2010. The technical basis of the consultations was to identify, by means of informal interviews and informal discussions, the themes or factors which may be responsible for the above outlined reluctance, and which may ultimately prevent some universities from being actively engaged in sustainability-oriented efforts or activities.

Based on the fact that -on both occasions-the consultations took place in the context of conferences and visits and were informal, added to the fact that confidentiality in treating the impressions deriving from them was promised, no mention will be made to the specific universities, nor will any names be provided. However, in order to offer an overview of the breadth of the discussions, the distribution of countries is herewith provided (Table 1).

Box 2. Saving money.

A university in the eastern part of Germany decided to invest on a new power station. In addition to the purchase of a new system, measures were put in place to cut consumption out of hours and to improve the efficiency of the illumination of rooms. Savings of around 6% of the total energy bill were seen in the first year alone.

Table 1. Countries and number of universities involved in the consultation (2000 / 2010).

Country	Universities consulted
Austria	2
Denmark	1
France	3
Great Britain	7
Germany	15
Italy	4
Netherlands	1
Portugal	2
Spain	3
Sweden	1

As stated in the first study, it should be stated that the findings deriving from the above outlined process should be seen with care, since the sample is rather small and the nature of the collected data is subjective since it is based on the personal opinions of the individuals involved. On the other hand, since these people occupy key positions in the administration of their institutions, it is assumed that their own, personal opinion and views, might have an effect on their decisions to favour a certain approach. Hence, albeit not conclusive, the findings may be regarded as **symptomatic** as to the current state of affairs and therefore as being of relevant to the present appraisal.

Box 3. Teaching stuff to staff.

A college in northern Italy started to run seminars on matters related to sustainable development and gender issues to staff. In addition to being popular, such seminars have motivated the creation of "green teams" within the institution, with staff getting together to discuss ways of making the institution's initiatives less environmentally harmful.

Due to the level of seniority of the interviewees and the fact that the main thrust of the consultation was to identify possible misconceptions, only two -central- questions were asked in the context of the consultations, being thus of direct relevance to this chapter. These were:

- i. what the interviewees' personal opinion on the concept of sustainability is;
- ii. what they perceive as being the major barriers in pursuing sustainability in the context of their institutions.

The rationale behind these two questions is simple: by identifying the opinions on the concept of sustainability, it is possible to infer whether it is regarded as a matter of relevance or otherwise. In addition, by determining the items seen as barriers to its implementation, it is also possible -by default- to identify where action is needed. Due to their strategic value and potential implications, each finding is discussed individually and contextualised.

a) Personal opinion on sustainability

In the 2000 study there was an agreement among 34 of the interviewed officials, that the matter of sustainability is an important one. This is the equivalent to over 80% of the total. Only six of the persons involved in the consultations have shown some degree of reservation on the relevance of the topic, classifying it as a "fashion" (3), as "abstract" (2) or as "difficult to implement" (1). On the other hand, there were representatives of institutions quite enthusiastic about it. One institution has indeed taken the step of creating a chair on sustainable development, that should have "sustainable businesses" as a focal point, while another has set in motion doctoral programmes to investigate the various aspects of sustainability. The 2010 study showed a much stronger awareness about the value of sustainability and no respondent stated it is not important, as seen in Table 2.

Table 2. Personal opinion on sustainability.

Opinion	Number of opinions on the 2000 Survey	Number of opinions on the 2010 Survey	
Sustainability is important	34	38	
Sustainability is relevant	2	2	
Sustainability is not important	4	0	

The fact that personal opinions may be overall regarded as optimistic has a strong meaning, since it shows that the thematic *sustainability* may count on a great deal of sympathy.

Box 4. Spreading the word.

