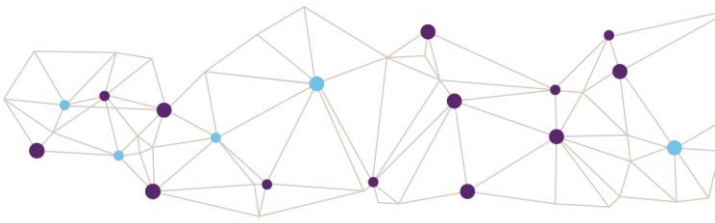
SHEFCE
Steering Higher Education for Community Engagement



University community engagement heatmaps: an alternative to ranking or benchmarking university performance?

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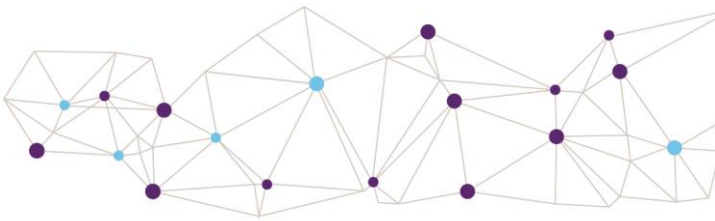
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1. Setting the scene

Although universities in Europe are expected to play an increasingly prominent role in addressing societal issues, the question of how to measure the societal impact of higher education and research remains an intractable one. The complexity of societal impact does not allow for simple quantitative indicators. This presents stakeholders with a significant challenge: policymakers cannot find reliable indicators of universities' societal impact and cannot monitor universities societal contributions; whereas universities and their leaders do not have a reference point to reflect on how they could improve their societal impact.

The EU-funded project "Steering Higher Education for Community Engagement" (SHEFCE), consisting of a team of 10 institutions from 5 countries, presented an alternative methodology to approach the question of how addressed this need. Without claiming to find a simple solution to the 'impact assessment' quandary, the project societal impact. The proposal of the SHEFCE project was to develop a European-level tool focusing on the community engagement of universities as a 'pathway to impact' (a term coined by Research Councils UK for research proposals to demonstrate what activities are likely to lead to impact). Community engagement was defined in the project as mutually beneficial interactions between universities and external communities in order to address societal needs. Community engagement in higher education can take place through a broad range of activities: teaching, research, service and knowledge exchange, student initiatives and university-level initiatives.

A team within the SHEFCE project developed and piloted an innovative methodology and framework allowing users to gain an insight into the community engagement of universities from different countries, socioeconomic contexts and institutional profiles. The team consisted of researchers and experts from the Institute for the Development of Education (Croatia), Ghent University (Belgium), Free University of Brussels (Belgium), University of Continuing Education Krems (Austria) and the University of Rijeka (Croatia). Under the working title of the 'European University-Community Engagement Heatmap', the intellectual output was developed as an online tool allowing users to search a limited database of institutions (up to 7 institutions) according to their community engagement activities, offer options to filtering by a range of criteria, allowing to identify areas of high performance and related good practices and present the data in a visually attractive and clear way. Based on this process, the project team assessed the feasibility of upscaling such a tool to more institutions and, potentially, to the EU level as a whole.

This work represented a continuation of process begun in a previous Erasmus+ project entitled 'TEFCE – Towards a European Framework for Community Engagement in Higher Education' (2018-2020), which developed a methodology for universities to map their community engagement in a structured and participative way. Part of the methodology included an institutional 'heatmap', providing universities with an overview of the areas in which they are strongest and the areas that are most in need of improvement. The SHEFCE project continued and took the process one ambitious step further: to create and pilot a single tool that allows for inter-institutional and transnational comparisons based on the 'Heatmap' methodology.

The two key questions faced by the project team in the development of the tool were: Is there be a reliable way to collect and present data on community engagement in higher education, which could allow for meaningful comparisons between institutions? If so, how could a tool be developed without becoming a benchmarking or ranking tool?

