Quality as sense-making

Stephen Marshall
Centre for Academic Development, Victoria University of Wellington, Wellington, New Zealand

ABSTRACT
Sense-making is a process of engaging with complex and dynamic environments that provides organisations and their leaders with a flexible and agile model of the world. The seven key properties of sense-making describe a process that is social and that respects the range of different stakeholders in an organisation. It also addresses the need to account for the history and context of the organisation while also acting to change that context. This paper describes a conception of quality framed by sense-making. It explores the possible insights and guidance it can provide to leaders and others seeking a model aligning quality with forward-looking organisational change and capable of reflecting the complex relationships between educational organisations and their diverse stakeholders. Quality as sense-making flows from a recognition that education is too complex and too important to be defined by a small number of qualities relevant to a privileged group of stakeholders, or by limited performance indicators such as financial efficiency, instead it is experienced through an ongoing conversation challenging complacency and the status quo.

Introduction
The modern university is a relentlessly measured institution. Engagement with quality is inevitably a political process (Harvey & Newton, 2004; Martin & Stella, 2007; Skolnik, 2010; Blanco Ramírez, 2013). The act of asking and probing the nature of education and testing the value and impact of its systems and outcomes is inherently confronting. Questions of quality are rarely dispassionate and objective, the choice of quality model and the focus placed on specific systems or measures is an attempt to pre-define the landscape within which quality can be situated.

Internationally governments are constantly revising and extending quality systems with a focus on accountability for public funds and increasing the economic benefit of education. This focus reflects several pressures on educational systems including: the impacts of demographic and social change driving globalisation and increasing the scale and scope of education; changing patterns of stakeholder influence over the focus and purposes of education; financial challenges and constraints reflecting and driving changing models of government support for higher education; the evolving nature of the qualifications awarded by...
institutions; and, as with many other areas, the impact of rapid and constant technological change (Cunningham et al., 1997; Sporn, 1999; Marginson & Considine, 2000; Shattock, 2003; Altbach et al., 2009; Wissema, 2009).

Blanco-Ramírez and Berger (2014, p. 99) identified four key questions facing governments and educational providers that are implicit in the quality frameworks applied to national systems:

1. What is educational quality?
2. Who defines the criteria?
3. Who provides answers to the question?
4. Who benefits from existing definitions of quality? Who does not?

These questions are rarely directly and explicitly engaged with. The changing environment and expectations made of systems of education mean that any attempt to describe a perfect system or provider will be at best of historical interest as the needs of society will have moved on while the quality measurement was created. Westerheijden et al. (2007) made the point that national education systems are prone to adopt quality systems through a process of isomorphic change: mimicking the policy direction and initiatives applied in other contexts without a detailed assessment of the implicit and explicit assumptions validating the quality system being promoted and without consideration of the potential of such systems to enable and stimulate organisational changes aimed at building capability for the future.

The pace of change within higher education presents challenges to formalised and codified quality systems and to organisations designed to operate in more stable environments. Increasingly there is an expectation that higher education organisations demonstrate a more entrepreneurial approach to their work (Fayolle & Redford, 2014; Marginson & Considine, 2000) and even start to act with agility and urgency in their engagement with society.

Quality as sense-making provides a means by which continuous engagement in understanding the qualities of the institution or sector positions it for the future in a form defined for itself, rather than being dominated by external interests. This paper describes the sense-making conception and explores the possible insights and guidance it can provide to leaders and others seeking a model aligning quality with forward looking organisational change and capable of reflecting the complex relationships between educational organisations and their diverse stakeholders.

**Defining quality**

Sitting within a system of education it is easy to limit the definition of quality in ways that are influenced by the historical experience of education within that system, the social and political expectations that are made of education, even the language that dominates discourse. Many of the terms in common use in English discussions of quality (standards, norms, quality) do not clearly translate into other languages and systems of tertiary education (Adelman, 2009), suggesting a wider complexity that is not normally acknowledged.

