Chapter 6 The European Higher Education Classification: The Design Process

Frans Kaiser and Frans van Vught

6.1 Introduction

In this chapter we focus on the process that has led to the first version of the European classification of higher education institutions. We first describe in general terms the steps and considerations that are the crucial elements of the underlying design process. In the second part we describe the actual process of building the first version of the European classification of higher education institutions and the various research activities performed during that process.

6.2 How to Design a Classification

There is a large literature about designing and design processes. Generally speaking, designing is seen as a goal-oriented activity in which decisions are made in the face of uncertainty with the objective of creating something new (Asimov 1962; Archer 1965; Jones 1980). We have followed a design process in which we intended to create a new instrument which should allow the grouping of empirical entities (in our case, higher education institutions). For this we have deliberately applied a design perspective in which social communication and interaction processes play a crucial role. We see the process of designing as a process of achieving a certain level of consensus among participants with potentially different interests, assuming that such a process requires the participants to explore and discuss their views. We have tried to apply an approach in which a user-oriented perspective is crucial and in which meaning can be constructed through direct interchange with the potential users (Bucciarelli 1994; Oudshoorn & Pinch 2003).

Designing a classification implies developing a set of grouping criteria to order empirical cases (Bailey 1994). Designing a higher education classification is developing a set of dimensions (as we have called the grouping criteria) to group higher education institutions. Analytically speaking five basic steps can be distinguished in the design process of a classification. The first step is to identify what entities are to be classified and what the classification is for, what purpose it serves. We see the design of a classification as a social and user-oriented process. Since there is no point in building a classification that is not or will not be used, it is crucial to identify the potential or intended users of the classification and what they would use the classification for.

The next step is to identify the relevant and adequate grouping criteria. "The secret to successful classification is the ability to ascertain the key characteristics on which the classification is to be based" (Bailey 1994, p. 2). The choice of the dimensions should allow the users of the classification to group the entities the way they want. The more dimensions selected, the more detailed the entities that can be grouped and described. This has a downside, however, since more dimensions also means less reduction of complexity, which results in a classification that is less manageable. There is no "objective" standard for the optimal number of dimensions, but "no more than seven dimensions" is a rule of thumb that is often used.

The dimensions identified are still abstract concepts that need to be translated into measurable terms. Step 3 identifies and defines the indicators needed to do that. Indicators are quantitative measures that allow the entities to be positioned on the grouping criteria. The choice of indicators is a crucial step as it has an impact on both the validity of the classification and its feasibility. If a classification is built for international comparative use, the definitions used need to be valid in the various national contexts.

Once the indicators are defined, empirical information – data – can be collected. In this fourth step, the reliability and timeliness of the data collected needs to be checked.

The final step is to determine the position of the entities on the dimensions. Based on the empirical information collected in the previous step, the entities are next allocated to the classes or cells of the dimensions. For each dimension, the classes must be identified: cut-off points in the range of indicator scores need to be defined, which requires the development of algorithms to transform the empirical data and the scores on the indicators into a limited number of classes to which the entities can be related

In the user-oriented setting of the project, a sustainable classification needs to meet minimum standards on certain orientations. Three major orientations can be distinguished:

- Creating and enhancing legitimacy
- · Creating and enhancing validity and
- · Creating and enhancing feasibility

These three major orientations have played a major role in the actual design process.

The design process presented above as a linear, straightforward process, looks rather different in reality. Due to the fact that the three orientations are interrelated, progress in one orientation will evoke new questions in the other orientations, which will lead to an upward spiraling of questions and analyses. Therefore, the simple linear five-step design process presented before is a simplification of the actual design process. In the rest of this chapter we describe the actual design process that resulted in the creation of the first version of the European classification of higher education institutions.

6.3 Designing the European Classification of Higher Education Institutions

The actual design of the European higher education classification took place during three project phases, over a period of 5 years (2005–2009). The first phase consisted of the two basic steps presented before (the identification of the entities and the grouping criteria). The second phase comprised defining the indicators and developing the methods for data collection. The third phase implied a reiteration of the steps relating to the identification of the grouping criteria and the choice of indicators, as well as a process of actual data-collection and an allocation of the entities to the classes of the dimensions.

