



# A review of the implementation of Sustainable Development in Higher Education

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# Introduction

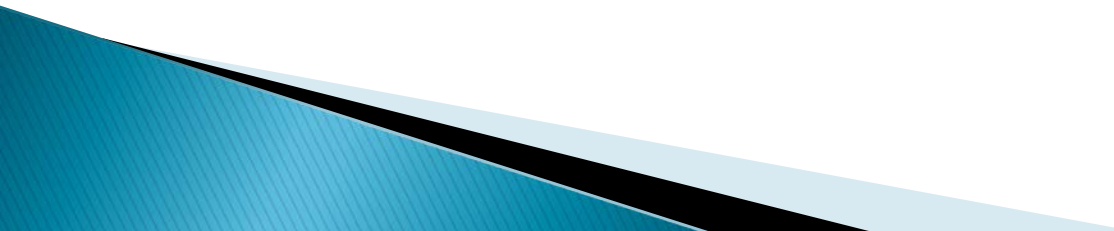
- ▶ Since the Stockholm Conference in 1972, an increasing number of HEIs have been engaged in embedding environmental education and ESD into their system's elements, including:
  - Education, Research
  - Campus operations
  - Community outreach
  - Assessment and reporting
  - Collaborating with other universities
  - Making SD an integral part of the institutional framework
  - Encouraging on-campus life experiences
  - 'Educating-the-Educators' programmes (Lozano et al. (2013))

# HEIs' SD declarations


<i>Year</i>	<i>Event/Declaration</i>
1990	Talloires Declaration, Presidents Conference, France
1991	Halifax Declaration, Conference on University Action for Sustainable Development, Canada
1993	Kyoto Declaration, International Association of Universities Ninth Round Table, Japan
1993	Swansea Declaration, Association of Commonwealth Universities' Fifteenth Quinquennial Conference, Wales
1993	COPERNICUS University Charter, Conference of European Rectors
2000	Global Higher Education for Sustainability Partnership (GHESP)
2001	Lüneburg Declaration on Higher Education for Sustainable Development, Germany
2004	Declaration of Barcelona
2005	Graz Declaration on Committing Universities to Sustainable Development, Austria
2009	Abuja Declaration on Sustainable Development in Africa: The role of higher education in SD, Nigeria

Source: (Lozano et al. 2013)

# Research objective

- ▶ This research is based on Lozano et al.'s (2013) study of eleven of the most widely signed HESD DCIs
  - ▶ This research was designed to provide an in-depth analysis into the implementation of SD in HEIs
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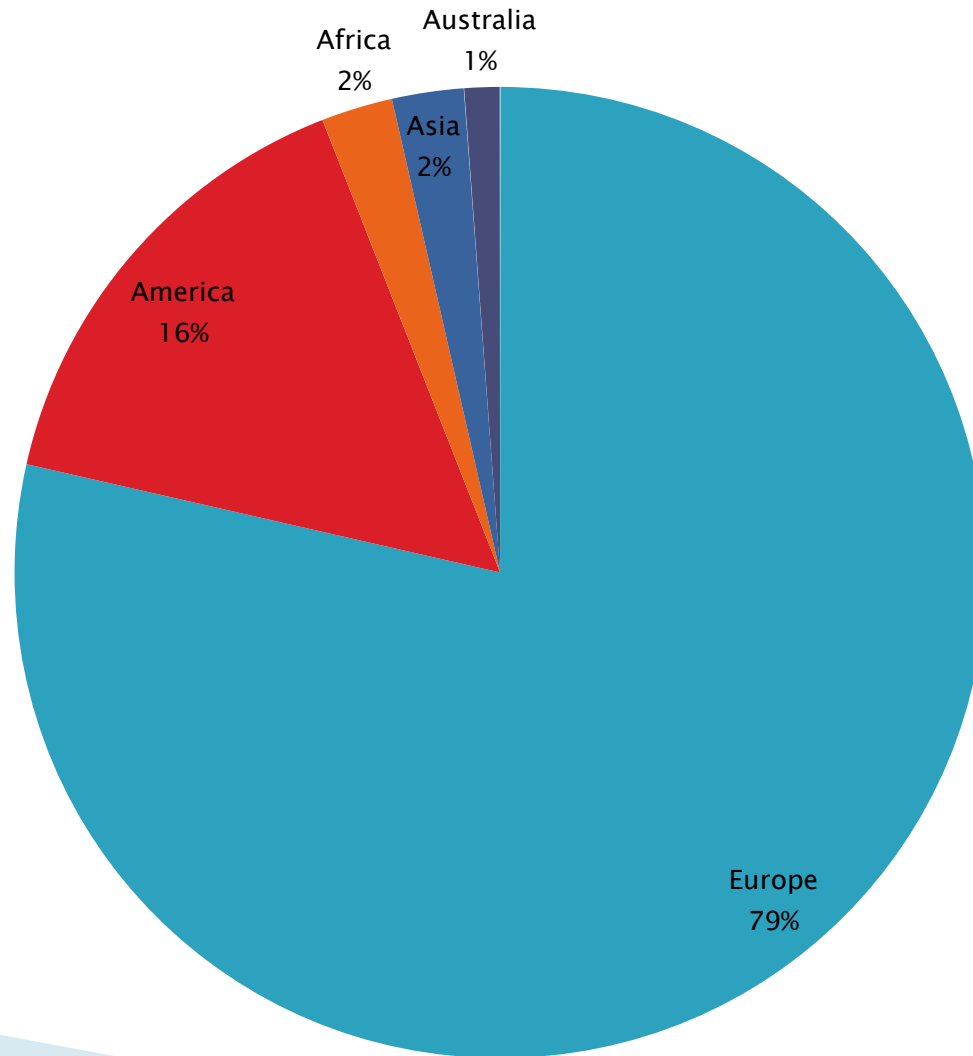
# Methods