In an attempt to raise the profile of the subject matter of sustainability, a university in northern Germany chose to set up a "Commission on Sustainability" right in the heart of its decisionmaking: the Senate. By doing that, it is making sure that all important players are aware of what the institution is doing in this field.

b) Barriers to sustainability

When asked about the items that might pose an obstacle to sustainability, the 2000 sample provided a range of opinions, which fall into five main fronts: "it is too abstract" (12 respondents), "it is too broad" (19 respondents),,,no personnel to deal with it" (4 respondents),,,it demands substantial resources which we do not have or can justify" (3 respondents) and, "it lacks a scientific basis" (2 respondents). The 2010 sample has shown a slightly different set of answers to the barriers, as described in Table 3. The good news is that the numbers of those who regard sustainable development as too abstract or too broad has decreased. However, lack of qualified personnel is now regarded a greater problem as it did 10 years ago. In addition, it can be seen that competition of other universities is regarded as a problem by some respondents.

Table 3. Barriers to sustainability.

Opinion	Number of opinions on the 2000 Survey	Number of opinions on the 2010 Survey	
Too abstract a topic	12	6	
Too broad a topic	19	5	
No personnel	4	12	
It demands too much resources	3	9	
Lacks a scientific basis	2	1	
Too competitive	0	7	

The above shows that even though some improvements have been seen since the year 2000, there are still many misconceptions of what the process of sustainable development is and what sustainability represents to an institution. Such misconceptions and the contradictory interpretations associated with them are usually translated into a negative view, which on its turn usually reflects on an institution's willingness - or lack thereof- to join in efforts towards making their activities more environmentally-friendly and the university business more sustainable. Let's examine the bases of such misconceptions:

- sustainability is too abstract: partly because of the scope of the theme and partly because of lack of information, some respondents see the theme as too abstract and as too distant of the reality. The truth is that, if carefully looked at and properly inferred to the activities of higher education institutions such as teaching, research, extension or even purchasing and electricity use, sustainability is as close to their lives as it could be.
- sustainability is too broad: second to "abstract", the adjective "broad" is also often used, as an argument against the undertaking of sustainable measures. Once again, a mistake is being made, since one can apply the principles of sustainable development to different parts of the university life, contextualising it.
- iii. we have no personnel to look after it: such a misconception finds its basis on the fact that, traditionally, a job at a university (e.g. tutoring, counselling) is performed by someone formally qualified. This is especially the case in countries which attach a great value to formal education, such as Germany, where practical and operational skills (also greatly valued else-

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where) usually comes in second place. The reality is that anyone familiar with the principles and practices of sustainable development and sensitive to the impact university activities have on the environment, is in a position to potentially do a good work in this area. It is often a question of having someone sufficiently motivated and qualified to do the job and undertake the necessary consultations and liaisons needed to do it effectively. This reply raises one issue, namely the lack of adequately training personnel to tackle matters related to sustainable development.

- iv. the resources needed do not justify it: this misconception is not based on facts. Although financial considerations do not always come on top of the list of what higher education institutions expect by conforming their work with the principles of sustainability, they do play an important role. As exemplified by the pilot project "50-50" now widely spread in Germany, savings in areas such as energy consumption can be translated into immediate financial benefits, which institutions can then use to purchase goods or services, or re-invest in infra-structure
- v. the theme has no scientific basis: this was not often mentioned, but unfortunately still referred to as a problem, which shows ill-information. Sustainability is now an item found on the very top of the scientific agenda. In many European countries, substantial resources are available for research on sustainability and in the European Commission's 7th Research Framework Programme, sustainability is a research topic to which considerable funding is available. Universities which deny the scientific basis of sustainability are not only wrong, but also losing valuable opportunities for acquiring research projects and increasing their research income.
- vi. too competitive: here it is meant that there is much competition for funds and resources for sustainability initiatives. This is something not inherent to sustainability: other areas of knowledge are also under the same competition and submission of research bids is a normal part of academic work.

The last three items show that, although there is on the one hand quite a broad support basis to sustainability, there is a need, on the other hand, to deal with the misconceptions above outlined so that universities may be in a position to take full advantage of the potential sustainability offers.

