Sustainability Awareness on Campus: The Case of Marmara University

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This study is supported by Marmara University Scientific Research Project Committee (BAPKO). Project number is SOS-A-100615-0292.

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Aim of This Study

making a literature review as a first step of our project

examining the sustainable university concept of the Turkish and Foreign Universities

examining measurement tools of the sustainability awareness

Sustainability

*Sustainability* is a concept describing skill of creating a creatures world, which satisfy the environmental, social and economical needs at present time without harming opportunities of mankind and next generations (Blackburn, 2007).
Sustainability

- Environment
  - biodiversity
  - energy
  - materials

- Social
  - human diversity (cultural, linguistic, ethnic)
  - equity (dependence/independence)
  - quality of life
  - institutional structures and organization

- Economy
  - money and capital
  - employment
  - technological growth
  - investment
  - market forces

The Historical Development Period of Sustainability Concept

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>197</td>
<td>United Nations Conference on Human Environment</td>
</tr>
<tr>
<td>1987</td>
<td>Rio Declaration on Environment and Development</td>
</tr>
<tr>
<td>1992</td>
<td>United Nations Commission on Sustainable Development</td>
</tr>
<tr>
<td>1994</td>
<td>Global Compact for Sustainable Development</td>
</tr>
<tr>
<td>2000</td>
<td>The Development of the UN's Global Agenda for the Millennium</td>
</tr>
<tr>
<td>2002</td>
<td>World Summit on Sustainable Development</td>
</tr>
</tbody>
</table>

Key points:
- The prevention of poverty, protection of biodiversity, and protective and sustainable living resources, a more equitable distribution of energy and its derivatives, and the promotion of the environment for the benefit of the environment and economic growth.
Sustainability Perception
Sustainability Awareness

- **Sustainability perception** expresses what they understand from the sustainability.

- **Sustainability Awareness**
  To catch the consciousness in the related subject and to spread this to economic, social and environmental life.

What is Sustainable University?

"A higher educational institution, as a whole or as a part, that addresses, involves and promotes, on a regional or a global level, the minimization of negative environmental, economic, societal, and health effects generated in the use of their resources in order to fulfill its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable life-styles." (Valezquez, vd., 2006: 3)
The Historical Development Period of Campus Sustainability in Higher Education

1990: Talloires Declaration
1991: Helix Declaration
1992: University Leaders for a Sustainable Future
1993: Kyoto, Swarms, and Copernicus University Declaration
1996: Campus Greening Conference
1999: Environmental Management for Sustainable Universities conference
2000: Global Higher Education for Sustainability Partnership
2001: Lubeck Declaration
2004: Barcelona Declaration
2005: Graz Declaration
2009: Abu Dhabi Declaration

Assessment Tools of Sustainability

- Status of Campus Environment
- Questionnaire of Sustainability Assessment
- Equipment inspection for sustainability in higher education
- Higher education 21 sustainability indicators
- Campus ecology
- Graphical assessment instrument of sustainability in the universities
The Historical Development Period of Assessment Tools in Higher Education

<table>
<thead>
<tr>
<th>Year</th>
<th>Tool/Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>Environmental audit in university, California Los Angeles</td>
</tr>
<tr>
<td>1999</td>
<td>University Landscapes for a Sustainable Future Assessment Tool</td>
</tr>
<tr>
<td>2000</td>
<td>Canadian Centre for Policy Alternatives (CCPA)</td>
</tr>
<tr>
<td>2001</td>
<td>Environmental Assessment Method for Community National Wildlife Federation Campus Environmental Assessment Tool</td>
</tr>
<tr>
<td>2002</td>
<td>Sustainability Assessment Project</td>
</tr>
<tr>
<td>2003</td>
<td>Campus Sustainability Assessment Framework</td>
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<tr>
<td>2008</td>
<td>Unit-Based Sustainability Assessment Tool</td>
</tr>
</tbody>
</table>

Literature Review for Turkey

<table>
<thead>
<tr>
<th>Reference</th>
<th>Objectives</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuncer (2000)</td>
<td>Investigate the university's policy to support the integration of sustainable development into the university curriculum and the impact of sustainability in the classroom</td>
<td>There was a significant difference between the sustainability policies of public and private universities. The sustainability policies of private universities were more effective in promoting sustainable practices.</td>
</tr>
<tr>
<td>Guler et al. (1996)</td>
<td>To assess the current level of sustainability in higher education</td>
<td>The results showed that the sustainability level of higher education institutions in Turkey was low.</td>
</tr>
<tr>
<td>Alkan and Duyar (2007)</td>
<td>To investigate the relationship between sustainability and academic performance</td>
<td>The results showed a positive relationship between sustainability and academic performance.</td>
</tr>
<tr>
<td>Akpinar et al. (2004)</td>
<td>To investigate the relationship between sustainability and academic performance</td>
<td>The results showed a positive relationship between sustainability and academic performance.</td>
</tr>
<tr>
<td>Cigiz et al. (2010)</td>
<td>To investigate the relationship between sustainability and academic performance</td>
<td>The results showed a positive relationship between sustainability and academic performance.</td>
</tr>
<tr>
<td>Bektas et al. (2012)</td>
<td>To investigate the relationship between sustainability and academic performance</td>
<td>The results showed a positive relationship between sustainability and academic performance.</td>
</tr>
<tr>
<td>Budak et al. (2000)</td>
<td>To investigate the relationship between sustainability and academic performance</td>
<td>The results showed a positive relationship between sustainability and academic performance.</td>
</tr>
</tbody>
</table>
The Case of Marmara University

12 Campuses
17 Faculties
11 Institutes
5 Vocational Schools
19 Research Centres

<table>
<thead>
<tr>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Masters (with Thesis)</td>
</tr>
<tr>
<td>Masters (without Thesis)</td>
</tr>
<tr>
<td>Doctorate</td>
</tr>
<tr>
<td>Doctorate with Bachelor’s Degree</td>
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<tr>
<td>Erasme Program</td>
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<tr>
<td>Erasmus Program</td>
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<tr>
<td>Farkas Program</td>
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<tr>
<td>Grand Total</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Staff (full)</td>
</tr>
<tr>
<td>Administrative Staff (full)</td>
</tr>
<tr>
<td>Contracted Staff</td>
</tr>
<tr>
<td>Grand Total</td>
</tr>
</tbody>
</table>

The Case of Marmara University

- **Courses**
  - Sustainability and Social Responsibility
  - Institutional Management in Fostering Sustainable Growth
  - Social Sustainability and Value Creation
  - Sustainability Economy
  - Institutional Sustainability Practices
  - Environmental Economics and Sustainability.

- **International Sustainability Research and Practice Center**
Future Study and Research Questions

- What is the general level of awareness of sustainability at Marmara University?
- How does sustainability awareness affect attitudes and behavior?
- Which behavior and attitudes of staff and students affect the development of awareness of sustainability?
- What is the effect of different factors such as age, gender, income and place of growth on the awareness and perception of sustainability?
- Is the awareness of economic and social sustainability developed as much as the awareness of environmental sustainability?
- What are the expectations of students on the lessons on sustainability?
- How should be the general content and applicability of a lesson on sustainability "in order to develop the awareness of sustainability of students"?
- How should be the most appropriate measurement tool to be used in measuring the awareness and perception of sustainability?

Conclusion and Evaluation

- most of assessment tools are environment focused, and they remain insufficient in terms of social and economic aspect in measuring the awareness.

- the survey to be developed will be a measurement tool that can be used in a leading and guiding nature not only for Marmara University but also for other universities in measuring the social, economic and environmental sustainability awareness and perception.
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Thank You!

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