U-Map Portugal Dissemination Seminar

10 October 2011, Aveiro (Portugal)

The U-Map Portuguese dissemination Seminar was organized on Monday 10 October 2011 in Aveiro. At this seminar the preliminary outcomes of the U-Map project for Portugal were presented and discussed for an audience of some 70 participants from Portugal. The program is shown in the box below.

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<th>Session</th>
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<td>11:00</td>
<td>Welcome (by Prof. Doutor Manuel Assunção, rector of the University of Aveiro)</td>
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<td>11:15</td>
<td>Presentation of the results of the U-Map project in Portugal (Marike Faber and Ben Jongbloed)</td>
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<td>12:30</td>
<td>Lunch</td>
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<td>13:30</td>
<td>Workshop: classifying Portuguese higher education institutions (introduced by Jon File)</td>
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<td>15:00</td>
<td>Break</td>
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<td>15:30</td>
<td>Panel discussion: different user-perspectives on U-Map as a university profiling tool</td>
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<td>16:30</td>
<td>U-Multirank: the outcomes of the feasibility study (Ben Jongbloed)</td>
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<td>17:00</td>
<td>Closing of the seminar (Jon File)</td>
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The seminar was moderated by the following members of the U-Map team: Jon File (chair), Ben Jongbloed and Marike Faber; all from the Center for Higher Education Policy Studies (CHEPS) at the University of Twente in the Netherlands.

The event was organised by the CRUP (the Portuguese Rectors Conference), together with CCISP (the Council of Polytechnics) and the APESP (the Portuguese Association of Private Higher Education). These are the three representing bodies of Portuguese Higher Education Institutions. The event was hosted by the University of Aveiro and follows up on the earlier U-Map technical seminar, held in Lisbon at Lusíada University on 7 April 2011.
Welcome

Prof. Doutor Manuel Assunção, rector of the University of Aveiro, welcomed everybody to the seminar and his university. He stressed the usefulness of U-Map as a tool to inform decision-makers. Informed decisions benefit not only from high quality and comprehensive data, but also from sound communication of the methodology used, its limitations, the uncertainties associated with all the process and, naturally, the way in which the results are presented. He mentioned the already existing rankings and classifications. These are instruments designed for increasing transparency and communication. However, the U-Map project provides a new instrument that may be used as a profiling tool - of interest both from the individual, single, institutional perspective, as well as from the system-wide perspective. The seminar, in his view, provided a valuable opportunity to discuss the current state of the U-Map project and the preliminary findings.

The chair, Jon File then explained the program for the day. The goal of the seminar is to present the U-Map activity profiles that were created for the participating Portuguese institutions, based on the data that were submitted by individual institutions over the summer period. The aim for the seminar is to actively involve all the U-Map participants and the various stakeholders by presenting different user-perspectives on U-Map and its outcomes.

Presentation of results from U-Map - Portugal

The mapping of the Portuguese higher education institutions in U-Map was addressed by Marike Faber in her presentation. About 75 institutions were invited to join the project, 58 responded positively, 52 provided data and more than half of these agreed to have their U-Map profile published on the (password-protected) site devoted to the Portuguese U-Map project. It is expected that another 15 institutions will follow shortly, meaning that for between 40 and 50 institutions we will U-Map profiles by the end of the project period.

Marike Faber sketched the idea of institutional activity profiles and the various stages that the U-Map project went through to arrive at these profiles. The experiences of using questionnaires to collect institutional data was discussed. Issues that led to some debate were related to the following:

1. Graduates (what to include?)
2. Discrepancies with the data used for pre-filling the questionnaire (what data was provided by RAIDES?)
3. Share of expenditure on research versus other activities (how to make the split?)
4. Publications (what to include?)
5. Direct basic government funding for teaching versus research (how to split?)
6. Regional income (what is the region?)
7. Patents (what to include?)
8. Spin-offs / Concerts & Exhibitions (what definitions were used?)
One issue that received quite some attention was the reporting of the peer-reviewed research publications by the institutions. While the U-Map team provided a definition, it was felt that there was quite some room for institutions to include items that are not covered in the ISI-indexed journals. In Portugal, there are some databases that are felt to be useful for looking into when collecting data for publications. For the moment, however, the U-Map team feels that the fact that U-Map profiles can be compared and checked by all participating institutions will push institutions to provide reliable data. Furthermore the U-Map team is verifying data by comparing publications data against research revenues and expenditure categories. For the number of professional publications and items like the number of concerts & exhibitions the fact remains that there are no reliable data sources whatsoever. Again, the open character of U-Map implies that there is peer pressure on institutions to provide reliable data.