6.3.1 Phase 1: Breaking the Ground

The first step taken was the identification of potential users of the classification. Based on a literature review and expertise of the project team members, four stakeholder groups were identified: higher education institutions, students, policymakers, and business and industry. A wide range of organisations expressed interest in the project and contributed to a constructive and fruitful exchange of ideas and views regarding the classification. The needs of the stakeholders were probed further through a process of intensive communication.

The second step was the identification of the grouping criteria that could serve as the dimension of the classification. Because of the diversity of the contributing stakeholders, the wishlist of dimensions became rather lengthy. There was always another characteristic that distinguished a certain type of higher education organisation from its colleague institutions and therefore was considered essential for their profile. In total, almost 30 dimensions were identified. However, this amount was considered hard to handle, which led to the decision to reduce the number of these dimensions. Based on the design principles (see Chapter 4) a draft classification was developed that consisted of 14 dimensions with a set of indicators per dimension. The dimensions and indicators were selected in an interactive process with the stakeholders and experts and were intended to cover the crucial characteristics of higher education institutions in Europe and to allow relevant differentiation between these institutions.

One conclusion of the first phase was that there was clear interest among stakeholders in a classification of higher education institutions in Europe. A long list of needs and wishes was transformed into dimensions that formed the major elements of the base for the further development of the classification.

6.3.2 Phase 2: Testing the Ideas

The overall objectives of the second phase were:

- To test the draft classification developed in phase 1 and adapt it to the realities and needs of the various stakeholders
- To explore and enhance the legitimacy of a European classification of higher education institutions

In this second phase two more steps in the design process were taken: the definition of the indicators and the testing of the various methods for collecting data. Both steps were interrelated, which makes it rather tedious to describe them here in a consecutive way. We have therefore chosen to chronologically describe the activities undertaken in the second phase and relate them to the two steps of the analytical design process.

During the second phase the draft classification was elaborated and tested, including the following activities:

- 1. An exploratory analysis of the existing (European) data sources in order to determine whether the relevant information for "filling" the classification could be collected from these sources
- 2. In-depth case studies in order to better understand the needs and expectations of individual higher education institutions regarding the classification
- 3. A survey of a number of higher education institutions in order to test the relevance, validity and reliability of the elements of the classification and to learn whether the necessary information can be supplied by the institutions.

6.3.2.1 Exploring Existing Sources

In an ideal world, a European classification of higher education institutions would be based on readily available, trustworthy data that are defined and gathered at a European level or are at least comparable at that level. The advantages are obvious: definitions are spelled out, data gathered and checked, consistency of analysis ensured and legitimacy secured. We explored to what extent this ideal situation actually exists. The availability, quality and relevance of the data required for the classification indicators was assessed using a three-step approach:

- Creation of a list of an extensive number of existing data sources.
- Determining whether the data sources were relevant. We used the following criteria:
 Does the data source comprise information on any of the indicators of the draft classification?

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- Is the information presented at the institutional level?
- Does the data source comprise underlying data at the institutional level?
- May the underlying data be used?
- Can the conditions for use (privacy, costs, etc.) be met?
- Assessment of the quality of the data, on the basis of the following criteria:
 - Data must be up to date
 - Consistency through time/reliability
 - Cost of data retrieval

Views and opinions of experts and stakeholders were used to complement the information regarding the most relevant data sources.

The conclusion of the assessment was that international databases are only to a very limited extent available and suitable for building a European classification of higher education institutions. The major bottleneck is that these databases usually comprise system-level data or aggregate data that are not sufficiently institution-specific. Therefore, only a small part of the data needed for the classification can be gathered from national data sources. Most of the data thus has to be collected at the institutional level.

6.3.2.2 Case Studies and Pilot Survey

For the in-depth case studies two levels were distinguished. In two institutions an elaborate on-site investigation took place into the potential strategic benefits of a European classification. In these case studies the very first ideas about dimensions and indicators in the pre-pilot questionnaires and their formulations were explored. In addition to the two in-depth case studies another six higher education institutions were analysed regarding specific issues and aspects of the possible use of the classification. For this analysis a pilot survey was developed and sent to these six institutions as well as to the two in-depth case study institutions.