When carefully examined, the above outlined misconceptions have deeper roots than one may in principle be able to identify. Some of factors that influence an individual's attitudes towards sustainability are described below:

Knowledge	Information on the meaning of sustainabilityand its implications
Background	The nature of his/her training often influences an individual's degree of receptivity in relation to sustainability
Experience	Previous experience with environmental and social affairs facilitate understanding on the role of sustainability
Perception Values	Differing from the previous ones due to its high degree of complexity, an individual's values often determine whether his/her attitudes are favourable or otherwise
Context	Sustainability is not only related to ecological components per se, but also entail items such as economics, politics and social matters. How-

ever, links with the latter are often ignored by universities

The list, albeit not exhaustive, does illustrate some of the key items to which attention should be focused.

It should be acknowledged that, although most of these factors may be regarded as subjective and -when individually looked- disconnected, they, combined, help to clarify why there are so many

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misconceptions in relation to sustainability. True, mention to a single item may not have much of a meaning, but together, they provide a rough overview of some of the key features of the problem.

A key question one may pose at this stage is why is sustainability - as a process- in some contexts so difficult to understand? There are various reasons for that.

The first reason is because sustainability is not a subject per se. Since it is not classified as being of the domain of any given science -rather being a component which may be incorporated into all disciplines- there tends to be a trend towards perceiving it as an abstract concept. Another aspect of the problem is that items such as sustainability or specific variables such as "Local Agenda 21" are often ill-defined (Patterson and Theobald 1999) being implemented under great financial and administrative constrains.

The second reason is because sustainability is seen as being too theoretical. Here part of the difficult lies on the fact that sustainability and sustainable approaches are seen as theoretical matters, part of the political discourse and hence a mere theoretical expression.

The third reason is because sustainability is seen as too broad. This feeling is felt in some contexts (e.g. the civil service, the engineering profession), where the subject is seen as too broad and, by default, as impossible to handle.

A further reason is because sustainability is regarded as being too recent a field. This is observed in some southern European countries, which see it as a new issue and a new field of action, as opposed to having being part of the process all along. As a result of this misconception, some universities think they should wait and see how it develops, as opposed to taking a more proactive role.

Furthermore, some people perceive sustainability as a fashion. This is unfortunately observed in many situations and derives from the suspicion on the real purpose of sustainability.

Perhaps the most worrying feature in relation to the above state of affairs is that one or more of the above points are used, every day, as an excuse for not taking action. It is this crucial that these are duly addressed.

Universities, Regional Development and Sustainability

Universities are widely acknowledged as institutions where the combination of good quality teaching, well founded research and an extensive programme of extension (i.e. courses, seminars and events targeted to further and continuing education) provides a significant contribution to a country's scientific and economic development.

No matter where they are located, it is a matter of fact that Universities are intimately associated with the city they are based. This is particularly so in cities of medium size (e.g. up to 200.000 inhabitants) to small cities (up to 120.000 inhabitants) where local universities are important employers (sometime being number 1 or number 2 after the city administration) and very much influence a city's cultural diversity and the existence of amenities. In all cities hosting universities there are theaters, cinemas and a lively programme of cultural activities. In addition, in those cities which host many universities this trend is even clearer: not only the high number of university students means that the substantial infrastructure needed to host them is available (from public transport to housing), but also because their purchase power is very important to the economies of the hosting cities. Indeed, in cities which host 5 or more universities (e.g. London, Hamburg, Paris, Madrid, but also Tokyo, New York, San Francisco or Toronto) the sheer students numbers mean the provision of direct and indirect employment to tens of thousands of people, from university services to restaurants and entertainment.

In many contexts, the very title (official name) of the University reflects the city or region they are based at, in a clear demonstration of their local affinity. Examples such as the University of Bradford (UK), University of Aalborg (DK), University of Hamburg (DE), University of Gröningen (NL), University of Padova (I), Oporto University (P), Uppsala University (SE), to name all but a few, attest this. But it is not only a matter of location. The study programme of many universities is often directly linked to their geographical position. This explains why the small University of Freiberg - a mining area in eastern Germany- offer an extensive study programme in mining, whereas the University of Bergen in Norway (surround by oil fields) has an extensive off-shore engineering programme.