The graphs below illustrate the extent to which (at the time of writing - October 2011) Portuguese institutions have been able to provide data on the various (65) items in the U-Map questionnaire. The higher the bar, the more institutions managed to provide data. ¹

Graph 1a: Number of institutions showing value >0 for given data element (total number =38)

¹ Please note that there are some Institutions that report a zero on some item (for instance the number of PhD degrees in the case of Polytechnics). These cases should in fact not be regarded as institutions that have missing data.
Graph 1b: Number of institutions showing value >0 for given data element (total number = 38)

The graphs show that for categories such as enrolment-and degrees-related items (colour code: dark blue; yellow for the ‘internationalization’ items) most institutions have data. The same holds for items related to staff, expenditure and income (colour: grey). On research-related items (colour: red) the picture is more mixed. The same holds for the knowledge exchange items (light blue) and some student profile (green) items.

The presentation then went on by showing a ‘live’ demonstration of the U-Map profiles published on the (protected) U-Map website. Together with the underlying database, the key elements of the U-Map online system are two features that assist users to compare and analyze institutional activity profiles: the Profile Finder and the Profile Viewer.

The Profile Finder identifies specific subsets of institutions from the entire set of institutions included in the U-Map database. Users are able to select a group of institutions to compare based on dimensions and indicators of particular interest to them. Only those institutions that match these user-defined selection criteria are included in the comparison.

The Profile Viewer provides the opportunity to ‘drill down’ into the activity profiles of the selected group of institutions and to compare the dimensions and indicators of up to three institutional profiles simultaneously in an efficient and ‘eye-catching’ way. The user can inspect more closely the activity profiles of two (or three) out of the institutions found by the Finder. She may ‘zoom in’ on the individual indicator scores of the institutions - for instance comparing their activities in terms of generating income from the region and creating start-up firms.
Workshop: Classifying Portuguese higher education institutions using U-Map

In the afternoon programme, the participants had the opportunity to cluster the activity profiles according to their own insight. Participants were grouped into seven teams and given a set of anonymised U-Map institutional activity profiles printed as playing cards. This allowed the teams to take a “fresh look” at diversity in Portuguese higher education because they did not know the names of each institution. The goal was to classify the Portuguese higher education institutions into a maximum of seven groups. Thus, the participants were given the opportunity to get their hands (and minds) working on how U-Map can be used to compare and group the different institutions.

Each group had a set of playing cards with the U-Map profiles of 35 (unidentified) Portuguese higher education institutions, and a key to the different “rays” of the sunburst charts (see Figure 1).

Figure 1: U-Map profiles illustrated
At the end of the workshop, each team presented the groups it had identified, along with the identification numbers of the Portuguese institutions in each group. The teams were free to decide on the grouping criteria that make the most sense to them, given the information on the dimensions in the profiles.

Table 1a: Results of classification exercise for Team 1

<table>
<thead>
<tr>
<th>Group</th>
<th>Label of the identified group</th>
<th>Rationale</th>
<th>Numbers of the institutions belonging to this group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Scope of teaching and learning</td>
<td>Distinguish between “broadband” vs. “narrow band” universities</td>
<td>45,47,46,52,56,58</td>
</tr>
<tr>
<td>2.</td>
<td>PhD or not</td>
<td>Distinguish between inst. that proceed or not PhDs</td>
<td>40,43,46,47,45,38,48,51,52,56,58</td>
</tr>
<tr>
<td>3.</td>
<td>Research – oriented institutions</td>
<td>Inst. with high scores in the indicator / income from % expenditure research</td>
<td>6, 25, 19, 23, 47, 44, 43, 45, 51, 56, 58</td>
</tr>
<tr>
<td>4.</td>
<td>Internationally – oriented institutions</td>
<td>High scores in the 5 indicators for international</td>
<td>20, 44, 43, 50, 58, 18, 40, 45, 51, 47, 46, 56, 26, 21, 52</td>
</tr>
<tr>
<td>5.</td>
<td>Regional engagement</td>
<td>High scores in the 3 indicators of regional engagement</td>
<td>18, 19, 25, 6, 56, 44, 57</td>
</tr>
<tr>
<td>6.</td>
<td>Institutions with high % of entrants and graduates working in the region</td>
<td>High – regional profile</td>
<td>58, 52, 40, 33, 38, 20, 55, 4, 13, 16, 54, 25</td>
</tr>
</tbody>
</table>