- ▶ Online survey
  - ▶ Sent to over 800 people through direct email contact, linkedin, GUNI newsletter, HEA newsletter, as well as snow-balling effect
  - ▶ 228 questions in 8 sections
  - ▶ Mixed methods: Quantitative (mainly using a 1–5 Likert scale) and qualitative
  - ▶ Open for 8 months through Bristol Online Surveys
  - ▶ 84 responses from 70 HEIs
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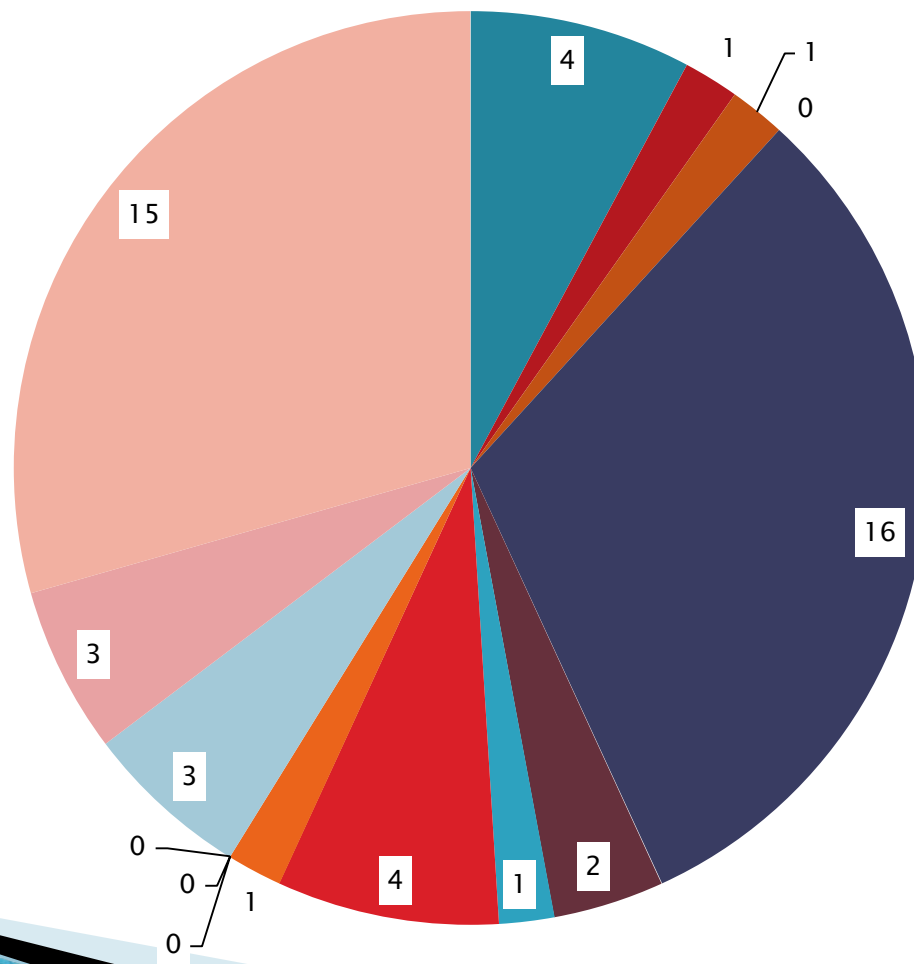
# Data analyses

- ▶ Three complementary methods:
  - Descriptive statistics
  - Constant comparative analysis of Grounded Theory (GT)
  - Inferential statistics. Three methods were used: (1) a regression analysis; (2) a cluster analysis and (3) an ANOVA