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2. Goals of community engagement heatmap

Heatmap methodology

In the TEFCE project (2018-2020) a proposal was developed of a framework that would allow universities to critically reflect upon their level of community engagement through a robust and comprehensive framework that would allow universities to critically reflect on several different aspects of engagement:

- the level of authenticity (and mutual benefit) of community engagement
- the different types of communities engaged with
- the different values reflected in such engagement,
- the spread of such engagement across the institution
- the sustainability of such engagement.

The TEFCE project developed what it called an 'institutional university-community engagement heatmap' that could incorporate all of these new issues in a user-friendly way. The result is a heatmap for each dimension, which are then combined to form a single institutional community-engagement heatmap. This provides a visual guide to the areas in which the university is the strongest and the areas of low intensity that could be further improved (depending on the university's areas of priority). The assignment of heatmap levels is flexible, rather than being a precise score determined by a corresponding indicator. Levels are assigned based on discussions acknowledging the collected evidence and are then validated by stakeholders, including community practitioners and representatives. The assignment of heatmap levels is based on the following guidelines:

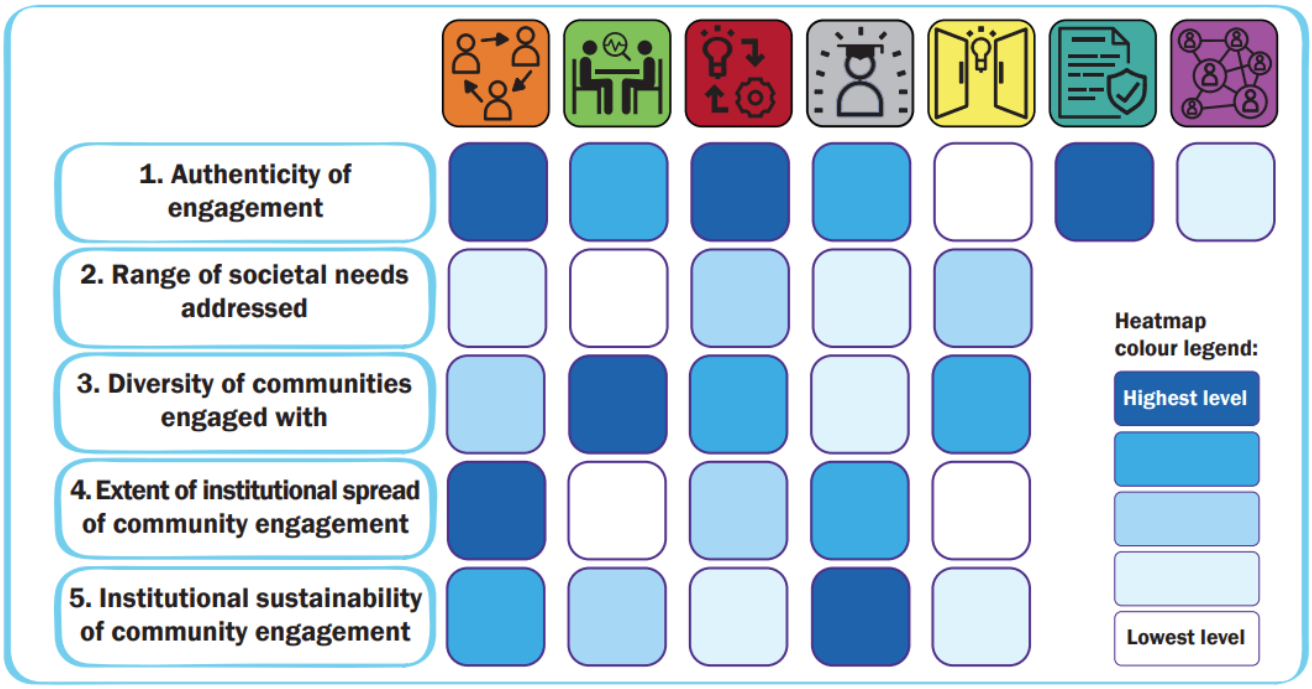
Table 1: TEFCE Toolbox – Tool 3: Institutional community-engagement heatmap