The case studies provided very positive reactions to the possible use of the classification. All institutions appeared to be convinced that they would be able to work with the classification as a tool for their own strategic management processes. The classification was judged to be a relevant instrument for sharpening an institution's mission and profile. By focusing on the relevant dimensions and indicators of the classification the institutions indicated that they would be able to strengthen their strategic orientation and develop and communicate their profile. In addition the institutions in the case studies indicated that they would be highly interested in identifying and learning from other institutions comparable to them on a number of relevant dimensions and indicators. Developing and expanding partnerships and networks with these colleague institutions and setting up benchmarking processes were seen as important benefits of the classification.

Based on the findings of the case studies and the pilot survey an adapted list of dimensions and indicators of the classification was drafted. This list was the basis for the survey undertaken in the second phase of the project.

6.3.2.3 The Classification Survey

The survey amongst a number of higher education institutions was the major element of the second phase of the research project. This survey served three purposes:

- · To assess the relevance of the dimensions selected
- To assess the quality of the indicators selected
- To provide data that will allow further analyses of the dimensions and their clustering and of the indicators and their potential and pitfalls

The survey consisted of two questionnaires: a questionnaire on the dimensions, querying the relevance of the dimensions and the indicators selected, and a questionnaire on the indicators. The latter comprised questions regarding data on the indicators selected as well as an assessment of the indicators.

Two draft questionnaires were developed based on the dimensions and indicators identified and selected at the end of phase I. These draft questionnaires were tested and discussed in the case studies, mentioned before. Based on the results of these tests, the questionnaires were adjusted and placed online for the survey.¹

The intended sample size for the survey was 100 European higher education institutions. To keep the non-response rate as low as possible, networks of higher education institutions, represented by groups of stakeholders, were asked to introduce the project and identify contact persons. Around 160 higher education institutions were contacted. A second channel through which potential participants to the survey were identified was through an open, web-based procedure. Higher education institutions could register their interest in participating on the project website. Based on the information provided, the project team decided whether an interested institution could participate. In total 16 higher education institutions were selected in this way. A final way to invite participation was through a number of national and international conferences where the project was presented and a call for participation made.

To create the required diversity in the experimental data set, the sample was stratified. The strata in age and size were based on the information on over 3,000 higher education institutions in the database of the International Association of Universities (IAU). For the identification of regions, the United Nations classification of regions was used.² In this classification Europe is divided into Eastern, Northern, Southern and Western Europe.

Eventually, 67 responses were received for the indicator questionnaire and 85 for the dimensions questionnaire. In terms of institutional age, the response appeared to be skewed towards younger institutions. Compared to the IAU-based size strata the sample is skewed towards larger higher education institutions. Apparently, larger higher education institutions had greater resources, levels of commitment or opportunities to participate in the survey. The responding higher education institutions

¹For pdf versions of the questionnaires see: www.cheps.org//ceihe_dimension.pdf and www.cheps.org//ceihe_indicators.pdf

²http://unstats.un.org/unsd/methods/m49/m49regin.htm#europe

were evenly distributed across the four European regions as distinguished in the UN classification of European regions.

6.3.2.4 Survey Outcomes

The survey addressed the relevance of the dimensions of the classification and the validity and feasibility of the indicators to be used.

The question "this dimension is essential for the profile of our institution" was central for assessing the relevance of the dimensions. The results regarding this question are presented in Fig. 6.1.

For eight of the 14 dimensions more than 80% of the responding higher education institutions agreed on the relevance of the dimension. There was only one dimension (13) which less than 60% of respondents rated as being relevant.

A lack of consensus on the relevance of a dimension is not a disqualifying characteristic. It merely means that the responding higher education institutions differ in their opinion regarding the relevance of this dimension for the profile of their institution.

In order to "score" higher education institutions on the dimensions, 32 indicators were selected. These indicators can be seen as (quantitative) information capable of assessing the positions of higher education institution on the dimensions. In the following text we focus on these indicators.



Fig. 6.1 "This dimension is essential for the profile of our institution"

First, we look into the validity of the indicators: do the responding higher education institutions think that the selected indicators measure the phenomena we are investigating? Do the indicators convey a "correct" picture of the dimension?