# Geographic breakdown of HEIs studied



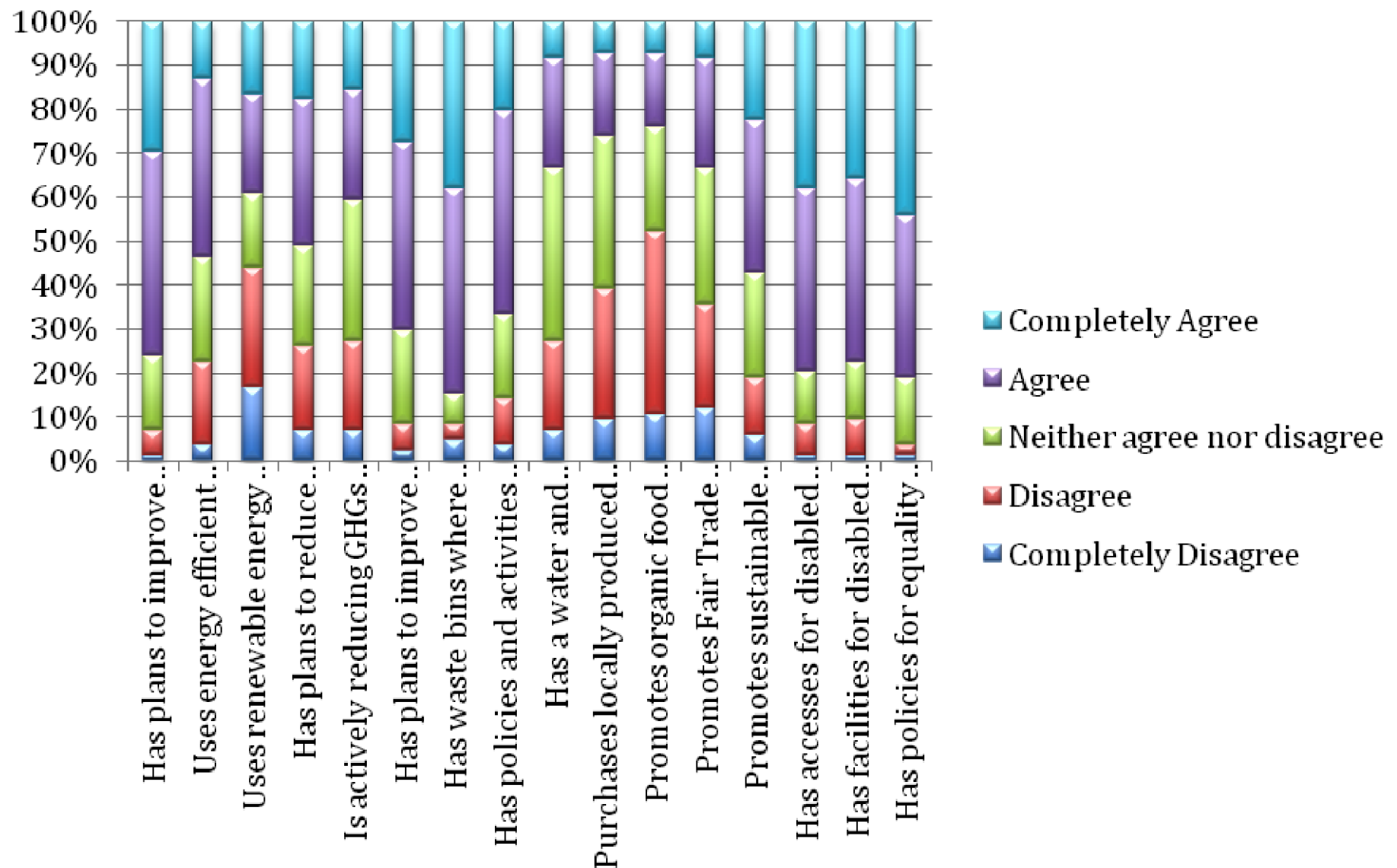
# Declarations signed



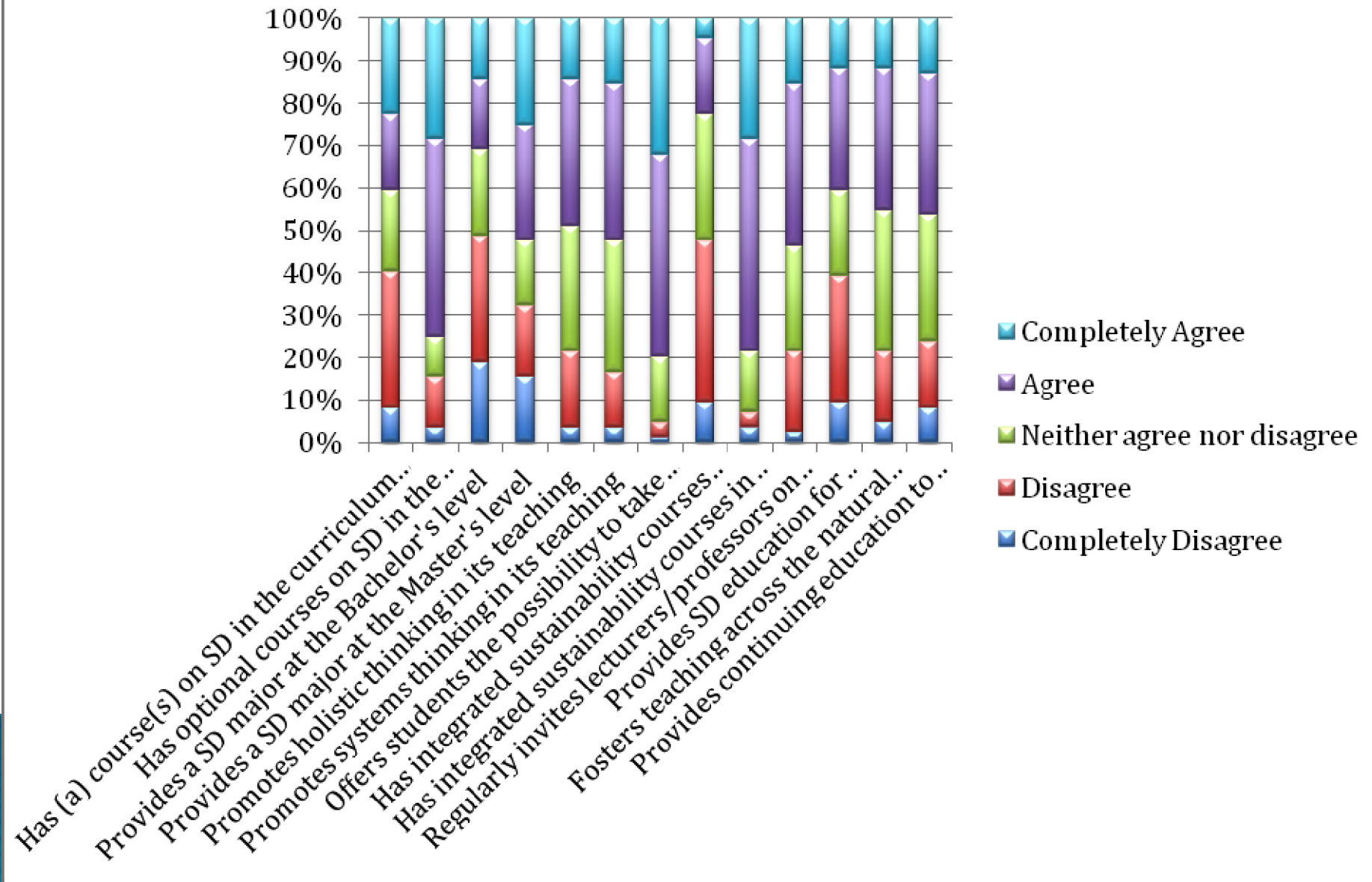
- Talloires Declaration
- Halifax Declaration
- Kyoto Declaration
- Swansea Declaration
- COPERNICUS Charter
- Global Higher Education for Sustainability Partnership (GHESP)
- Lüneburg Declaration
- Barcelona Declaration
- Graz Declaration
- Turin Declaration
- Abuja Declaration
- Bonn Declaration
- Don't know
- Other (please specify):
- Other



