



Beyond the metrics:

Identifying, evidencing and enhancing the less tangible assets of higher education

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1 Introduction

In recent times across the UK, there has been ongoing and considerable effort to measure teaching quality, driven in part by a growing focus on accountability across the public sector, and, most notably, in education. With ever-more focus on metrics-based quantitative measures of success, the higher education sector now recognises that 'official' accountability for teaching quality can rely only on indirect measures or proxy indicators, such as student satisfaction (for example, the National Student Survey (NSS)) and graduate earnings (for example, the Longitudinal Education Outcomes (LEO) data). The reality, recognised by many commentators, but perhaps most influentially by Gibbs (2010), is that measuring teaching quality is a messy problem; it does not boil down to numbers or proxy output measures. This has been reinforced by the results of the recent 'learning gain' initiative.¹ The overarching conclusion from the £4m HEFCE-commissioned 13 projects was that the issues surrounding learning gain are extremely complex - they urge caution on the use of readily-available metrics for such purposes and question the robustness of such approaches. There are clearly important aspects of higher education which are not easily measurable or quantifiable - what we term our **intangible assets.**

There is also a risk that by trying to measure educational excellence without counting all the things which matter - to students, to staff, to the sector and to society itself - the sector might find itself falling foul of the McNamara Fallacy. This concept, named after Robert McNamara, the US Secretary of Defence from 1961-68, points to decision-making based solely on quantitative data while simultaneously ignoring all other sources of information. The rationale for such an approach is that qualitative data is not easily proven and therefore too easily dismissed. However, the following quote from Yankelovich (1972) points out the dangers of such an approach:

'The first step is to measure whatever can be easily measured. This is OK as far as it goes. The second step is to disregard that which can't be easily measured or to give it an arbitrary quantitative value. This is artificial and misleading. The third step is to presume that what can't be measured easily really isn't important. This is blindness. The fourth step is to say that what can't be easily measured really doesn't exist. This is suicide.' (p 72)

The authors have become increasingly interested in this area and have sought to gain a better understanding of the impact of 'softer' enhancement activities. See, for example, a WonkHE article from 2018 which begins to explore these issues: https://wonkhe.com/blogs/teaching-quality-a-sticky-wicked-problem

This Collaborative Cluster project, jointly led by Abertay University, the University of West of England and Edinburgh Napier University, sought to provide a renewed understanding of contributory aspects to the success of higher education that are deemed important, yet are not easily measurable or quantifiable - our so-called 'intangible assets'. The aims of the project were as follows:

- Work with the sector to identify which 'intangibles' are considered key to the success of teaching quality, student success and a higher education more broadly.
- Develop tools and a process by which the value and impact of these 'intangibles' might be evidenced.

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¹ www.officeforstudents.org.uk/advice-and-guidance/teaching/learning-gain

 Based on the above, what are the potential implications for HE policy and practice at both national and sectoral levels of such intangible assets?

This report outlines background literature to intangible assets and their potential relevance to higher education; the methodology of the current study; a new conceptual model for mapping our intangible assets in HE; guidance on how institutions might undertake their own analysis of intangible assets in their particular context (for example, in preparation for quality reviews or enhancement purposes more generally); and analysis of priority intangible assets, as identified by the participants who took part in this study through a series of nine stakeholder workshops across the UK from October 2018-February 2019.

2 Background literature and insights - value, assets and intangibles

This section of the report introduces, in more depth, some of the key literature and insights that have informed the development of our Intangible Assets project and associated workbook.

2.1 Wicked problems

Measuring things that cannot be counted has long been recognised as a complex task. The value of something, even when considered through an objective lens, cannot be put down to numbers alone. As Dewey stated, over a century ago, 'a value, in short, means a *consideration*, and a consideration does not mean merely an existence, but an existence having a certain claim upon the judgement to be formed. Value judged is not existential quality noted, but is the influence attached by judgement to a given existential quality in determining judgement' (Dewey, 1915, p 578: *author's original emphasis*). This resonates with insight provided by W I Thomas, also writing in the first half of the twentieth century, who uses the term 'inference' to help us to recognise that values and decisions are not based on statistics alone:

'It is... highly important for us to realise that we do not as a matter of fact lead our lives, make our decisions, and reach our goals in everyday life either statistically or scientifically. We live by inference. I am, let us say, your guest. You do not know, you cannot determine scientifically, that I will not steal your money or your spoons. But inferentially I will not, and inferentially you have me as a guest.'