The focus then shifts to the question of whether the information reported is trustworthy, the perceived reliability of the information reported. Since there are significant differences in the status of the indicators (some are based on widely accepted standard statistics, whereas other have a more experimental character) the project team thought it imperative to check the perceived reliability of the information reported.

The final characteristic of the indicators discussed was whether it is feasible for the responding higher education institutions to collect the required information. This issue was one of the main reasons for the survey. Much of the information underpinning the classification must be provided by individual higher education institutions. Given the growing survey fatigue and administrative burdens faced by higher education institutions, it is crucial to know how higher education institutions perceive the potential burden presented by a classification. Four indications for feasibility are included: time needed to find and report the information, perceived ease of doing so, use of existing sources and percentage of valid responses.

Validity

Validity was assessed in the dimensions questionnaire. The higher education institutions were asked to give their opinion on the statement: "indicator A is a valid indicator for this dimension".

There were five dimensions where the validity of the indicators selected raises some doubts: 3 (orientation of degrees),³ 4 (involvement in lifelong learning),⁴ 6 (intensity of innovation),⁵ 13 (cultural engagement),⁶ and 14 (regional engagement).⁷ These five dimensions have a more experimental status than the other dimensions (Table 6.1).

³Comments referred to the subjective and "vague" character of indicator b. There were also some comments that the indicators did not differentiate between academic and non-academic or professional institutions. The project team deliberately avoided this traditional dichotomy in the definitions, to break free of these institutionalised labels.

⁴The comments focus on the cut-off point. In some systems other definitions of "mature" students are used (e.g., over 21 years on entry in the UK), which may lead to confusion. It was also mentioned that national differences in age of entry and differences in the organisation of programmes may lead to different age structures of the student body. In those cases the indicator does not identify differences in involvement in lifelong learning but systemic differences.

⁵Comments mainly referred to national differences in patenting practices.

⁶The indicators are considered too "simplistic" and not covering the full width of cultural activities.

⁷Comments revealed some problems regarding the demarcation of the region, and the weak link between the eligibility of the region for structural funds and the regional engagement of a higher education institution. It was further suggested to use the indicator on start-ups (6a) as an indicator for this dimension as well.

or disagree on statement this is a valid indicator						
Less than 15%	15%-29%	30-50%				
1a	1b	3b				
2a	3a	4a				
7a	5a	6a				
7b	5b	6b				
7c	8a	6c				
7d	10a	6d				
9a	10b	7e				
9b	10c	13a				
	11a	13b				
	11b	14a				
	12a	14b				
		14c				

Table 6.1 Percentage of responses "strongly disagree" or "disagree" on statement "this is a valid indicator"

The numbers refer to the numbers of the indicators as listed in Chapter 4, Table 4.2

Reliability

The indicators selected differ in status. Some indicators are already being used in different contexts and build on standard data, whereas others are "experimental" and use information that is not included in the set of commonly reported data. For these indicators it may be that the data provided depend on the person or department reporting the data. To find out whether this reliability problem is perceived to exist, the participating higher education institutions were asked to respond to the statement: "the information is reliable".

The responses are very positive about the reliability of the information provided. For 25 indicators at least five out of six responding higher education institutions reported that they (strongly) agreed with the statement that "the information is reliable". The indicators on which slightly more respondents had some doubts regarding reliability are: 3a and 3b (orientation of degrees), 6d (revenues from private contracts) and 14b and 14c (regional engagement).

Feasibility

To assess the feasibility of the process of collecting and reporting the data we used four indications: the time needed to collect data on the indicator; the score on the "easy to collect" scale; whether the data were collected from an existing source; and the total number of valid cases.

Based on this information an overall rank score was calculated. Calculating an overall rank score is a tricky exercise. There is no clear conceptual basis for weighting the rank scores on the individual feasibility scores. Yet there is an argument to make for weighting the first two indicators stronger than the latter two. The first two are self-reported by the respondents, whereas at least the last indicator is indirectly derived from the sample.

Based on the weighted rank scores⁸ we may distinguish three broad categories: indicators with no or only minor feasibility problems, indicators with some feasibility problems, and indicators with significant feasibility problems. To determine the indicators that go into each category, we may either use the list of indicators (sorted by rank score) and make three equally-sized groups, or we may look in this list for relatively large differences in the scores of consecutive indicators. The result of these groupings of overall feasibility scores is presented in Table 6.2 below.