Table 1b: Results of classification exercise for Team 2

<table>
<thead>
<tr>
<th>Group</th>
<th>Label of the identified group</th>
<th>Rationale</th>
<th>Numbers of the institutions belonging to this group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Research intensive</td>
<td>PhD production Publications, patents Research expenditure</td>
<td>51, 56, 45, 40, 58</td>
</tr>
<tr>
<td>2.</td>
<td>Classical university</td>
<td>Moderate values, research does not predominate over education</td>
<td>38, 43, 46, 47, 48, 50, 52</td>
</tr>
<tr>
<td>3.</td>
<td>Traditional polytechnic</td>
<td>Professional training Regional emphasis Some research</td>
<td>6, 13, 18, 19, 21, 23, 25, 44, 54</td>
</tr>
<tr>
<td>4.</td>
<td>General college</td>
<td>General training Low research No professional emphasis</td>
<td>20, 26, 33, 34, 57</td>
</tr>
<tr>
<td>5.</td>
<td>Second opportunity College</td>
<td>Low academic research vocational oriented Mature students, Small</td>
<td>4,8,14, 16, 32, 55</td>
</tr>
<tr>
<td>6.</td>
<td>Other</td>
<td></td>
<td>9, 37, 22</td>
</tr>
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Tables 1a and 1b show the results for two of the teams. Each team presented six groups, with every group given a label and a rationale to describe why the institutions in the group were classified together.

Some of the other groups identified by the other teams were labeled as:
- Applied Sciences colleges
- Professionally oriented institutions
- Institutions offering flexible learning paths
- Teaching oriented institutions
- Balanced institutions.

It was interesting to learn that one of the teams took the point of view of the students in identifying their groupings. They came up with three main groups:
1. Flexible institutions, oriented at mature/part-time/distance students
2. Applied sciences/career-oriented institutions
3. Research-career-oriented institutions

*Jon File* then gave some reflections on the outcomes of the clustering exercise. He stressed that there is no single best way of classifying institutions. The fact that there are many ways of doing this illustrates the U-Map rationale of “user-drivenness” of classifications. Each user will apply her/his own criteria, depending on what (s)he regards as important criteria.

He compared the exercise to that of trying to detect similarities among a set of African masks (see picture below).
Panel discussion
In the second part of the afternoon, a panel discussion was held to start a debate on the usefulness of the U-Map instrument. The panel consisted of:

- Prof. Alberto Amaral (president of the Agency for Assessment and Accreditation of Higher Education, A3ES)
- Dr. Pedro Nuno Teixeira (Director of the Centre for Research on Higher Education Policies - CIPES, and University of Porto)
- Prof. Maria Carrondo (Vice-rector of the University Nova de Lisboa, representing CRUP)
- Prof. António Ferrão Filipe (Vice-president of the Portuguese Association of Private Higher Education Institutions, APESP)
- Dr. Pedro Dominguinhos (Vice-president of the Polytechnic of Setúbal, representing CCISP)

Each of the panelists presented a different perspective on U-Map, highlighting whether U-Map is useful, what it can offer, and what aspects would need to change.

Professor Amaral first shared some aspects of U-Map that he regarded as positive: U-Map provides a good snapshot (in a visual picture) of each higher education institution. The institutions may use U-Map to position themselves and it may eventually be useful for strategic planning and for providing easy information for the general public, politicians and the media. As such it offers a multidimensional perspective which is more elaborate than traditional rankings.

The negative aspects of U-Map relate to the following: The U-Map information is rather general and not directly useful for institutions like a quality assurance agency. U-Map may possibly open the way for a ranking - such as the U-Multirank multidimensional ranking - and this may have unwanted, distorting effects on the behavior of higher education institutions. He felt that it is not clear yet how U-Map will operate on a European level, because U-Map does not present a unique classification. And because of its multidimensional character, it is not easy to compare profiles in U-Map.