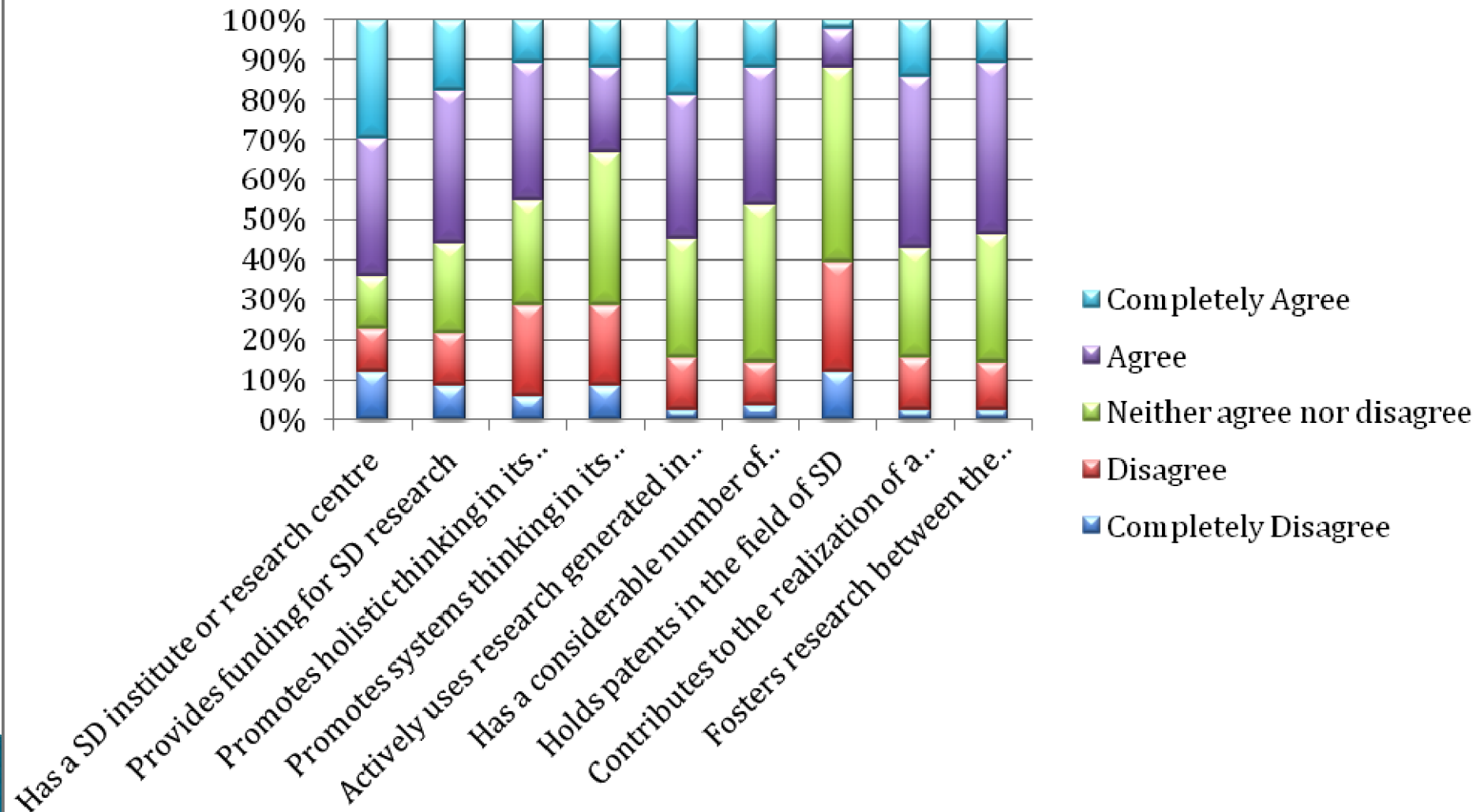
# Campus operations



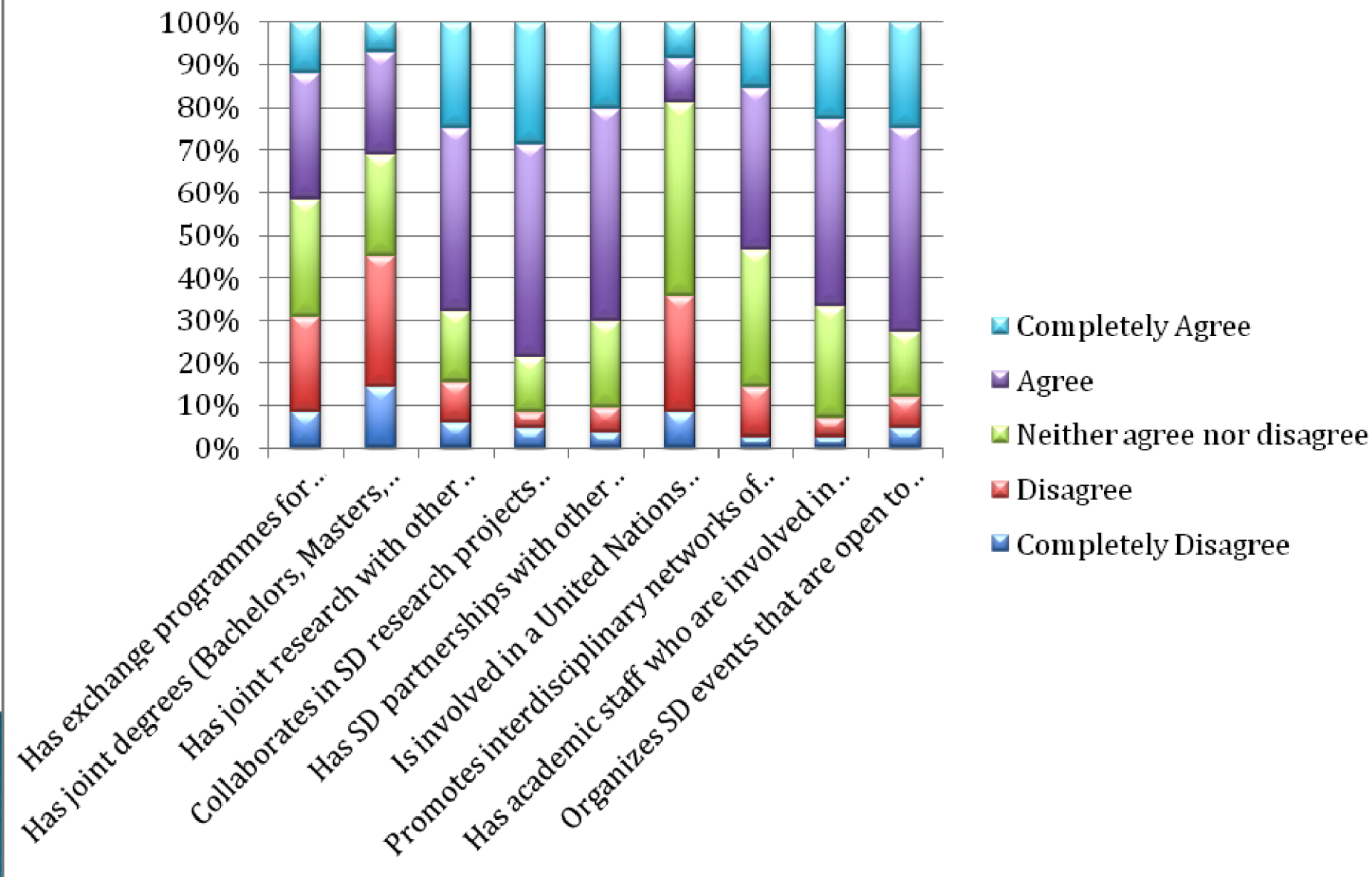
# Education and curricula



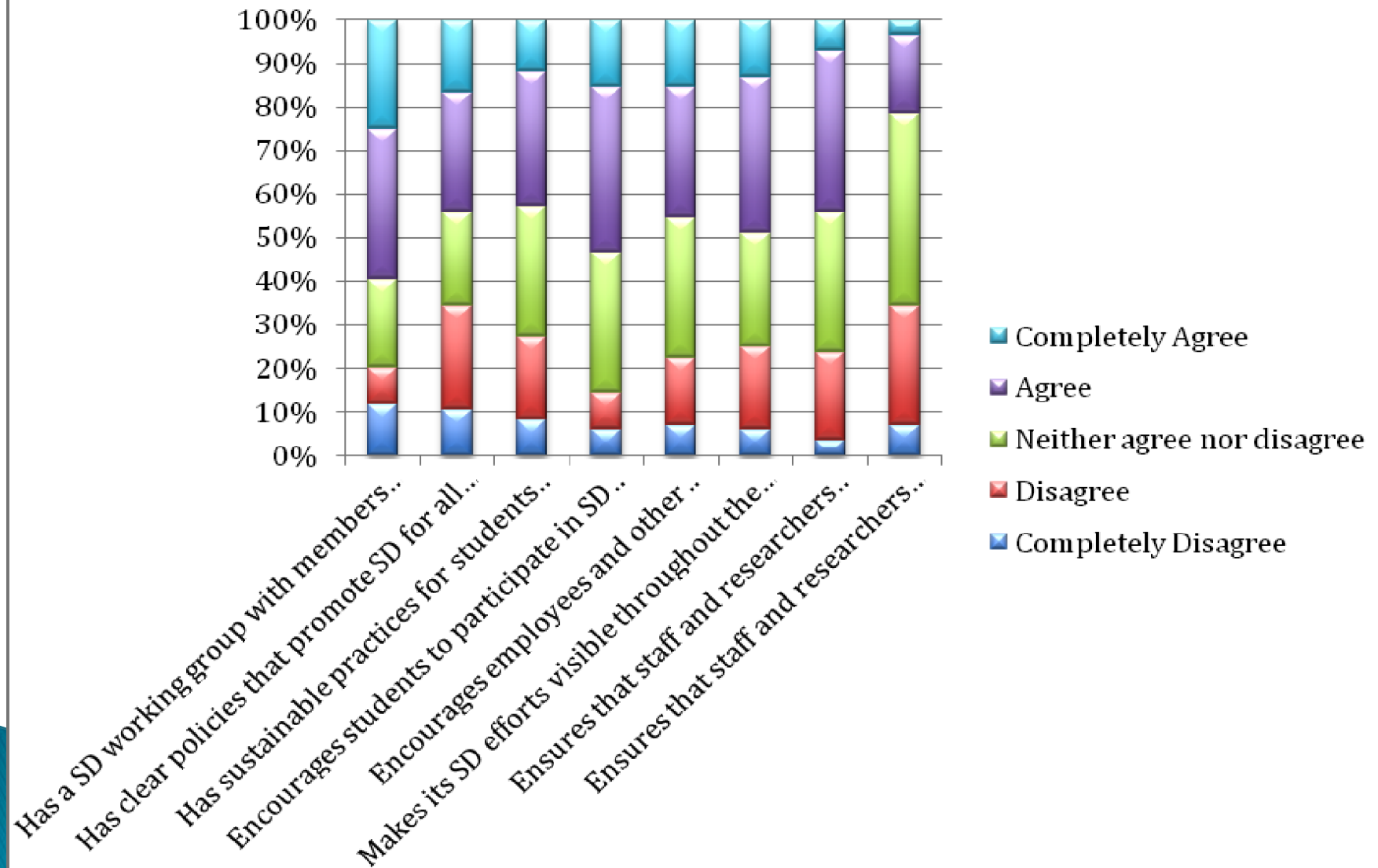
# Research



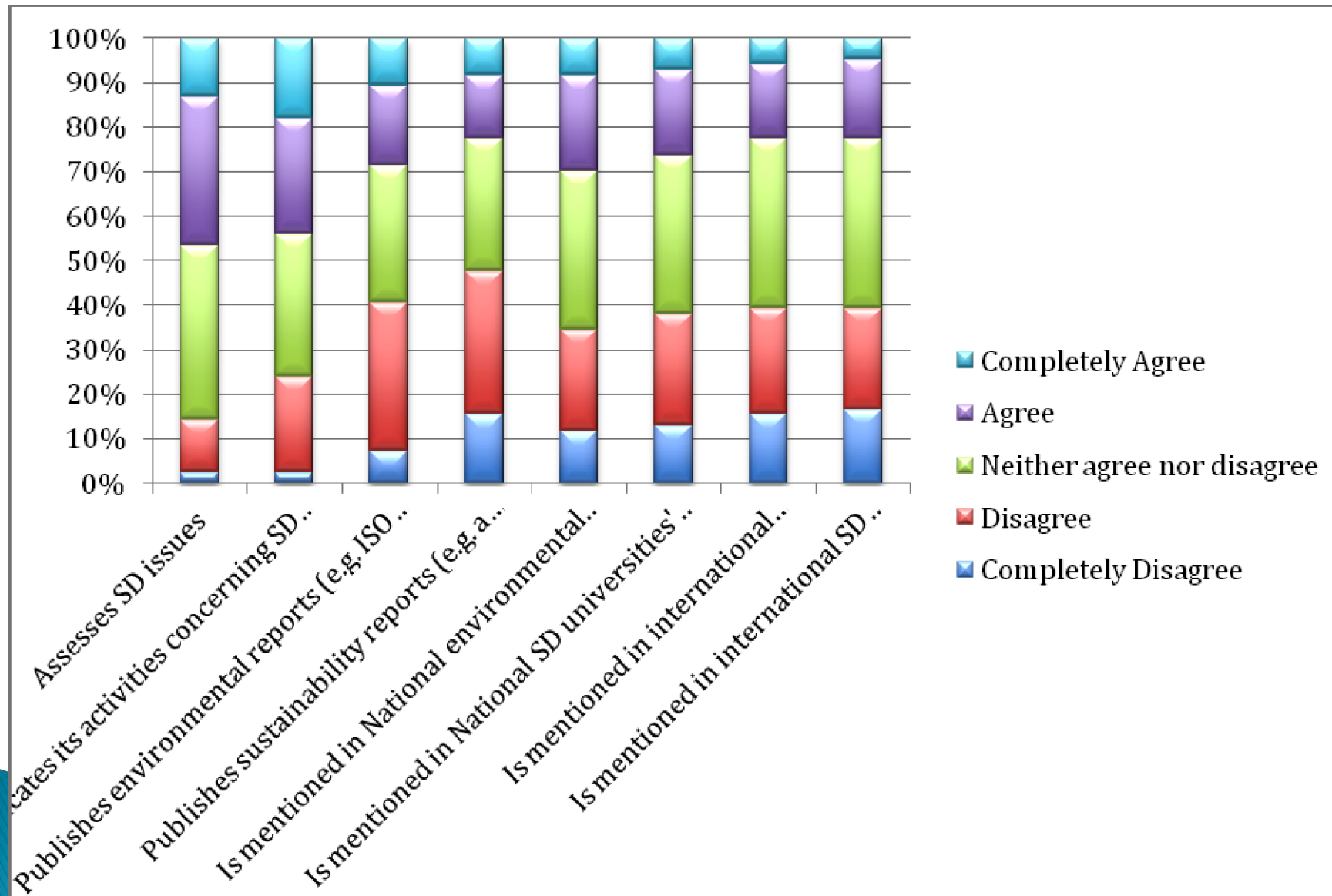