Characteristics of engagement	Heatmap level		
	Lowest level		Highest level
1. Authenticity of engagement	A level is assigned based on a synthesis of the findings of the previous levels of engagement for each sub-dimension, to reach a conclusion for the dimension as a whole.		
2. Societal needs addressed	Lower levels: engagement that meets the traditional notion of 'use to society', such as law, medicine, public administration, industry, etc.	Middle level: engagement that responds to needs such as digitalisation, innovation, smart cities, 21st century skills, etc.	Higher levels: engagement responding to pressing global challenges such as climate change or migration and local social problems.
3. Communities engaged with	Lower levels: large, highly-structured and well-resourced institutions such as corporations, central government, hospitals.	Middle level: institutions with less capacity for engagement such as local authorities, SMEs, cultural institutions, public bodies.	Higher levels: engagement with partners with the least capacity for engagement, such as schools, NGOs, social enterprises and citizens.
4. Institutional spread	Lower levels: community-engagement practices being only present at one or two university departments.	Middle level: community-engagement practices taking place at several different departments.	Higher levels: community-engagement practices that take place across the entire university.
5. Institutional sustainability	Lower levels: community engagement that is primarily the result of short-term projects or collaborations.	Middle level: community-engagement initiatives that have seen continuous implementation.	Higher levels: community-engagement practices that have been institutionalised, with adequate funding.

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By using a colour-coded heatmap in a matrix with a range of fields, the design of the heatmap was intentionally set up to dissuade a narrow 'scoring' approach for the institution. In other words, the process did not result in an aggregate score, but rather provides a visual indication of areas of strength and areas that could be improved. This approach was also meant to avoid a 'ranking mentality' of users.

Figure 2: TEFCE Toolbox – institutional community engagement heatmap



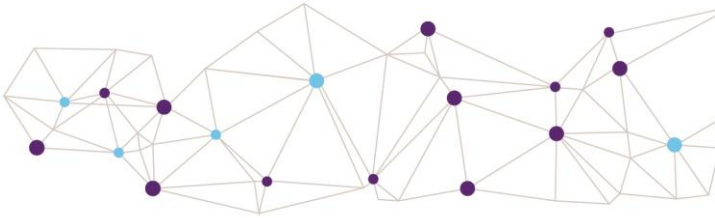
Developing an international/comparative heatmap: key goals

The proposal of developing a platform that would allow users to view the heatmaps of different institutions therefore immediately brought up the dilemma of how to develop such a tool without immediately falling into an approach that would rank or benchmarking aggregate scores with other institutions.

The ethos of the approach developed in the TEFCE and subsequent SHEFCE projects was that any effort to develop tools to support community engagement in higher education should support **collaborative learning rather than comparison of competitive performance**. Any framework should result in a qualitative discovery of good practices and a critical reflection on strengths and areas to improve, achieved through a collaborative learning process. Any framework should thus represent a learning journey to further improve universities' community engagement efforts, rather than as a narrow performance assessment for the purpose of ranking or competitive benchmarking.

The task of the SHEFCE team was therefore to brainstorm what kind of tool could be developed that could provide transparent information on a university's performance in community engagement, but without guiding a

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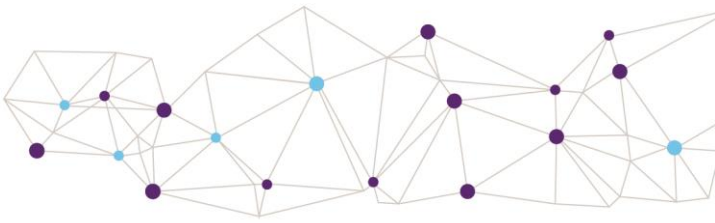


user to rank or compare institutions. Rather than focusing on performative or reputational goals, the tool would have to be focused on of the following goals:

- Critical reflection: on how one's own university compares to others, and where it can improve
- Inspiration: on how to learn from other university's experiences in order to inform improvement's at one's own institutions.
- Idea generation: gaining insight into concrete community engagement practices that can be adapted in one's own institutional context
- Networking/matchmaking: connecting academic staff and institutions outside their own institutions to launch new collaborations

The first major conclusion regarding the heatmap tool is that it would have to be part of a more comprehensive online platform that could provide users with more information on the institution, on their community engagement performance and on good practices. Since the SHEFCE project precisely aimed to develop such a platform, the logical conclusion was that both tools would need to be fully integrated. The developed platform was launched inn the 2023 at the following address: www.community-engagement.eu.