Prof Amaral furthermore mentioned the fact that U-Map and its sister project U-Multirank (see below) do not pay any attention to the core of academic work, which is knowledge creation and student learning. He mentioned the OECD’s AHELO project (on learning outcomes - an initiative that is very much still in its initial stage) and the lack of robust data on the many diverse functions of universities. Like other commentators (e.g. LERU/ the League of European Research Universities and the EUA / European University Association), he is very skeptical about the utility of rankings and fears that U-Map and - in particular - U-Multirank may lead to an oversimplified picture of institutional mission, quality and performance, especially at a time when diversification and individual institutional profiling are high on agendas across Europe. He furthermore stressed the importance of universities’ links to external stakeholders and environments and urged those involved in constructing rankings and classifications to take that aspect into account. However, the lack of internationally comparable data is a challenge.
In response to this criticism, the U-Map team argued that the institutions themselves, as well as stakeholder organizations, were heavily involved in the selection of indicators for U-Map (and U-Multirank). Furthermore, U-Map is not a ranking tool, but a profiling tool – showing what institutions do, not how good they are at doing this. So far, most institutions felt that U-Map was a useful tool, providing a mirror for institutions to compare themselves to other institutions.

Professor Maria Carrondo gave a clear presentation on U-Map and U-Multirank, comparing these transparency tools to the Global Institutional Profiles project initiated by the Times Higher (together with Thomson Reuters). She feels U-Map provides a good opportunity for Portuguese universities to collect comparable and reliable data about key aspects of their activity and allows for internal and external evaluation of institutional performance. U-Map allows comparison with other institutions (including other European ones) that have similar profiles. She then listed the indicators in U-Map and U-Multirank, comparing them to each other and to the Times Higher profiles. She concluded that the Times Higher project presented a simple, comprehensive profile that in her view was still too much dependent on reputation surveys carried out among third parties. This involves too much subjectivity.

Dr. Pedro Teixeira felt that U-Map was an interesting exercise but also expressed some doubts. He would have liked to see more attention paid to the institutions that in the end chose not to participate. The U-Map response to this is that most Portuguese institutions are included in the project. Teixeira furthermore shared some of the same doubts as professor Amaral: although U-Map is not a ranking it does encourage institutions to compare themselves to others and may tempt them to intentionally deliver data that in some respects is not entirely reliable. The fact that some data are not nationally available also may give rise to errors and omissions in reporting. Some institutions are not fully aware of the definitions and criteria underlying the data. Both national and international comparisons are difficult to make in case of diverging definitions. The U-Map project, however, has made many efforts to explain the definitions and data collection procedures. A technical seminar was organized and a glossary of terms and definitions is available. The U-Map team feels that the issue of definitions and comparability is something that should also be taken up by the national associations of universities and - preferably - by international initiatives. In any case, U-Map is entirely open and transparent about its definitions and procedures, involving the institutions themselves in agreeing on data issues. Finally, Teixeira mentioned the wish to see a more dynamic picture of diversity. Diversity is a positive attribute, but what is probably even more important is to learn where we are going system-wise, nationally and internationally.

Professor Filipe, representing the private higher education institutions in Portugal, also regards U-Map as a useful exercise. It provides a much wished incentive for institutions to show what they do and to be more visible - also for students and also internationally. U-Map can help institutions to position themselves. Even though the data requirements are many, U-Map is still not sufficient to do so. More efforts are needed to develop U-Map further. However, this should not go as far as to
transform U-Map in another ranking tool. The U-Map team responded by saying that governments indeed can make use of U-Map to monitor diversity and different profiles. If government then feels that there is a trend towards more homogeneity in the system it can make efforts to change incentives towards increasing diversity.

Referring to the same discussion, dr. Dominguinhos also felt U-Map is a good exercise that can shed some light on the diverse binary system in Portugal. He thinks U-Map can also assist in increasing accountability, as it requires institutions to answer to data demands on a varied set of indicators. This will ultimately feed into an information system once the data are sufficiently standardised in terms of definitions. The U-Map tool manages to reduce a complex set of data into a colorful picture - even though some may find this an overly simplistic snapshot. He stresses the need to place each picture in its context, and, like the previous panelists, urged the U-Map team to make the mapping exercise a longitudinal affair.