# Outreach



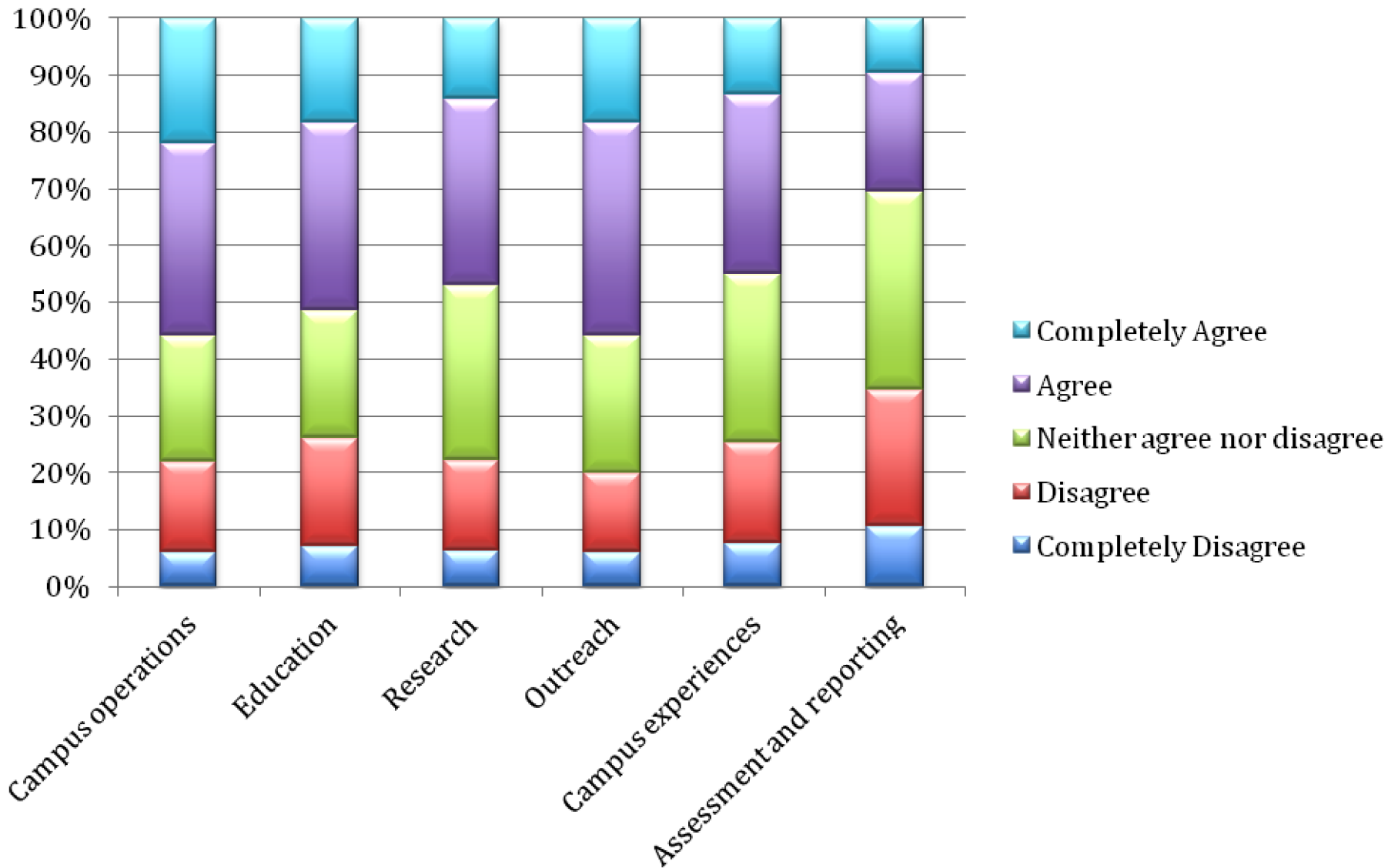
# Campus experiences



# Assessment and reporting



# Accumulated results



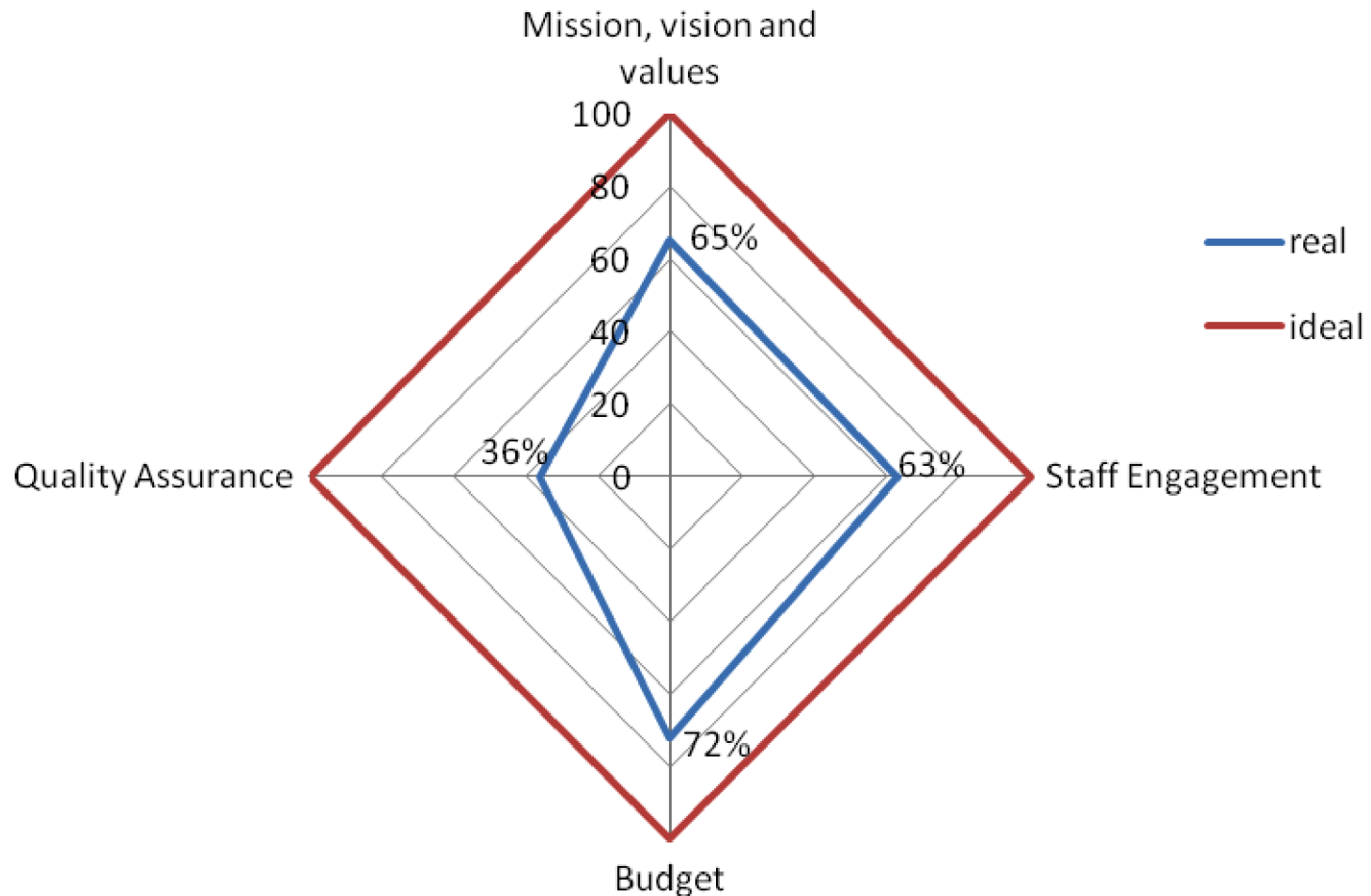