(quoted in Volkart, 1951 p 5; cited in Goffman, 1959/1990, p 15)

Both Dewey and Thomas clearly indicate that the 'value' of the things we do, say and feel is the result of a series of complex social interactions and judgements which can be given, recognised and taken away by those with the power to create meaning in cultural situations.

The McNamara Fallacy

Yet in a world where we are increasingly asked to focus on big data, metrics and key performance indicators to measure success or 'excellence', it can sometimes feel that the more difficult to measure, but nevertheless valuable, aspects of our lived experiences are somehow less important. In its most extreme application, this data-driven approach is sometimes known as the McNamara Fallacy (briefly introduced in section 1 above). This concept was coined by sociologist Daniel Yankelovich (1972; cited in O'Mahony, 2017) and named after the US Secretary of State during the Vietnam war, who used quantitative business methods, which had been highly successful at Ford, to manage the conflict. With

hindsight, McNamara recognised that his emphasis on a single crude metric (the number of deaths on both sides) oversimplified the social complexities and contexts of the conflict, with negative results. The McNamara Fallacy, therefore, refers to situations where focus is placed on things that can be easily measured - there is disregard for things that cannot; actions to create arbitrary proxy measures for them are undertaken where possible; and there is blindness to those that cannot be counted in these ways. A final logical step in this process is the conclusion that such unmeasurable aspects of our lives and cultures do not really matter.

This is, of course, an extreme position. It is important to stress that many of the arguments and ideas presented in this section are not 'anti-numbers' per se, and few people and organisations fall wholly into the McNamara trap. In our exploration of the literature, it has become clear that metrics and statistics have a very useful role to play in developing, supporting and evaluating many of the activities we undertake in organisations, institutions and businesses. However, in some more complex situations, where there are 'wicked problems', mixed-method approaches can be the most appropriate way forward, as they are able to offer solutions and reach conclusions that are not necessarily simple or right, but are meaningful in context (Mertens, 2014). Interestingly for us, the concept of 'wicked problems' stems from work by urban planners Rittel & Webber (1973), who identify them as those problems which 'involve multiple interacting systems, are replete with social and institutional uncertainties, and for which only imperfect knowledge about their nature and solutions exist' (Mertens, 2014, p 3). We will return to the world of urban planning a little later on in this section of the report.

Education is full of such 'wicked problems', and the journey to measuring the outcomes of the learning process can be fraught with difficulty. For many, the tendency to conflate the learning process with graduate outcomes (end performance/product) is a wicked problem indeed. This was clearly articulated nearly a decade ago by Graham Gibbs in his seminal report *Dimensions of Quality*. Gibbs notes that the best predictors of educational gain (student success) are the contexts in which students study: 'what institutions do with their resources to make the most of whatever students they have' (p 5). These *process* variables are 'wicked' in that they are often difficult to measure, and invariably are complex and context dependent, meaning that they are not easily compared between institutions. 'Few relationships between a single dimension of quality and a single measure of either educational performance or educational gain can be interpreted with confidence because dimensions interact in complex ways with each other' (Gibbs, 2010, p 5). Further many 'process variables ... [are] extremely difficult to quantify or measure in a safe way, such as the extent to which teaching is valued, talked about and developed' (p 6).