The link with sustainability offers however a different picture: few European universities (and, *inter alia*, cities) have a strong sustainability profile. Indeed, it is fair to say that many European regions are lagging behind and are missing the various opportunities teaching and research on matters related to sustainable development offer. This is not to say that these universities are not aware about what sustainability is. This is not the problem. It is a noticeable, sheer lack of emphasis, that disturbs: sustainable development is, along with climate change, one of the most important challenges of modern times. Yet, it is central to the activities of only a handful of universities. Some of the elements which illustrate the links between sustainability and regional development are:

- Regional engagement
- Handling concrete issues and problems
- High quality
- Dialogue with stakeholders and partners

It can be seen that by means of high quality academic inputs, a dialogue with regional stakeholders and partners can be achieved, by means of which concrete problems can be handled.

An analysis of the extent to which sustainability is present at university programmes in Germany (based on existence in the curriculum, research and extension) has shown that there exists much room for improvement. As seen in Table 4, only a few universities fully realize the advantages which may be brought about by a due emphasis to sustainability as part of their programmes. Indeed, since some of the country's largest universities have a weak sustainability profile, one can see that substantial efforts are needed so as to allow a broader dissemination of matters related to sustainable development in university programmes.

Table 4. Emphasis of some German universities to sustainability.

University / Student numbers	City/Region	Emphasis on sustainability	
University of Lüneburg / ca. 7.000	Lüneburg, Lower Saxony, Germany	Strong	
University of Zittau-Görlitz / ca. 4.000	Zittau, Saxony, Germany	Strong	
Hamburg University of Applied Sciences / ca. 13.000	Hamburg, Germany	Medium	
University of Duisburg-Essen / ca. 31.000	Essen, North-Rhine Westphalia region	Medium	
Free University of Berlin / ca. 30.000	Berlin	Weak	
University of Munich/ ca. 47.000	Munich	Weak	
University of Kiel /ca. 23.000	Kiel, Schleswig-Holstein	Weak	
University of Hamburg / ca. 39.000	Hamburg	Weak	

This trend is unfortunately not new. In an earlier paper, Leal Filho (2009c) has outlined the fact that proportionally little emphasis seems to given to sustainability by large universities. Indeed, many universities perform activities in the area of environmental protection (e.g. energy savings programmes, waste management, etc) and regard this as their contribution to sustainability, neglecting the fact that Campus operations are indeed important contributions, but by far not the only ones. In order to claim excellence in the field of sustainable development, universities need to have fulfill six main criteria:

- 1. the existence of a core number of staff who have formal qualifications in the field by means of doctoral degrees on matters related to sustainable development;
- the existence of a strong publications profile on sustainable development issues published in international journals;
- 3. the existence of a robust research programme with externally-funded projects handling sustainable development matters;

- 4. the implementation of principles of sustainable development as intrinsic part of university teaching programmes;
- 5. the integration of sustainable development in the context of university activities and operations (e.g. campus greening);
- 6. the existence of a programme of extension (outreach) on sustainable development topics, for the non-students public.

It is admittedly not easy to fulfill all the six criteria. Most universities will fulfill a couple of them, but it is seldom to see universities which provide emphasis to all six criteria, which would be an ideal scenario.

But the problem of reduced emphasis is not only limited to sustainable development. The world climate change survey, for example, undertaken in 2009 and which involved 1.250 students from 166 universities in 43 countries (Leal Filho 2010b), showed that the emphasis to matters related to climate change at university programmes also leaves much room for improvements (Table 5).

Table 5. Level of emphasis to matters related to climate change according to the sample (in %).