# Inter-linkages found during the constant comparative analysis

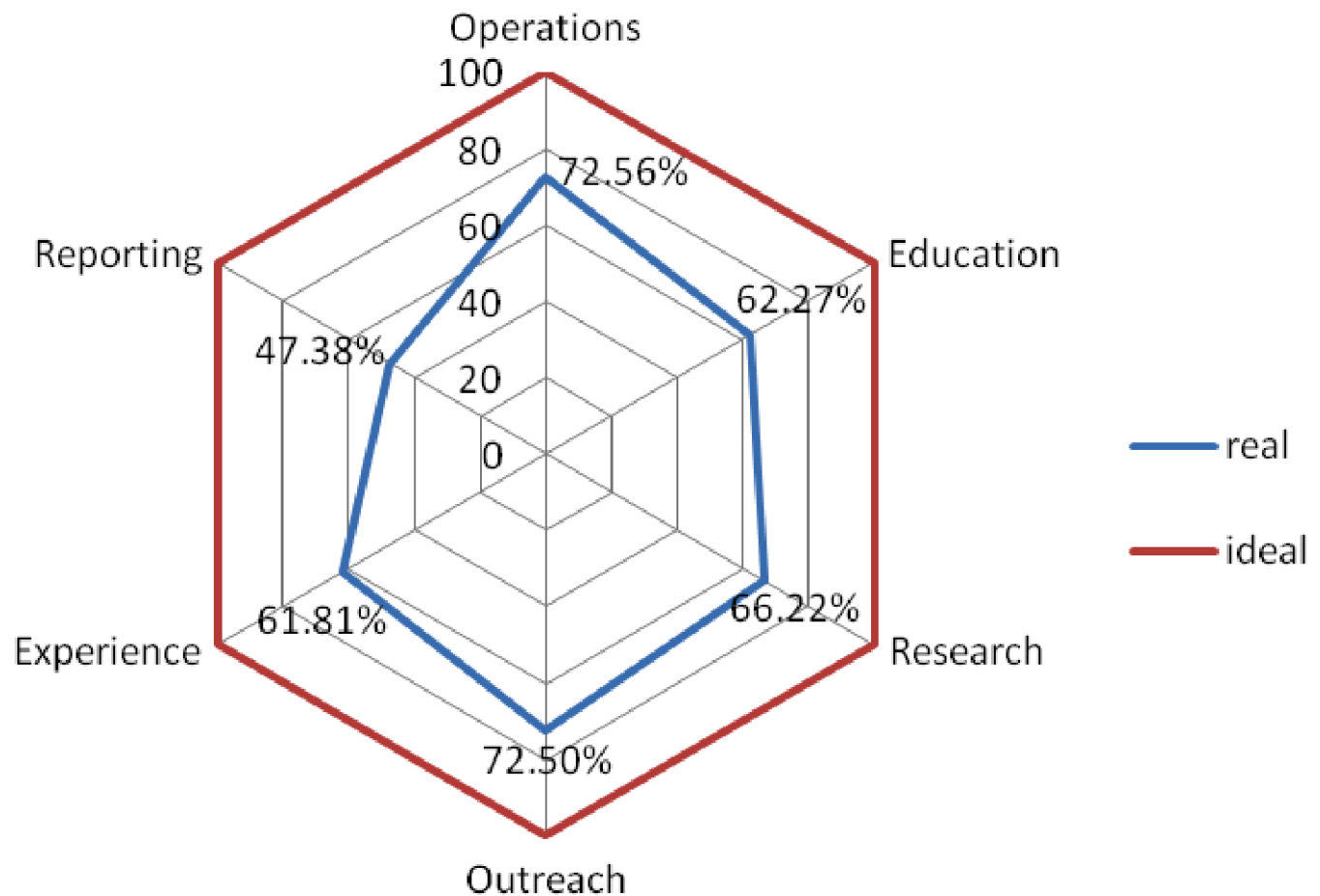
	Campus Operations	Education	Research	Outreach and collaboration	On-campus experiences	Assessment and Reporting
Operations	83	6	2	9	17	17
Education	6	45	18	16	5	9
Research	2	18	38	13	3	8
Outreach and collaboration	9	16	13	19	8	1
Campus experiences	17	5	3	8	29	6
Assessment and Reporting	17	9	8	1	6	34