2.2 The rise of the intangible economy

It would be easy to assume that such 'wicked problems' occur solely when we try to apply the measures of private business and capitalism to the needs of the public sector; where our 'products' are very different and the basis of our relationships with key stakeholders is founded on different principles and values. However, a key text that was seminal in the inception and development of this project: *Capitalism without Capital: the rise of the intangible economy* (Haskel & Westlake, 2017), is helpful in unpacking some of these assumptions. In brief, Haskel & Westlake argue that in the twenty-first century, world economy, intangible investments and intangible assets now outweigh tangible investments. By tangible investments they mean long-lived capital investments which were the building blocks of twentieth century businesses and industry: desks, buildings, IT equipment and people. These are relatively easy to account for - both in terms of their tangible presence and observations that can be made regarding their value based on markets for purchasing, and, for some assets, selling. Market rates for vacant roles, the second-hand value of office equipment and the cost of renting office space, can all be observed and a value can be

placed upon these things with relative ease. However, where there is no market for the raw value of an investment, measuring the value of that asset is very hard. Investment in activities like research and development, building networks of activity, building 'know-how', and building brand awareness, are generally ignored by asset auditing and measurement conventions - yet they cost significant amounts of money. This changing investment profile of companies means that many business critical investments are ignored by the dominant conventions of quantitative measurement of previous eras. As such, Haskell & Westlake argue 'we are now trying to measure capitalism without counting all of the capital' (2018, p 7).

Given our discussion above (and to rephrase Haskel & Westlake), if we do not identify and use collective ways of identifying impact beyond the dominant conventions of measurement in higher education, and find ways to complement these with new ways of evidencing value, are we in danger of measuring educational quality without counting all of the education? This is certainly something that was highlighted by Gibbs (2010), and from our own observations gathered during this project, remains a key concern for a range of colleagues from across the higher education sector.

2.3 Lessons from other sectors

Unsurprisingly, education is not alone in recognising that their investment profile is complex, and that many of the assets they value the most, are not easily counted. The project team considered a variety of other public or not-for-profit sectors where valuable intangible aspects of their practice are often not recognised or prioritised, particularly when the sector is subjected to 'value for money' focused activities. Below, we offer up a brief overview of one key area (Intangible Cultural Heritage), and associated approach to evidencing value (cultural mapping), which we felt resonated well with our project and we have used to develop our own thinking in this area. Due to the nature and purpose of this project report, this discussion is not presented as a comprehensive overview of this literature. We therefore encourage you to undertake further reading to explore some of the insights introduced in more depth.

Intangible Cultural Heritage

The UNESCO 'Convention for the Safeguarding of Intangible Cultural Heritage' (UNESCO, 2003), defines Intangible Cultural Heritage (ICH) as, '...the practices, representations, expressions, knowledge, skills - as well as the instruments, objects, artefacts and cultural spaces associated therewith - that communities, groups and, in some cases, individuals recognize as part of their cultural heritage' (Article 2: Definition 1). The Convention goes on to outline the intangible assets in which this is manifest: oral traditions and expressions; performing arts; social practices, rituals and festive events; knowledge and practices concerning nature and the universe and traditional craftsmanship (UNESCO, 2003, Article 2: Definition 2).

However, as some of the wider literature on ICH indicates, the importance of such intangible assets is not limited to local communities, groups and individuals. Maintaining a competitive advantage in the travel market place and positioning places as 'destinations', relies on both tangible and intangible elements of cultural heritage. In the process of this work, there is the dual potential of enabling destinations to unlock their unique potential as well as reaffirming and building local communities' sense of place (Mitsche *et al*, 2013). However, as part of this process, Smith & Campbell (2017) stress the importance of ensuring that dominant or 'authorized heritage discourse' (Smith 2006) - with its stress on materiality, expert judgement, innate significant and defined roles for source communities - does not take over.

To ensure this is the case, they state:

"...rather than talking about "values" it is imperative to be more specific, and talk about *valuing*, and use more useful and accurate terms like beliefs and interests and ideas and ideologies, and recognize the people and professions that hold them, and the social and political work discourse does.'

(Smith & Campbell, 2017, p 40: our emphasis)

Ultimately then, the value of our intangible assets comes from our context (for example, who we are, what we believe) and cannot be meaningfully associated with fixed measures that assume innate significance (from a particular, or dominant, perspective).

In addition to the useful insights that this literature provides, through our reading we were directed towards an emerging methodology for mapping intangible assets in context, that is designed to ensure the contextual processes of 'valuing' takes priority. It is to a brief overview of this method we now turn.