Gibbs (2010), in his extensive review of quality in higher education identified the need to be clear about the purpose of engaging with quality, distinguishing between quality models that frame education as having specific outcomes (such as employment) and models that focus on the enhancement of students in more holistic terms, placing the learner at the centre. Auvinen and Peltonen (2004) suggested that multiple viewpoints need to be considered
including technological, economic and pedagogical perspectives. Giertz (2000) distinguished between the objectivist perspective (Barnett, 1992) adopted by external quality experts, which drives the use of quantitative performance indicators and the nominalist perspective (van Vught, 1997) adopted by education practitioners, which holds that there is no definitive and final description of quality and where trying to find such a description is fruitless. Perhaps deliberately this latter perspective on quality raises the risk noted by Marshall:

A risk of a pluralist construction of [quality] is that by allowing a multitude of perspectives and possible meanings of quality, the entire concept becomes meaningless, or at least less useful as a tool for change. (Marshall, 2011, p. 2)

The commonest cited framework for considering the quality of education is that provided by Harvey and Green (1993) who proposed that educational quality could be framed as falling into one of five different conceptions:

- Quality as exceptional. The definition of exception is in relation to some form of standard or norm that is exceeded.
- Quality as perfection. Describing the state of flawlessness.
- Quality as fitness for purpose. Potentially the most inclusive model of quality, fitness of purpose refers to the degree of utility or impact.
- Quality as value for money. This conception focuses on the provision of an adequate return on investment, as measured by cost-benefit tools typically focusing on the financial input costs.
- Quality as transformation. Describing quality as a mechanism that supports qualitative change and continuous improvement activities, focusing on quality as improvement rather than quality as assurance.

Definitions of **quality as exceptional** depend entirely on the robustness and validity of the standards that are proposed as measures. Defining standards is however complicated, while validating them is almost impossible. A further weakness of this model is the tendency, particularly when faced with financial and other constraints, for standards to define what is sufficient or good enough. This then can lead to a culture of compliance and a reduced focus on stimulating further change and improvement other than on the specific aspects of the organisation measured by the standard, rather than encouraging a variety of approaches to the evolution and improvement of learning (Harvey, 2005; Chalmers, 2007; Gibbs, 2010; Hénard, 2010; Law 2010).

The definition of **quality as perfection** focuses on consistency and the removal of all defects. This requires an unambiguous description of perfection and the ability to directly act on aspects that represent defects. The dynamic and evolving diversity of disciplines, qualifications and students represented in a typical university and the sense that a stable, coherent and consistent definition of perfection can be expressed seem inherently improbable (Brink, 2010). The co-production of educational outcomes (Ehlers & Pawlowski, 2006) also suggests that this definition is problematic in educational settings, as achieving perfection requires action on the part of the student as much as by the teacher, and demonstrating perfect consistency is an educationally inappropriate expectation of both students and institutions (Lomas, 2002).

**Quality as fitness for purpose** is consistent with the alignment of courses and programmes to specified learning objectives and graduate attributes that has become a feature of mass higher education systems such as Australia and the United Kingdom (Spronken-Smith et al.,
While it is perhaps the most inclusive and least confronting model of quality it is also the conception most subject to political influence. There is a multitude of possible purposes capable of being addressed by an educational system and the nature of these is constantly changing. Westerheijden et al. (2007, p. 3) observed that “fitness for purpose” and “fitness of purpose” are empirically empty terms: they can mean anything, depending on what is given as purpose.

Positioning quality as value for money addresses the very real challenges facing society in resourcing education. The importance of this conception of quality is consistent with Trow’s (2006) sociological prediction that mass education generates a focus on accountability for public expenditure on education. This also typically includes a shift in the underlying organisational model from one of public service to one dominated by commercial structures and models (McNay, 1995; Tapper & Palfreyman, 1998), such as the New Public Management framework (Marginson & Considine, 2000). This conception is silent on concerns regarding value to whom and how the costs are allocated within society. One response to this issue of defining value and purpose is to place the onus upon the student. The ideologically framed pressure to shift to customer-driven models of quality can be seen in Australia where the demand driven model of funding without caps is being controlled through application of market forces and competition (Pitman, 2014).

Quality as transformation is the most ambitious and the most challenging model of quality. This conception potentially frames quality as a process that can allow the diverse interests of different stakeholders to be represented. Harvey and Green (1993) identified two key elements of this conception: the extent to which value is added to the student; and the way in which the educational experience can empower them. While it is true that not all possible transformations are desirable (Rowan, 2003), a positive aspect of this conception is that the focus of transformation is the student rather than the institution, course or programme. Consequently the different aspects contributing to quality could be a result of activities undertaken by the student in multiple institutions, at the very least reflecting the extent to which secondary education prepares the student for subsequent tertiary education.