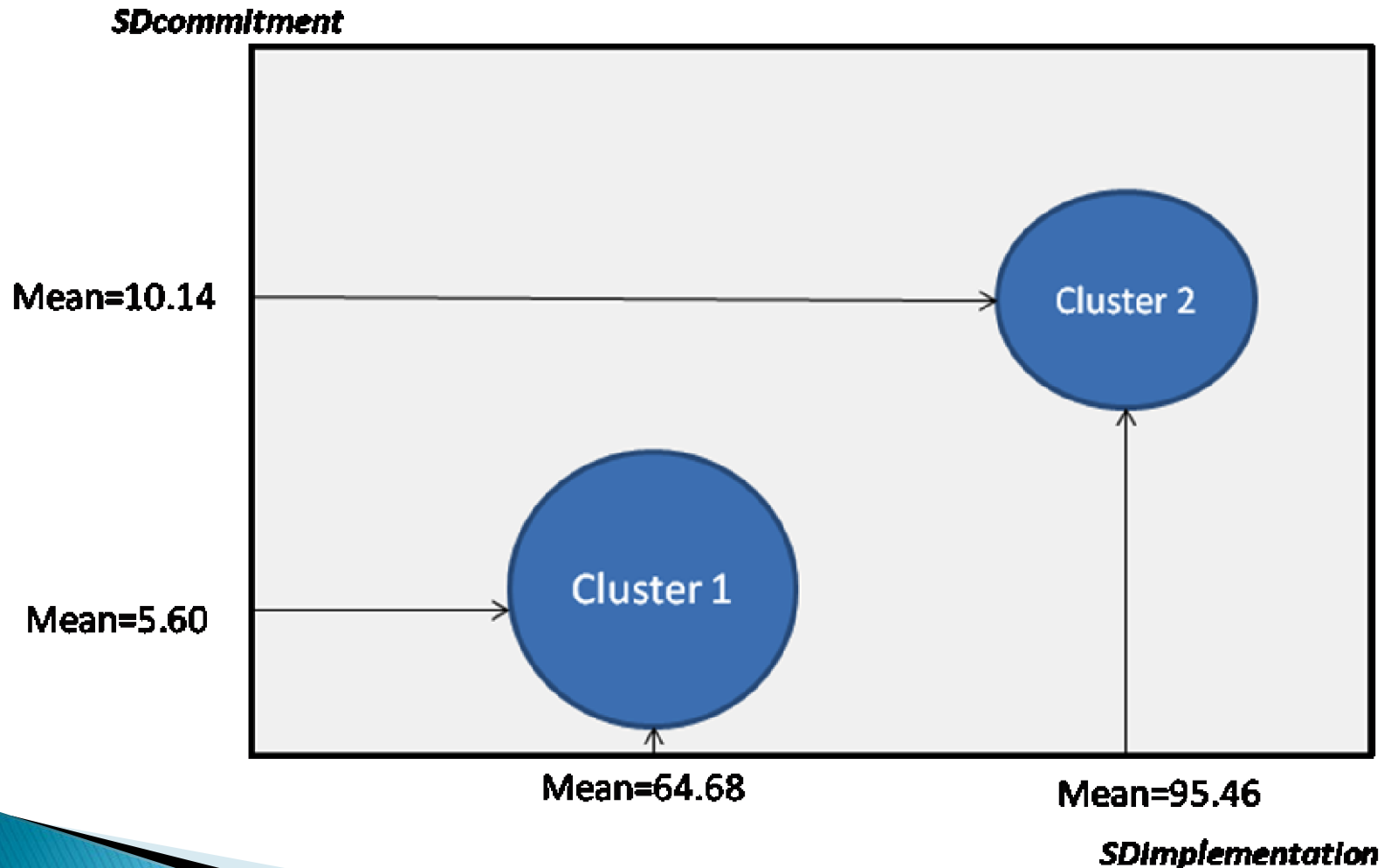
# Normalised comparisons of the SD commitment



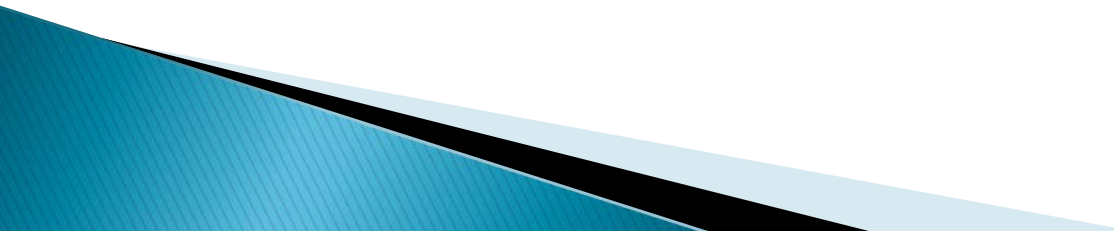
# Normalised comparisons of the SD implementation



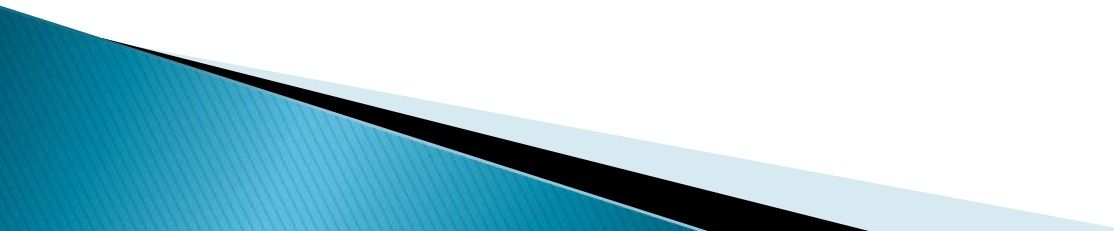
# Results of the cluster analysis




# Discussion

- ▶ There has been a larger interest in SD integration in HEIs in Europe than in other regions of the world
  - ▶ The numbers of students or staff per institution do not seem to be a key factor in the implementation of SD in HEIs.
  - ▶ The HEIs have been implementing sustainability in different elements of their system. However, the implementation of SD has been compartmentalised
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# Discussion (2)

- ▶ Signing a DCI reinforces the commitment from the HEI and its leaders to SD; however, it was not possible to detect causality between being committed, signing DCI, and implementing SD initiatives
  - ▶ HEIs that have signed HESD DCIs could be good examples for other institutions on how to incorporate and implement HESD into their systems
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# Conclusions

- ▶ HEIs are doing many things for sustainability, but the efforts seem disconnected
  - ▶ There is a strong relation between SD commitment, implementation, and signing of DCIs
  - ▶ This raises the following questions:
    - Is it really important that universities sign a declaration?
    - How can the 'policies' and actions be better linked?
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# Thank you

We would like to invite you to the Global Cleaner  
Production & Sustainable Consumption  
Conference

<http://www.cleanerproductionconference.com/>

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