Scale	Europe	Africa	Asia/Oceania	Latin America	North America
The topic is very well covered so we have more than enough	13	9	8	11	17
The topic is covered. We have enough.	21	14	23	17	27
The topic is not as well covered as we would like to	43	20	34	32	41
The topic is poorly covered	12	33	10	22	7
The topic is not covered at all	9	19	19	17	6
I do not know/am not sure	2	5	6	1	2

(After Leal Filho 2010b)

This state of affairs suggests that action is needed in order to allow universities to integrate sustainable development in regional development. . Some of the measures that can be undertaken without a great deal of extra resources are:

- fostering the links between the theory and the practice of sustainability: by means of case studies, pilot projects and regional initiatives on-the-ground, it can be illustrated how close to reality sustainability is and how cities and regions may benefit from it. There are various good examples of initiatives related to Agenda 21, the Gothenburg Declaration and from the EU Action Plan for Sustainable Development, for example, which provide an excellent basis against which the real value of sustainability efforts can be seen.
- going into the specifics: although the broader, theoretical discussion on sustainability is helpful, there ought to be more attempts to get into specific issues and themes of regional relevance. For example, energy use, sustainable water consumption or sustainable production are some of the contexts where there are relevant approaches can be used and in the context of which clear outcomes can be expected.
- c) **disseminating the value of sustainability**: a major problem seen in both industrialised and developing nations alike, is that the value of approaches towards sustainability is not widely acknowledged. A further problem is that not all good experiences are duly documented, a problem "Sustainability and University Life" (Leal Filho 1999a), "Teaching Sustainability at Universities" (Leal Filho 2002), the "Handbook of Sustainability Research" (Leal Filho 2005) have tried to address. Here there is a clear need for more demonstration and information, so as to raise its profile, which may lead to increased acceptance and hopefully, further use.

Discussion

There are at present signs that the subject matter of sustainability is progressively being disseminated as both an aspect of teaching programmes and as a context for research. As demonstrated by Leal Filho (2010a) the ground for the introduction of concepts of environmental education and sustainability is very fertile. However, prior to being able to fully take advantage of the degree of acceptance sustainability has, it would be important to cater for the training needs of university staff, so that they feel confident to introduce concepts of sustainability as part of their works.

As seen in the data and examples described in this paper, which are symptomatic of the reality in many institutions of higher education in Europe, a certain degree of preparedness to pursue sustainability may be felt, also at the regional level. This state of affairs is also seen in some developing countries, where innovation at university level takes place at a relatively lower pace than in industrialised nations and where the lack of resources sometimes prevent active engagement on the debate on international themes. But a number of features need to be put into place so as to enable all universities to fully engage on the debate on sustainability and take advantage of the opportunities it provides. Some of these are:

- a) an understanding of the role may play in implementing sustainable development (Romero 1995, Simai 1995, Selman 1996);
- b) reliable in-service training provisions on matters related to sustainability to academic staff:
- set-up of research centres or working groups to debate how best to pursue it via specific initiatives;
- d) development of partnerships and networks (intra-institutional and inter-institutional) to exchange ideas and experiences (Speller 1992, UNESCO 1995);
- e) the setting-up and execution of specific projects.

Last but not least, attempts to implement regional initiatives related to sustainability at universities should be followed according to a proper structure (e.g. Sustainability Programme, Sustainability Action Plan, etc). A Plan or Programme helps to provide a sense of direction as to where efforts are going into and help to establish if results have been achieved.

Conclusions

One of the first documents outlining the need for further engagement of universities into environmental affairs, the "Magna Charta of European Universities" promulgated in Bologna in September 1998, states that:

" ...universities must give future generations education and training that will teach them, and through them, others to respect the great harmonies of their natural environment and of life itself."

Among the most effective ways of achieving this, mention can be made to the need to afford sufficient emphasis to sustainability, since it deals not only with "ecological" matters, but also with the pool of factors that influence the environmental balance and quality of life.

Although the value of sustainability is broadly acknowledged within the university community, there are still various misconceptions that need to be addressed so as to clear the way for action. Prior to being able to undertake long-term works in this area, it is important that such misconceptions are duly addressed. One of the ways to do that is via concrete initiatives at the regional level, in the framework of which the practicality and efficiency of sustainable approaches are shown. This need, which has been largely overlooked in the past, should be duly addressed, since it is not only responsible for the lack of action in the past, but future, long-term progress depends on it.

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