The transformative model is seen by some in the sector as one of the most important conceptions of quality (Lomas, 2002; the other is fitness for purpose). However there are issues defining the nature and focus of the transformation. If the transformation is conceived in intellectual terms it can be problematic to demonstrate the outcome (Newby, 1999), particularly given that the students are themselves an important determinant of any potential transformation (Ehlers & Pawlowski, 2006) and may not recognise or benefit from an educational experience until much later in their life. Intellectual transformation is also not the only form that can be enabled by education. Cheng (2014) identified a further six different transformations that are possible including critical capabilities such as the ability to judge and to cope with ambiguity; personal opinions, behaviour and attitudes; emotional attributes including motivation and resilience; physical changes reflecting the passage of time; social and spiritual reflecting the influence of the educational community and its values.

A key aspect of quality that Harvey and Green’s taxonomy is silent on is the focus and granularity with which quality is measured under the different conceptions. Value for money means very different things to a student (and their family) in comparison to the view of an institution or a government agency. As a sector, quality is typically framed by the students as a generalised cohort, aggregated by demographics, designated qualifications and
contextualised to specific educational providers. The use of qualifications in particular acts as a form of closed discourse (Filippakou, 2011) preventing a consideration of a wider set of qualities potentially of value to society. The growing importance of generic attributes as a measure of educational outcomes (Gibbs, 2010; Spronken-Smith et al., 2015) suggests that the limitations of qualifications in their traditional sense are apparent to the sector.

Also missing from the taxonomy is explicit recognition of the role that the diversity of stakeholders in education play in the salience (Mitchell et al., 1997) of different combinations of these qualities as measures of organisational quality and success. The literature lists a large number of different stakeholders in higher education including students; alumni; donors; parents; other institutions or providers; accrediting agencies; vendors and suppliers; employers; taxpayers; non-government organisations; government; and academics, both individually and collectively as members of disciplinary groups and other organisations such as unions or advocacy groups (Amaral & Magalhaes, 2002; Jongbloed et al., 2008; Watty, 2002). Inevitably, such a diverse group will conflict over quality and, depending on their relative power, influence the operation of quality systems. The resulting power-imbalance has been suggested as a contributing factor to ethical failures in higher education (Prisacariu and Shah, 2016), reflecting another dimension missing from the Harvey and Green taxonomy.

Sense-making

Another conception of quality missing from Harvey and Green’s taxonomy is the framing of quality as a mechanism for organisational sense-making (Weick, 1995). In this conception, the engagement with the qualities of education stimulated by change is done in order to develop a deeper understanding of education. Defining and measuring the qualities of education can then be seen as providing a lens for re-evaluating and exploring the activities of students, organisations and the sector as a whole, potentially suggesting new ideas or possibilities that build on the intrinsic qualities of the existing system and enabling a diversity of voices to be valued and incorporated within the quality sense-making activities.

For an individual student this conception of quality is embodied in the pedagogical processes driven by feedback and the scaffolding of assessment. Organisationally, quality as sense-making is evident in the processes used by teachers in the constructive alignment of courses and programmes (Biggs, 1996) and in the way that effective quality systems inform strategy and operational decision-making. For a sector or national system this conception is apparent when quality activities expose the diversity of educational contexts, pedagogical models and outcomes being achieved by students, teachers and providers.

Sense-making is characterised by Weick (1995, p.17) as having seven properties. Sense-making is:

- social in nature;
- grounded in identity construction;
- retrospective;
- enactive of sensible environments;
- ongoing;
- focused on and by extracted cues;
- driven by plausibility rather than accuracy.
Social

Collective and social engagement in sense-making underpins much of Weick's model of sense-making in organisations (1995). Sense-making is undertaken by individuals but it also occurs within an organisational context. The participation by a range of stakeholders in an organisation generates a collective understanding and meaning for the organisation as a whole and its connections with wider society.

Sense-making is influenced by the nature of the changes being experienced, the roles that different participants have and seek in the organisation, the wider economic and political landscape the institution is situated within. Organisational change processes, strategy activities and the measures used to quantify the activities, systems and organisation as a whole also act upon the experience of sense-making and, consequently, its influence upon the perceptions of quality.

Organisational sense-making can be collegial, a means of building collective will and engagement, or it can be destructive, with disparate interpretations conflicting and preventing progress. Weick is clear that sense-making is sustained and enabled by communication, by individuals sharing their understanding and supporting a mutual development of meaning (Weick et al., 2005; Weick, 2009).