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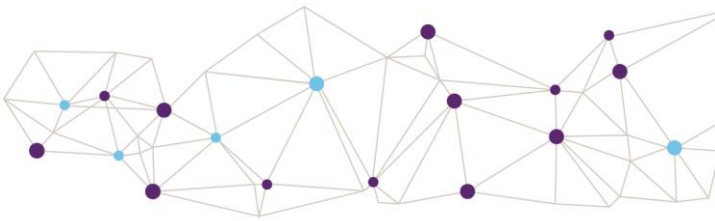
3. Analysis of existing international tools

The first step of the SHEFCE team in developing the heatmap was to critically examine existing tools at the international level used to provide information on university performance. The three following tools were considered as most relevant, and for each of the tools selection was made on their strengths and weaknesses which regards to the potential goals of the SHEFCE heatmap:

Description of tool	Relevance and value for SHEFCE heatmap idea	Shortcomings for SHEFCE heatmap idea
Times Higher Education Impact Rankings:[1] A league table of universities ranked according to their social impact, measured according to contributions to the UN's sustainable development goals	An exclusive focus on measuring the social impact of universities. Such an alternative focus, compared to predominant university ranking criteria, makes this tool unique and highly relevant.	Although the tool provides data on performance according to a range of SDGs, the major shortcoming is that it does not lead users to learn more about what the universities in question are actually doing, but only in providing their aggregate scores.
U-Multirank:[2] A multidimensional, user-driven university ranking system, with possible various ranking dimensions and without aggregate scores.	By not producing "league tables", U-Multirank's alternative approach to presenting its data could be of great interest for the SHEFCE tool, since it avoids reductive performance assessments.	The tool remains a ranking, with conclusions on which universities are better or worse, although admittedly only according to specific dimensions. The tool does not lead to additional information on what universities do in different dimensions, only on their performance scores
Knowledge Exchange Framework (UK):[3] Online tool presenting the results of an assessment framework on knowledge exchange activities in higher education institutions in the England. Knowledge exchange refers to the process of sharing and applying knowledge generated by universities and colleges to benefit the economy, society, and the public.	Of the three analysed tools, the KEF is the closest in focus and ethos to what the SHEFCE project intends to achieve at the European level. The tool focuses on how universities engage with their external communities, providing scores (based on self-assessments) that do not result in a ranking, but can be used comparatively. The tool also leads users to more information through an institutional fact sheet on what key activities take place in each analysed dimension.	The tool itself has few shortcomings and is cloest to what the SHEFCE heatmap tool wishes to achieve. The only challenge to the SHEFCE team was that the tool actively encourages institution-by-institution comparison. Although this is both transparent and can lead to valuable institutional learning, it is also fundamentally competitive.

[1] https://www.timeshighereducation.com/impactrankings
[2] https://www.umultirank.org/
[3] https://kef.ac.uk/dashboard

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In addition to the three tools mentioned above, other tools focused primarily on providing information and good practices were also analysed in depth, to assess which of the features could of value in developing a tool for community engagement. The tools in question were EU-supported tools in the field of education and research: E-Pale, Euraxess and E-Twinning, as well as the broader thematic platform of the Intereg Policy Learning Platform. From the analysis of these websites, the project team concluded that some of the most valuable features of the platforms were:

- The use of **maps** to search for practices and institutions based on geographical locations
- The use of **good practices search engines** based on areas of interest, location or key words
- The availability of a wealth of **learning resources**, including publications, videos, manuals and news.