Cultural Mapping

Cultural Mapping is described as a practical, participatory planning and development tool, and an emerging mode of research (Duxbury, Garrett-Petts & MacLennan, 2015) which has been associated with, and integrated into, contemporary urban planning activities (Duxbury & Jeannotte, 2015). A special issue of *City Culture and Society* in 2016 was dedicated to the role of cultural mapping practices in advancing our 'conceptualisation and understanding of diverse approaches to mapping intangible dimensions of culture and to synthesize some insights from these approaches to advance methodological practice in this area' (Longley & Duxbury, 2016, p 1).

In line with the starting point for the 'Beyond the Metrics' project, Duxbury, Garrett-Petts & MacLennan (2015) state:

'Methodologically, if one accepts that the intangible, the subjective and the immaterial are important to what culture is as an object of study, then quantitative methods alone are inadequate. This interest in making the intangible visible heightens the importance of drawing on cultural research traditions that are primarily qualitative in nature.' (p.18)

What does this mean in practice? The scope of the mapping process is broad and contextually defined, and the 'map' itself can take on many forms and can embed a host of different information using a range of media, that are meaningful to those involved. These might include stories, histories, places and people, brought to life by descriptions, narratives, sound, images and quantitative and qualitative data. Importantly, the 'map' itself is an interface that carries affective and stylistic qualities that resonate with the mappers, as well as 'basic' information. As Longley & Duxbury explain, this very process 'often reveals many unexpected resources and builds new cross-community and cross-sector connections' (Longley & Duxbury, 2016, p 1). In doing so it helps to identify the aspects of a place or culture that together build a sense of place and sense of identity, but are not easily quantified, and 'the ways in which those meanings and values may be grounded in embodied experiences' leading to 'better understanding the contemporary urban environment' (Longley & Duxbury, 2015, p 2). Further, it prioritises a community's intellectual capacity and its ability to define its own meaningful resources.

What can we learn from this?

The notion of the importance of a community defining its own significant resources, particularly resonates with the earlier points made by Gibbs (2010) that the best predictors of educational gain (student success) are process variables (not outcomes), which can only be identified and made sense of within the particular contexts in which students study. This insight particularly helped us to begin to envisage ways in which we could support communities to 'map' these contextual spaces, to ensure that the intangible assets that matter most to them are not lost in a world that appears to be increasingly dominated by metrics-led discussions.

Returning to the notion of 'inference' introduced at the beginning of this section of the report, it follows that our prospective and current students (and other stakeholders such as our colleagues from within our institutions and the wider sector, professional body and employer representatives and parents/carers) will 'infer' the quality of our university offer from a range of things we say and do that exist beyond the metrics. This will emanate from the cultures of excellence we identify, create and make real, and the vibrant stories we tell about the intangible assets that matter to us, and lie at the heart of these cultures of excellence.

The literature on cultural mapping helps us to understand how we can develop these maps and stories, through a process of *valuing*, rather than relying on isolated hearsay, anecdote or descriptions of initiatives. Having opened this section with insights from early twentieth century sociological commentary on values, it seems fitting to end with sociological commentary from one century on. Fabian Muneisa (2012) notes that '[p]eriods of unrest in valuation often open interesting opportunities for the questioning of available theories of value and for the renewal of the intellectual repertoire, sometimes also of the political one' (p 33). We certainly hope this is the case in the current climate, and that through this project we can contribute to the rebalancing of some of the approaches to attributing value that appear metrics-heavy in contemporary higher education.

3 Methodology

3.1 Ethical approval

Ethical approval was required and gained at all three lead institutions. Attendees of each workshop (see below) were provided with a briefing of the project, informed that their participation was entirely voluntary. If they consented to be engaged in the study, they were asked to sign two consent forms (one for them and one for the project team). All participants provided their consent.