Interaction exposes the participants to the different cognitive frames or viewpoints (Kaplan, 2008) being used by others to interpret common experiences or knowledge and helps stimulate creativity and an awareness of the potential for complacency or stasis. Leadership is essential to the process of organisational sense-making, helping different participants re-engage with sense-making with a collective perspective balancing their own position and seeing others similarly do so, a concept Weick describes as ‘heedful interrelating’ (Weick, 2009, p. 57).

Identity

The sense-making property of identity recognises that people have a set of identities that they use to frame their understanding of self and their relationships with other people collectively in groups. The boundary between the formal organisation and its many stakeholders is invariably permeable, with many staff positioning themselves as members of stakeholder groupings that include a predominance of external peers.

Sense-making as an activity undertaken by people is inevitably influenced by the identities they are constructing and the actions taken to enhance those identities individually and as groups. People will use different models of meaning to position themselves socially and politically within their organisation in order to maintain or build actual or perceived status (Cornelissen, 2012), both internally and externally to the organisation.

The construction of individual identities and reputations operates within groups of peers and stakeholders. Any attempt to make sense of quality within educational organisations, including the impact of technological innovation, must respond to that individual imperative as well as the organisational defensive routines (Argyris, 1990) enacted as policies or actions preventing threats to the prestige or status of particular groups within and without the organisation.

Retrospection

The sense-making approach is inherently reflective, considering the consequence of what has occurred in order to attach meaning to the current state of the organisation, rather than
accounting for the past performance. Weick proposes (1995) that future events can be understood but only as a result of considering them as if they have already happened. This positions quality information as a tool for informing future actions enabled by the current capabilities, rather than simply accounting for past performance, as so many quality systems do in practice. This view of evidence of past capability can then be used in organisational sense-making activities such as strategic planning, particularly in the form of scenarios (Godet, 2010) strategic narrative generation (Fenton & Langley, 2011) or as part of activities like formal benefits analysis (The Treasury, 2014).

**Enaction**

Enaction poses the idea that actions are commonly undertaken in response to imperfect understanding but consequently rationalised or discovered to be true on the basis of experience of the outcomes. More simply, we act in order to think. Weick’s (1995) intention in identifying this property is to help those engaging in sense-making avoid an overdependence on purely rational, external or deterministic models.

In educational terms this approach is consistent with socially constructed pedagogies where the learning experience is created by the participants and subsequently interpreted and reflected upon. Educational institutions have been described as prone to strategic paralysis through their attempts to completely analyse situations prior to acting upon them (Christensen et al., 2008), often driven by an attempt to be seen to fairly engage with competing stakeholder interests.

By making sense of the ways in which individuals in the organisation have understood prior experiences with quality, it is possible that new ways by which change can happen will become apparent without the need to disrupt the existing meanings and associated values held by different stakeholders.

This interpretive and analytic approach to change has significant potential advantages in the context of education. It respects the diversity and complexity of providers, their myriad stakeholders and the different purposes education serves in society. When educators engage with new forms of education they are enacting a new educational environment and shaping wider conceptions of the role that higher education plays in modern societies. By avoiding crisis, transformation and disruption, it sustains the existing activities and outcomes of the organisation but still provides a means by which necessary and useful change can be enabled. A sense-making perspective, undertaken collegially and across the entire organisation, is compatible with the values of academic freedom and collectivism that define universities and can help reinforce that shared sense of identity and meaning that are integral to successful organisations in any context.

**On-going**

The on-going property of sense-making emphasises the need to continuously reengage with the context of an organisation, the importance of understanding the dynamic nature of the world and the fragility of static models of organisational and educational quality.

Organisationally, the on-going nature of sense-making also respects the reactive quality of organisational decision-making (Weick, 2009, p. 56). Many important decisions in the life of an organisation are by necessity reactive, responding to black and grey swans (Taleb, 2007).
The risk associated with many quality systems is that they embody rigid assumptions about the organisation and its context that, rather than building resilience (or ‘anti-fragility’ in Taleb’s (2012) parlance), make the organisation less capable of sustaining itself in a rapidly changing environment.

**Cues**

Cues extracted from the world are key to sense-making as they are the points where individuals notice the need to re-engage with their models of meaning. Effective quality models need to generate cues for sense-making if they are to shift conceptions of organisational capability and stimulate improvement. Sense-making is not automatically triggered by the introduction of new ideas for change. Individuals have to notice the key features of the change as cues that trigger sense-making activities.