Based on the above analysis, the SHEFCE team examined what solution would be optimal for the topic of community engagement, but without resulting in a ranking or benchmarking tool.

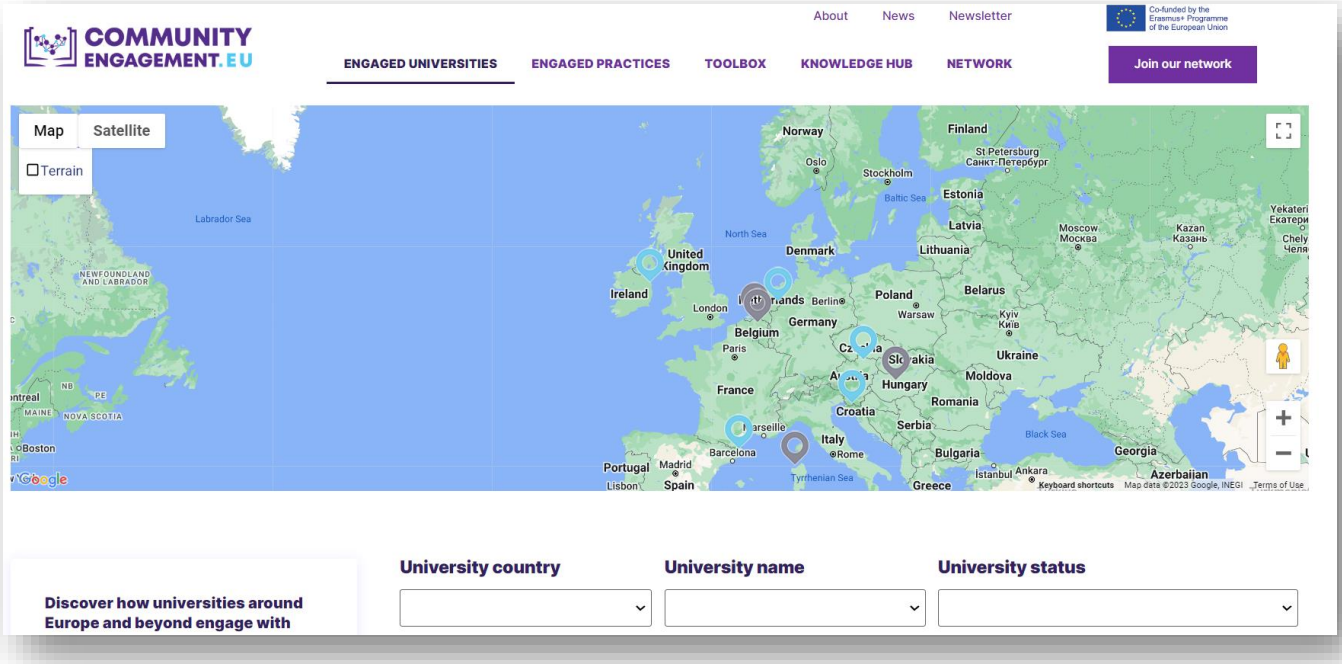
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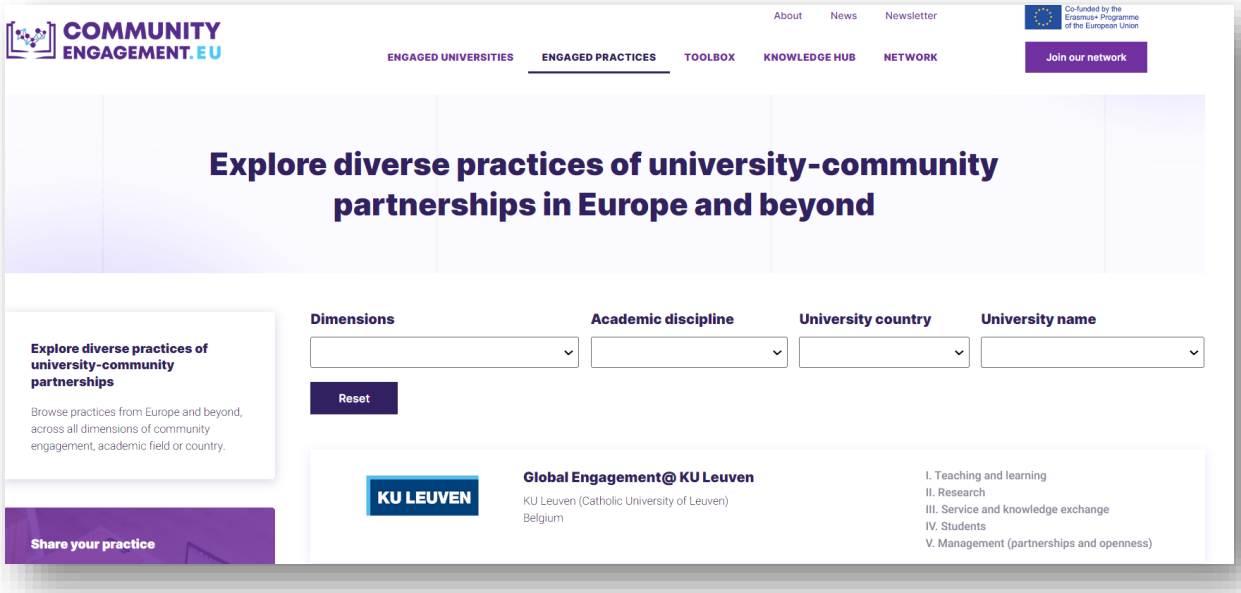
4. Towards a new approach