3.2 Phase one workshops

A key feature of the project was to work with the sector to identify which 'intangible assets' are considered key to the success of teaching quality, student success and a higher education more broadly (Project Aim 1). A series of nine workshops were run across the UK between October 2018 and February 2019 (see Table 1). To maximise participation and ensure engagement with key stakeholder groups (academic and professional services staff, senior managers and student representatives), in the main, the project team attended existing network meetings to run the workshops rather than creating new ones. The exceptions to this were the institutional workshops held at two of the partner institutions, Abertay University and the University of the West of England.

Table 1: Phase one workshops, including number of attendees in each and their roles

Date	Who	Roles	Number of participants
			(signed and returned consent forms)
11/10/18	Enhancement Theme Leaders Group	Student representatives, academic staff, quality managers, Educational Developers	16
26/10/18	Teaching Quality Forum (TQF)	Academic Quality Managers, sparqs	18
6/11/18	Scottish Educational Developers (SHED)	Educational Development practitioners (predominantly), some Educational Development leaders	15
7/11/18	Abertay University	Academic and professional services staff	27
14/11/18	Heads of Educational Development Group (HEDG)	Educational Development Leaders, Directors of Learning and Teaching	33
29/11/18	PEDRIO conference, University of Plymouth	Academic and professional services staff	11
23/1/19	University of West of England, UWE	Academic and professional services staff	14
24/1/18	Scottish Higher Education Enhancement Committee (SHEEC)	Senior managers with strategic responsibility for Learning and Teaching	7
20/2/19	sparqs Academic Representation Co-ordinators' Network	Student Association staff	6
Total num	ber of participants*	147	

(*A very small number of participants attended more than one workshop.)

The overall numbers and extent of engagement across the sector was in line with the project plans, although a couple of workshops had lower numbers than expected (SHEEC and sparqs). In terms of the demographics of participants, there was a good mix of staff with academic and professional services/academic-related and senior manager roles represented. Student representatives took part in the Enhancement Theme Leaders Group and a specific workshop was held for Student Association staff at the sparqs Academic Representation Co-ordinators' Network.

In each workshop, participants were organised into small groups and asked to complete a series of exercises. The first step required individuals to work on their own, identifying things that were important to them which could not be easily measured. Their task was to complete a specifically designed Evidencing Intangible Value Grid (Appendix 2). In the second step of the process, the small groups were asked to debate their ideas, using their individual grids to inform the discussion. Step three of the process invited each small group to identify their group's top three intangible assets and to have the details of these intangibles documented clearly on three individual grids with an associated title. For the fourth and final step, everyone in the workshop was tasked with reviewing all the priority intangible assets identified in each of the small groups and then to vote using sticky dots to identify:

i the top three intangible assets which they felt were most important to them as an individual in their practice (red stickers)

and

the top three intangible assets for which they had the most difficulty in identifying tangible measures of 'value' (yellow stickers).

Appendix 3 shows a sample Evidencing Values Grid that was completed by one of the workshop participants, prioritised by their group and then voted upon by everyone in the workshop. The intangible asset in Appendix 3 clearly resonated with participants as evidenced by the number of red and yellow voting dots. This methodology aligns with Bamber & Stefani's (2016) idea that there are ways in which our 'practice wisdom' can be collectively used to recognise impact. It also permitted subsequent qualitative analysis to identify common words, phrases and terms, and quantitative analysis of each workshop's top intangible assets and, in turn, the key intangibles arising from all nine workshops. The project team acted only as facilitators in each of the workshops. All outputs resulted from workshop participation.

3.3 Workshop outputs analysis and development of a novel intangible asset evaluation process

The outputs of each of the workshops were analysed and grouped together based upon common themes. This was done for each workshop, and then for the workshop series as a whole to identify cognate priority intangible assets. The qualitative textual analysis was undertaken manually. From this analysis, and drawing upon established models of organisational design and effectiveness, a new conceptual framework was developed, comprising four domains (see Section 4 below).

A key aim of the project has been to develop tools that could be used by the sector to identify and self-evaluate intangible assets in their context. Utilising the new conceptual model, a series of worksheets were developed drawing on 'cultural mapping' methodology. This relatively new but established systematic participatory approach has been used to identify, record, classify and analyse tangible and intangible aspects of a place's culture (Duxbury & Longley, 2016). The worksheets were trialled and refined following two further open invitation stakeholder workshops held in Glasgow and Birmingham in May 2019. Stakeholder engagement has been an important aspect of the project's methodology to ensure sector engagement, buy-in and to improve the accessibility and utility of the resulting project outputs. Details of the intangible asset evaluation process are provided in Section 5 of this report and the accompanying workbook.