Using the Survey Data 6.3.2.5

The survey provided a rich database that was used to assess the validity and feasibility of the indicators used. In the previous section we discussed the outcomes of this analysis. In this section we present information on two indicators as an illustration of their potential to discriminate between groups of higher education institutions. This discriminating power is an important input for the discussions regarding the reduction and redefinition of dimensions in the third phase of the project (see below).

In Fig. 6.2 the responding higher education institutions are plotted against their size in terms of enrolment (headcount). The figure shows that there are large differences in the size of higher education institutions, even in the small sample we used here. Visual inspection of the graph gives also reason to believe that there is a limited number of "size classes" in the sample. There is one class of "tiny" institutions comprising around 17% of the responding higher education institutions, and three broader classes (small, medium, large) each comprising around 30% of the responding institutions.

The second example refers to the graduate intensity of institutions. Based on the number of degrees conferred, a ratio is calculated with the number of graduate degrees as a percentage of the total number of degrees conferred. The idea

Table 6.2 Grouping of indicators by feasibility score						
Method	Feasibility	Indicator				
Equal size						
	High	2a, 9a, 1a, 12a, 1b, 11b, 7e, 9b, 6b, 6a, 5				
	Medium	10b, 13b, 13a, 10a, 14a, 7a, 6c, 3b, 10c, 11a				
	Low	14d, 14c, 3a, 7b, 7c, 7d, 8a, 6d, 14b, 4a				
Differences bet	ween consecutiv	e scores				
	High	2a, 9a, 1a, 12a, 1b, 11b, 7e, 9b, 6b				
	Medium	6a, 5, 10b, 13b, 13a, 10a,14a, 7a, 6c, 3b,				
		10c, 11a, 14d, 14c, 3a				
	Low	7b, 7c, 7d, 8a, 6d, 14b, 4a				

Table 6.2	Grouping	of indicators	bv	feasibility	/ scor
			~ /		

⁸Weighted rank score: sum of rank scores (rank scores % time and % disagree counted double) divided by four.



Fig. 6.2 Size (enrolment) by percentage of responding higher education institutions

behind this indicator is that the higher this ratio is, the more graduate-oriented an institution can be assumed to be.

Figure 6.3 shows that there is a small group of institutions that confer undergraduate degrees only, a larger group (around 25% of the responding higher education institutions) that confer mainly undergraduate degrees, a group that has a more or less balanced undergraduate/graduate portfolio and a group that confer mainly graduate degrees. Five percent of the responding higher education institutions confer graduate degrees only.

6.3.2.6 Interim Conclusions

Activities in the second phase informed the project team on a wide range of issues related to classification design. The survey not only provided information on the feasibility of data collection at an institutional level, but also provided a clear focus on the (re)definition of the indicators. The results and the suggestions of the participants led to a new set of indicators that served as an input in the third phase. The survey also highlighted the potential of and problems regarding the validity of the indicators, which contributed to an increase in the legitimacy of the project as a whole. Similarly, the results and analyses of the relevance of the dimensions created a starting point from which the dimensions can be redefined and reduced in number.

One of the reasons behind the survey was to identify the dimensions and indicators which would be useful in the classification. In order to do this, we combined



Fig. 6.3 Graduate intensity by percentage of responding higher education institutions

the information on validity, feasibility and reliability of the indicators selected for each dimension. We did not use the scores on the perceived relevance of the dimensions since a high proportion of respondent institutions strongly disagreeing with the relevance of a dimension is not an indication of the quality of the dimension. Such a lack of consensus is, rather, evidence of the diversity of the missions and profiles of the higher education institutions. Only if the vast majority of the responding higher education institutions disagreed with a dimension's relevance would we reconsider the choice of this dimension. This was not the case for any of the 14 dimensions.

To identify potential "challenging" dimensions we selected those for which at least one indicator scored more than 5% "strongly disagree" on the validity and reliability items and which was in the bottom five of the overall feasibility ranking. Using these criteria, there are only two such dimensions: 4 (involvement in lifelong learning) and 6 (innovation intensiveness).