Learning as primary goal

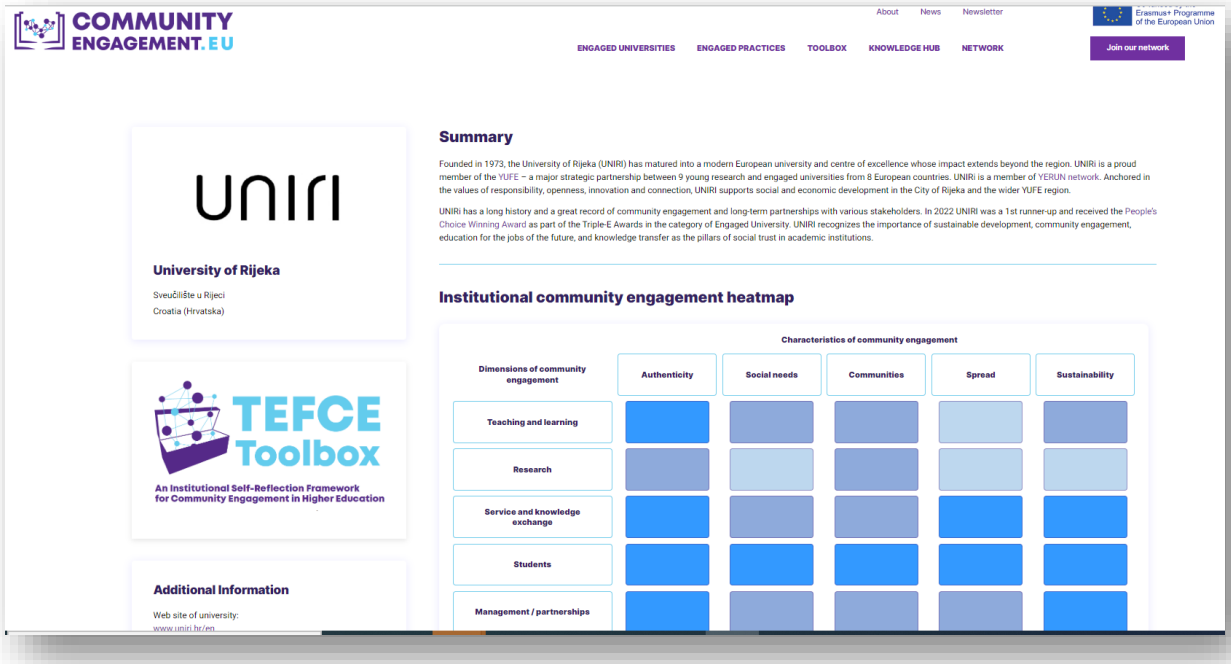
The first conclusion of the team was that any tool that would be developed would have to primarily focus on the goal of providing users with information on community engagement in higher education and on how to improve their own performance in this area, including through gaining insight into how other universities in Europe have gone about this and in reviewing concrete examples practises of community engagement according to topics that are of interest to them. The use of a heatmap would therefore be a means to this end, rather than an end in itself, and it would therefore not have to be a highly prominent part of the broader platform, but rather one of its features.