In an overall response to the panelists and some members of the audience, Ben Jongbloed once more stressed that U-Map should not be confused with a ranking exercise. It is about comparing institutional profiles - not their performance. We are still developing the tool further - in the future adding background information to each institution’s sunburst chart by means of institutional ‘business cards’. However, we cannot prevent others to make use of U-Map and base their individual judgments on the sunburst charts and attach different degrees of prestige to different sunburst charts. Still, an institution that has a sunburst chart with lots of ‘long rays’ is not necessarily a better institution than one with a lot of short rays. And, once more, U-Map does not make use of surveys to collect opinions and qualitative judgments.

**U-Multirank**

In the last part of the program, Ben Jongbloed presented the outcomes of the ‘sister project’ of U-Map: U-Multirank. The U-Multirank project was a feasibility study to design and test a new, multi-dimensional global ranking in higher education. When fully operational it is meant to be an international transparency tool that is multi-dimensional, multi-level and user-driven. Because of these characteristics it differs substantially from all existing higher education rankings and addresses the needs of various stakeholders in higher education. The U-Multirank project shares many data elements with U-Map, but unlike U-Map it is oriented at the performance of higher education institutions.

The U-Multirank project was initiated and funded by the European Commission (DG Education and Culture) and has been carried out by a consortium of research organisations under the name CHERPA Network (consortium for higher education and research performance assessment). U-Multirank takes the view that many of today’s popular rankings neglect the idea that higher education institutions (HEIs) are institutions that often have more than one mission. HEIs have a teaching, a research, and a knowledge transfer mission. Furthermore, they are addressing (sometimes in parallel) two important audiences: the regional/local community and the international community. This multidimensional character requires a broad set of indicators to capture the full performance profile of HEIs.
U-Multirank is focusing on two levels in the institution: (1) the institution as a whole (Focused Institutional Ranking), and (2) the scientific field (Field-Based Ranking). The latter was tested for two fields: Business studies and Engineering.

From a global sample of 159 higher education and research institutions, with two-thirds coming from Europe, more than a hundred completed an institutional questionnaire in order to deliver data to the U-Multirank team. This data was used to construct about 30 indicators and from that build institutional performance profiles for the institution as a whole such as the one shown in figure 2. For the specific fields, performance charts were also constructed.

Figure 2: Sunburst representation of institutional performance profile

The conclusion of the U-Multirank study was that although there are some gaps to close and some further work on a few indicators needs to be done, in general all instruments and processes could be described and tested satisfactorily. Therefore, the U-Multirank multidimensional ranking tool is feasible. Ben Jongbloed then proceeded to give a short demonstration of the trial version of U-Multirank. This involves first applying U-Map to arrive at a set of matching institutions, based on the selection of criteria that the user her/himself decides upon. For this set of comparable HEIs, the user then will see the institutional performance profiles. She/he can then make personalised rankings for the institutions in this set, again based on her/his choice of indicators in each of the five dimensions (teaching & learning, research, knowledge transfer, regional engagement, and international orientation).
The personalised rankings are shown in the form of a table (a *performance chart*) that has colour codes to show average, better than average, and less than average performance for individual institutions (or programmes).

In its most recent (2011) Modernisation Agenda (‘Supporting Growth and Jobs: An agenda for the Modernisation of Europe’s higher education systems’ COM (2011) 567/2), the European Commission states that it intends to launch U-Multirank as a new performance-based ranking and information tool for profiling higher education institutions. It states that U-Multirank is “aiming to radically improve the transparency of the higher education sector, with first results in 2013. By moving beyond the research focus of current rankings and performance indicators, and by allowing users to create individualised multidimensional rankings, this independently run tool will inform choice and decision-making by all higher education stakeholders” (p. 11).

The audience asked why in the U-Multirank project the choice was made to focus on engineering and business studies. This choice was made by the Commission - it may have been inspired by the fact that in the AHELO project (the OECD’s learning outcomes study) the same fields were chosen.

Jon File closed the seminar and thanked everybody for their contributions. He invited the representatives of those Portuguese institutions that have submitted all their data and have had their data approved to check their institutional profiles on the U-Map Portugal website: [http://www.u-map.eu/pt/finder.shm](http://www.u-map.eu/pt/finder.shm)

Professor Assunção then kindly invited everybody for snacks and drinks.