In addition to the analysis of "challenging" dimensions, the second phase offered a number of general insights that fed into the third phase. A short overview of the suggestions:

• Include an open question regarding the mission of the institution, preferably in the dimensions questionnaire. This will give the institution an opportunity to include its aims and, where there is a large discrepancy with its "empirical" profile, to use this as a starting point for its further strategic development. This information should not be used to classify institutions but presented as additional contextual information.

- The national context should be taken into account. This refers to systemic differences, as well as administrative differences such as the way in which financial statistics are used, or the use of academic versus calendar year.
- Forge links to other institution-based comparative initiatives. For example, there are projects related to student opinions on programmes (such as the German CHE ranking⁹). The suggestion was not to integrate this information into the classification but to present it as relevant background information. Such linkages may increase the usefulness of the classification for students and thus their use of it.
- Create transparent procedures for validation of statistical data and other information provided by the higher education institutions. This is important for the classification (all data need to be collected and presented in a comparable manner) and for the individual institutions (which must be sure that the information provided is presented correctly).

6.3.3 Phase 3: Crafting the Tools

In the third phase, two previous steps, regarding the dimensions and the indicators, were addressed again. The main reason for this was to enhance the validity and feasibility of the indicators. At the end of the second phase it was concluded that the set of indicators could be improved. Redefining existing indicators and adding a few new indicators would enhance the scope of the activities captured with the classification and would therefore also contribute to its legitimacy. It was also concluded that the links between indicators and dimensions were not ideal and that certain indicators could serve to inform more than one dimension. An example of this is the use of "number of extracurricular courses" (an indicator for the dimension "regional engagement"). It was suggested that this could also be used as an indicator for the dimensions "lifelong learning" and "mode of delivery". This observation, added to the accepted practice of limiting the number of dimensions, led to reiteration of step 2: the (re)definition of dimensions. The main criteria for reducing the number of dimensions are the existence of an overlap between dimensions and a dimension not sufficiently distinguishing between higher education institutions.

To redefine the dimensions we use four approaches. First of all, we use the recommendations made during the second phase by members of the various stakeholder groups, higher education institutions participating in the survey and participants at the conferences organised during the project (see previous section).

Secondly, we apply theoretical and conceptual considerations to argue for the clustering of dimensions. While this approach had been taken in the first phase, thinking regarding indicators and dimensions in the field of higher education has

⁹http://www.che-ranking.de/cms/?getObject=2&getName=CHE-Ranking&getLang=de

evolved since then. The consultations and surveys brought up new insights that need to be embedded in broader conceptual frameworks, which is why theoretical considerations are returned to during the design process at this stage. The third approach is data-driven. Sixty-seven higher education institutions participated in the indicator survey. The data provided by these institutions, once validated and completed, serve as an invaluable basis for statistical analyses focused on the redefinition and reduction of the number of dimensions. Finally, we use interest groups (or classification communities) to inform our decisions regarding the redefinition and reduction of dimensions. The creation of classification communities was suggested during a project conference and emerged as a main result of the second phase of the European classification research project. It was recommended that the project team set up communities of institutions willing to invest in developing a more comprehensive set of indicators for classifying higher education institutions in specific dimensions and aspects (see Box 6.1). Such a community of interested institutions could play an active role in developing indicators and could advise the project team on dimensions and underlying indicators. Participation would be on a voluntary basis. Working with such a community could enhance the validity, feasibility and legitimacy of the indicators and dimensions used.

Box 6.1 Classification communities

Involvement in lifelong learning

Current indicator: 4a: number of adult learners as a percentage of total number of students by type of degree

Although most stakeholders claimed that this dimension was very relevant, there was no consensus on how to capture the dimension. The results on the indicator chosen were rather surprising, as for many responding institutions it proved to be time-consuming to provide the data in the format required. It was concluded that this dimension should be reviewed and possibly integrated with another (e.g. mode of delivery).

Innovation intensiveness

Current indicators: 6a (number of start-ups); 6b (number of patent applications filed); 6c (annual licensing income); 6d (revenues from privately funded research contracts as a percentage of total research revenues).

There were comments on the narrow focus of the indicators for this dimension. It was suggested that some indicators should be included signalling innovation in teaching, curricula and research, as well as for innovation in the arts.