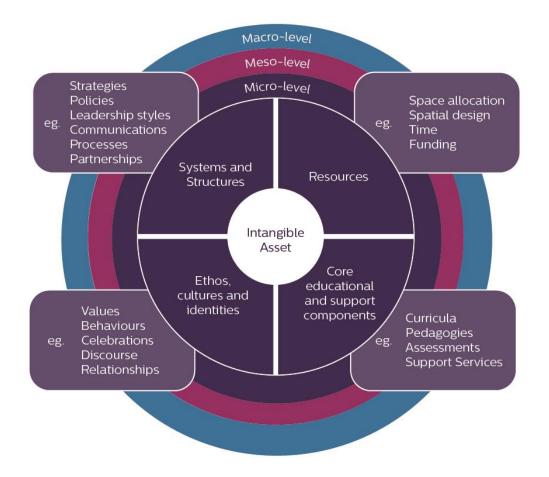
4 Results and discussion

4.1 New intangible assets in HE conceptual framework

This project has developed a novel 'Evidencing Value Framework' for the mapping and subsequent detailed analysis of intangible assets in higher education. This framework draws upon a combination of relevant academic literature on organisational design and effectiveness (see, for example, Katz and Kahn, 1978; Martins and Terblanche, 2003; May and Bridger, 2010) and empirical evidence gathered through this study. The framework, Figure 1, comprises four interrelated organisational domains:

- systems and structures
- resources
- core educational and support components
- ethos, cultures and identities.

Figure 1: Evidencing Value Framework



A series of examples of areas in which an intangible asset may be embedded and evidenced are indicated in the framework diagram. Given the individual nature of intangible assets, not all domains and examples will be relevant to all intangible assets, and other, better examples may emerge during the mapping process.

It is also important to note that the framework comprises three levels:

- micro-level: for example, module or programme level assets
- meso-level: for example, department/programme cluster/service level assets
- macro-level: for example, institutional or faculty/school/college level assets.

The strengths of this framework are its holistic yet also flexible nature. It can easily be adapted based upon an institution's particular organisational structure, context and the intangible assets under study.

4.2 Priority intangible assets arising from this study

The overwhelming feedback from the 147 workshop participants was that commonly used metrics in the UK higher education sector - such as student satisfaction, graduate earnings, non-continuation - were insufficient proxies for key aspects of their work and practice that mattered most. This aligns with the motivation for the project and, therefore, although it is not a surprising finding, it provided reassurance that this area is one of significant interest for the HE community.

Despite the variety of stakeholder groups involved in this study, there was a fairly high degree of commonality in terms of the intangible assets identified. Furthermore, there appeared to be an association between the intangible assets which participants felt were most important to them in their practice and those for which they had most difficulty in identifying tangible measures of 'value'. Of course, some intangible asset examples that were generated fell into one or other of these categories, receiving mainly red or mainly yellow dot votes.

Using the outputs generated through the nine initial workshops, it was possible to rank the importance of the intangible assets identified by participants. For each workshop, the intangible assets were ranked based on the number of votes they received and a list of the top five created. The results for each of the nine workshops were then collated and ranked to identify intangible assets arising from all of the workshops that were deemed to be of highest priority in terms of both importance and difficulty of measurement. The following intangible asset themes emerged as the priorities from this workshop series (highest priority first):

1 Sense of belonging/part of an (academic) community

Our participants indicated that this applied to both staff and students; something that is supported by a significant body of academic literature (for example Tinto (1975), Thomas et al (2017)) that students who feel part of a learning community amongst their peers and academic staff are more likely to successfully complete their studies and achieve better outcomes.

2 Building effective relationships (between students and staff, and between staff)

In accordance with Thomas et al's (2017) findings, our participants suggested that this helps to foster strong learning communities, and, for students, leads to potentially higher levels of engagement, knowledge and understanding, retention and achievement.