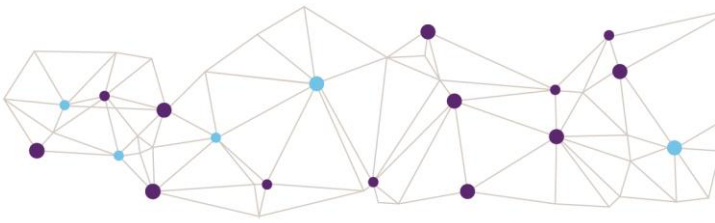
In practical terms, the SHEFCE team decided that any user entering the newly developed platform would have the option of either exploring **institutions/universities** around Europe (based on the use of an interactive map or using a search engine of institutions) or exploring **good practices** (again, using a search engine of practices including filters such as academic discipline, dimension of engagement, institution and country). Only after these steps would a user have an opportunity to see a university's institutional profile and community engagement heatmap results.





The heatmap results would also not be shown in a vacuum, with no wider context. Each heatmap would be shown next to examples of good practise of engagement from that institution, as well as with links to an institution report provided an in-depth view of its community engagement approach, activities and achievements.





Resolving the quandary of comparison without ranking

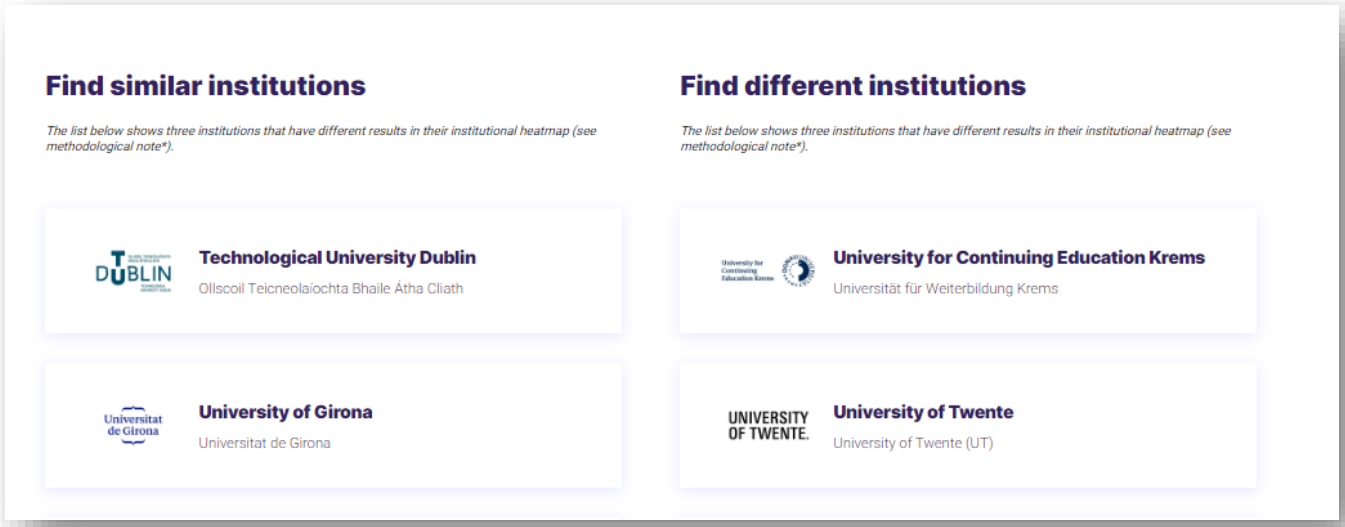
The SHEFCE team decided against using a system that would allow for direct comparison of scores or direct ranking of institutions. The primary reason for this decision was one of ethos: the entire project is based on the idea of peer learning and improving community engagement, rather than of comparing which institutions are better at community engagement. An additional reason is that there were a number of technical challenges and limitations to comparing data to others:

- Limited range: the 'scoring system' developed by the TEFCE/SHEFCE project is essentially on a 1-5 scale, meaning limited variation/range in scores.
- Ordinal data: The scoring system is subjective (based on self-assessments) and not a measure with set intervals. The difference between scores is not necessarily equal across the scale (e.g. we cannot say that an institution with a score of 4 is twice as good on a certain score than an institution with a score of 2; an institution with a score of 4 compared to a score of 3 isn't necessarily better to the same amount as a comparison between 2 and 1), nor is it necessarily equal for the individual doing the scoring.
- Small sample: Even if the SHEFCE project further gathers momentum, statistically speaking the sample size remains small. This makes measures such as mean comparison highly sensitive to small changes or outliers.
- Self-reporting: Although all analysis of e.g. surveys is based on self-reporting and the usual errors associated, the process leading to heatmap scores (the 'TEFCE Toolbox' methodology) is a more complex exercise with subjectivity on multiple levels before coming to final scores. This makes it even more difficult to directly compare institutions based on scores.

Given these limitations, the SHEFC project team decided to avoid direct comparison or ranking based on individual scores or mean scores. These would most likely to have very little meaning or value, and alluding to comparisons would probably encourage those visiting the tool to make it a ranking. The SHEFCE team therefore decided that the most value would be a library of heatmaps and practices for consultation and inspiration.

However, in order to retain an element of international and inter-institutional comparison, but one based on *qualitative* rather than quantitative/competitive comparison, an idea developed by the project team was to use a tool to **encourage users to further explore 'similar' institutions and 'differing' institutions.** The solution developed by the team member from Freen University of Brussels, was using "Euclidean distance" between institutions to provide the similar and differing institutions. This is a basic method of a 'recommendation' system that services often use to provide you with similar content, which calculates the distance in an n-dimensional space between two cases. The more different the scores between two institutions, the larger the distance. This system can also vary the extent in which randomisation is used to display e.g. 3 random institutions from the top X% of cases, in order to avoid direct comparison or the same institutions always being displayed.

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5. Reflections on feasibility and upscaling

The heatmap developed through the SHEFCE project is a completely innovative and unique product that does not have an equivalent elsewhere in the world, as far as our mapping has shown. Its unique characteristic is that it is a tool that is intended above all as a *developmental* tool for institutions to self-reflect on the extent to which they engage with their external communities in ways that are mutually beneficial, and, in the case of international comparison, to try and understand how other universities approach similar questions and challenges in different settings.

The potential impact and transferability of the heatmap is significant. In the ideal scenario of project impact, the heatmap could continue as a viable way of framing community engagement in higher education and it could be taken up by policymakers, university networks and/or individual universities in Europe. During our initial discussions, a question was raised on whether the self-reported nature of the heatmaps could represent a risk for the further uptake of the tool (based on perceptions of unreliability or bias). However, by placing the heatmap 'deep' in the structure of the community engagement platform, and by not encouraging direct comparisons of scores, the SHEFCE team concluded that the heatmaps steer users towards constructive and critical reflections on how their own institutions can improve their community engagement, rather than on concerns regarding whether a given an institution has a higher or lower score.

The SHEFCE team therefore believes that the heatmap, in combination with the range of other tools and resources available on the platform www.community-engagement.eu, can provide a sound basis for helping other universities in Europe (and beyond) to critically reflect on the extent to which they engage with society, and can support them through a process of self-reflection and action-planning for community engagement.