International orientation teaching and staff

Current indicators: 7a (number of degree-seeking students with foreign nationality as percentage of total enrolment); 7b (number of incoming students in European exchange programmes as percentage of total enrolment);

Box 6.1 (continued)

7c (number of students sent abroad in European exchange programmes); 7d (international staff members as percentage of total staff); 7e (number of programmes offered abroad).

It was suggested that "nationality of qualifying diploma" should be used (where the diploma of secondary education was awarded) instead of "nationality of student" to distinguish between national and international students. It was recommended that the project team set up a community of institutions willing to invest in developing a more comprehensive set of indicators for this dimension.

Cultural engagement

Current indicators: 13a (number of official concerts and performances (co)-organised by the institution); 13b (number of official exhibitions (co)-organised by the institution).

The main reason for retaining the dimension "cultural engagement" and investing in the development of better indicators for this is its relevance for particular groups of institutions. Several groups of institutions (arts and music schools) have already expressed their willingness to join a community in this area.

Regional engagement

Current indicators: 14a (annual turnover in EU structural funds as percentage of total turnover); 14b (number of graduates remaining in the region as percentage of total graduates); 14c (number of extracurricular courses offered for regional labour market); 14d (importance of local/regional income sources).

It was recommended that the project team set up a community of institutions willing to invest in developing better indicators for regional engagement, and that the indicator "number of extracurricular courses" be used for both dimensions "lifelong learning" and "mode of delivery". It was also suggested that the number of partnerships with business and industry be included as an indicator in measuring "regional engagement".

Business engagement (new)

One potential use of the classification is in facilitating business-university cooperation. At the Berlin conference it was noted that the current set of dimensions and indicators do not adequately reflect activity levels in this field. It was therefore suggested to include a dimension entitled "employer engagement" which would cover not only business-university cooperation but also issues such as human resource management and career perspectives. Since this dimension was not on the original list, a community will be created to kick off the debate and possible creation of this new dimension and its underlying indicators.

In addition to redefining the dimensions and indicators, a further process of data collection is organised in phase 3 of the project. The data provided by the higher education institution in the classification survey needed to be completed and validated. The first dataset was only the starting point for the development of the classification tool. The intention is to let this core grow, as higher education institutions that did not participate in the survey now have the opportunity to submit their data through a renewed online questionnaire. This continuous data collection process will first feed into the further development of the classification tool and later on, hopefully, into the implementation of the classification. Thus far, only a first version of the European higher education classification has been presented. In the coming years the continuing data collection process and the results from the classification communities will lead to one or more further versions.

The final step is to allocate the participating higher education institutions to the various "cells" of the multidimensional classification space. The position of an individual higher education institution on each dimension is based on its "scores" on the underlying indicators and the algorithm through which those scores are combined into a position on the dimension. However, this technical positioning is only part of the story of this methodological design step. As important is an effective and responsible way of communicating these positions. The various stakeholders need to be involved in this process and attractive, simple and flexible communication instruments need to be designed. This is certainly a challenge for the further development of the classification tool.

6.4 Conclusion

In this chapter we reported on the actual design process of the European higher education classification so far. We presented the various design steps and the results of the research activities that were undertaken to inform these steps. The overall result is the first version of the classification as presented in Chapter 4 of this book. This first version is based on extensive communication with stakeholders and several analyses regarding the relevance of the dimensions of the classification and the validity and feasibility of the indicators.

Our overall conclusion is that it is certainly possible to design a multidimensional European classification of higher education institutions and to use such a classification in the contexts of institutional strategies and system-level policies. A European higher education classification is an interesting and effective instrument to make the diversity of European higher education transparent and to offer opportunities to make use of such an increased transparency. It should also be noted, however, that designing a classification is a more or less continuous process. As indicated in Chapter 4, the classification should be flexible not only in the sense that the higher education institutions can change their positions on the dimensions over time, but also in the sense that the dimensions and indicators themselves can be adapted and expanded. The classification communities discussed in this chapter are a user-oriented instrument for this. In addition, the first phase of the data collection process regarding the indicators has shown that valuable insights can arise from further data-gathering. In years to come a solid database will hopefully be developed, allowing both a relevant positioning of higher education institutions on the various dimensions of the classification and a further refinement of the classification instrument itself.

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