3 The wider transformational impact of a university education on students

Our participants indicated activities that lay beyond core academic studies, and also the longer-term impact of a university education in terms of attitudes, behaviours, values and attributes (metaskills).

4 Wellbeing of students and staff

Our participants suggested that individuals are much more likely to be engaged, productive and successful if they have positive wellbeing and mental health. Again, there are grounds for this within the academic literature (see, for example, Lewis et al (2011) and Split et al (2011)).

5 Student engagement

Our participants defined this as students' engagement and participation in their own learning and also the wider student learning experience in line with sparqs' Student Engagement Framework for Scotland (2012).

5 Undertaking an intangible analysis in your contextguidance for institutions

It is important to note that the priority intangible assets listed above are those arising from the project workshops. The methodology required participants to generate their own intangible assets rather than engaging them in discussions on a pre-prepared list. In using this set of resources, we therefore encourage you to do the same, in your own context, to create your own process of 'valuing' (Smith & Campbell, 2017, p 40). This may be at multiple levels (module/programme, department/service, institution/faculty) or at one level. The process has been designed to provide institutions with a better understanding of their own intangible assets, how their value and impact might be better evidenced and, finally, how they might be enhanced. While not being prescriptive, we anticipate that this exercise might prove beneficial for a variety of quality processes such as, curriculum design, internal quality review, ELIR, Teaching Excellence Framework (TEF) submissions, and the review of student support services. In order to undertake this exercise thoroughly and gain its maximum benefits, it is recommended that teams dedicate at least half a day to complete the activities described below. The notes on the stages outlined below should be used in conjunction with the accompanying 'Evidencing the Intangible Aspects of the Student Experience' workbook.

5.1 Identify your priority intangible assets from a stakeholder perspective

This initial stage of the process examines the following:

- What (are the intangible assets)?
- Who (are they important for and at what level)?
- Why (are they important)?
- How (are they currently, or how might they be measured)?

Having identified the area of interest - for example, curriculum design, review of student services, ELIR - it is important to first of all identify what the relevant intangible assets are, then prioritise as a team. The methodology can be adapted, as required, for smaller numbers but we recommend 10-25 people in a workshop setting is ideal. It is also important to set some context on a) the issue in hand, b) what is meant by intangibles and c) why they are relevant. A series of guidance notes for a sample workshop used in this study are provided in Appendix 1.

Having identified a series of intangible assets, the next stage of the process is to consider their value and how they might be evidenced.

5.2 Mapping the 'Big Picture'

The second stage of the process uses the Evidencing Value Framework (Figure 1), and relevant Evidencing Value Mapping Tool (micro, meso or macro-level) to undertake a systematic reflective analysis of the ways in which the intangible assets are valued, can be evidenced and how they might be further enhanced. This stage asks you to consider:

- Are the important intangible assets adequately captured and evidenced?
- Are there any opportunities for additional or new value creation and capture?
- Are there areas where you are overvaluing to the disadvantage of others?
- How do you know your activities are enhancing the intangible asset? Are you spending your time effectively?

In brief, this allows you not only to show where you are placing your efforts in terms of the IAs that you value, but also, once you know this, to engage in effective and targeted evaluation of those activities to find out 'what works'.

5.3 Evidencing value through narrative, affirmation and evaluation

Building on the second stage of the process, this stage examines how best to communicate the ways in which your intangible assets are reflected and evidenced in all four institutional dimensions of your organisation, at the relevant level, to evidence alignment, interrelationships and coherence and impact. This stage asks you to consider:

- How can we use this evidence to 'map' these intangibles through words, stories or other modes of communication?
- Does our current communication affirm the value of each intangible asset at the appropriate organisational level, for the appropriate audience, and for the greatest impact?
- Are our existing evaluation activities targeted in the right areas and asking the right questions?
- Are there opportunities to collect more nuanced and focused evidence of impact and case studies?

6 Conclusions

In conclusion, this project has developed a novel process for mapping and evidencing the value of 'intangible assets' that positively enhance the student learning experience and a conceptual model which has the potential to be used in a variety of quality and enhancement processes.

It is important to note that the authors are not arguing that metrics do not have value. Indeed, we fully understand their role and value in the HE context. However, we do contend that the sector should avoid falling into the McNamara trap of measuring and valuing only what is easily measurable, and discounting other important factors that we know, through 'inference', contribute to our and others' understandings of quality and excellence. These are important findings in the context of the growing focus on data-driven accountability through evolving methodologies such the Teaching Excellence Framework (TEF), and internal and sectoral quality reviews.

We hope you find this project and its resources useful, and welcome feedback and comments as you use the resources in practice.

7 Acknowledgements

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Appendix 1 - Identifying Intangibles Workshop Plan

The workshops aimed to explore:

- What 'intangibles' do I (and my colleagues) offer that are key to the success of the higher education?
- How might the impact of these 'intangibles' be best evidenced?

Workshop Outline Plan

1 Ice breaker (10 minutes)

Participants were asked to discuss in small groups, how success of higher education is currently measured in their institution?

2 TED talk (15 minutes)

The following TED 2018 video was played:

www.ted.com/talks/ingrid_fetell_lee_where_joy_hides_and_how_to_find_it?utm_campaign=t_edspread&utm_medium=referral&utm_source=tedcomshare_

As participants watched the video, they were asked to start thinking about the things in their working lives that cannot necessarily be 'measured' but which provide clearly measurable impacts on us and others.

3 Introduction to the project presentation (five minutes)

4 Participant Exercise 1 (15 minutes) - individual

Participants individually completed a copy of the Intangibles Grid (see over), coming up with as many examples as they could think of in 10 minutes. One grid per idea.

5 Participant Exercise 2 (15 minutes) - in small groups

Each group review the examples created and worked collaboratively to refine any examples and decide on their group's top 3.

6 Participant Exercise 3 (10 minutes) - individual

Each participant then voted using stickers on:

- i the three top intangible examples which they felt were most important to them in their practice (red dots)
- ii the three top intangible examples which they felt they had the most difficulty in identifying **tangible** measures of 'value' (yellow dots).

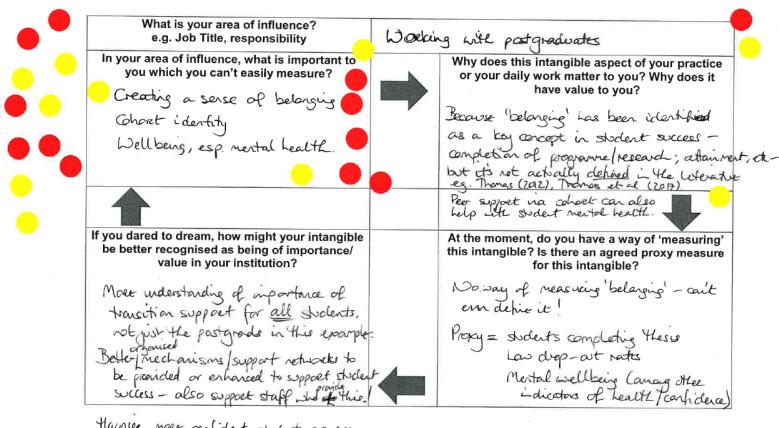
7 Participant Exercise 4 (five minutes) - individual

To finish, participants were asked to reflect on the workshop and identify at least one thing that they would take away from the discussions to change their current practice.

Appendix 2 - Intangibles Evidencing Value Grid

What is your area of influence, for example, job title, responsibilities?	
In your area of influence, what is important to you which you can't easily measure?	Why does this intangible aspect of your practice or your daily work matter to you and others? Why does it have value to you and others?
1	•
If you dared to dream, how might your intangible be better recognised and valued in your institution?	At the moment, do you have a way of 'measuring' this intangible? Is there an agreed proxy measure?

Appendix 3 - Sample completed Intangibles Evidencing Value Grid



thapper, more confident students art seen as the more inportant than employability dota, etc. (You said to dream!)

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