A natural response to sense-making cues is to develop simplifying analogies, to relate the key features of the change to those of existing systems or activities, to make the new idea fit within existing models of the world. This preference for a standard personal set of behaviours is described as the response repertoire (Mead, 1974; Weick, 1979) and while often characterised negatively as change-resistance it reflects an entirely sensible mechanism intended to maintain efficiency and personal self-worth.

Importantly, these cues need to be apparent to the various stakeholders of an organisation, even those not directly affected by any change, as their different perspectives and narratives will influence those who are directly affected.

**Plausibility**

The final sense-making property, plausibility, is the mechanism by which sense-making responds to complexity and ambiguity. Rather than seeking some hypothetical perfection when making decisions, the reality is that most people settle on a plausible course of action and move on. Dithering is widely recognised as unproductive and many leaders recognise the value of making a ‘good enough’ decision quickly in the majority of situations. This is a key distinction with the sense-making conception of quality that enables it to cope with rapidly changing and ambiguous contexts.

Sense-making is often triggered in what Weick (1995) described as ‘ambiguous situations’. These are situations that are unclear and commonly characterised by multiple interpretations and a resistance to comprehension driven by information gathering. The complexity of universities and the diverse range of stakeholder viewpoints are respected by the plausibility property of sense-making. The process is not intended to identify ‘truth’, there is no correct or accurate result from sense-making. Meanings are inherently personal and collective organisational meanings and identity will always represent compromises or discordances with the individual sense. This avoidance of certainty respects the complexity of the organisational challenge facing higher education.

These seven sense-making properties should be understood to inform understanding of quality as sense-making, helping sensitise participants to the experience of sense-making both individually and organisationally. Sense-making is not products or artefacts such as strategies, plans or scenarios, it is the process of engaging with information on the qualities such artefacts reveal. It arises from the interplay of action and interpretation. By adopting a
sense-making approach when considering changes in educational activities, the focus is maintained on understanding the nature of the individual and organisational experiences. The sense-making process connects the abstract potential of any change with the concrete experiences and reality of the enacted educational experience.

**Sense-giving**

Sense-making is complemented by the concept of sense-giving: the intentional attempt to change how other people think. Weick (2009) defines sense-giving as a sense-making variant undertaken to create meanings for a target audience. Framing and influencing of other people’s ideas is essential to leadership and underpins the concept of sense-giving particularly when expressed through organisational planning and strategising. It should be realised that sense-giving is not the creation of a vision, a strategy, or measures of quality, rather it is the process of awakening in others the frame that is subsequently expressed in the collective development of these artefacts of sense-making. Sense-giving may be the attempt to share a very clear meaning held by a leader or it may involve the introduction of ambiguity, the creation of cues, or the enacting of specific activities intended to stimulate sense-making in particular ways.

More broadly, sense-giving can be seen in the ideas of shaping strategies (Hagel et al., 2008) where a strategic narrative is used to influence the wider organisational environment in ways that stimulate other organisations to act. Sense-giving and sense-making encapsulate the ideas of persuasion and influence that commonly characterise the leadership of universities and can be seen as a model for understanding many of the challenges and experiences of institutional leadership.

**Framing Quality as Sense-making**

A conception of quality defined by these properties is potentially far more inclusive, agile and future-oriented than other conceptions of quality. Recognising the conception of quality as sense-making emphasises the possibility that we may not know all there is to discover about quality in education and the organisational forms and systems needed in the future. Models that are too rigidly defined around historical models of provision or too focused on measuring narrowly defined outcomes run the risk of failing to notice substantial changes inconsistent with that world view.

Quality improvement needs to be seen as a collection of actions undertaken by or on behalf of the key stakeholders in education. Aligning the information to specific stakeholders and recognising the ways by which they can act to improve the qualities they value helps ensure that the issues described above are at the very least mitigated.

Students need a quality improvement framework that sustains their engagement with learning throughout their life, assisting them in identifying opportunities to develop new skills and knowledge, motivating and engaging them in education with a level of intensity designed to maximise the benefits and helping them represent their personal qualities in a way that enables their success.

Education organisations need a quality improvement framework that helps the organisation engage in collective sense-making and reflection so that change can be undertaken continuously in manner that respects the core values and role of the organisation. Elements
of the framework need to ensure that the organisation has the information needed to manage its resources and activities effectively but the focus needs to be on the qualities of the outcomes being achieved and far less on the change mechanisms being used, as in the transformation notion of quality.

The shift of the focus of quality and accountability to the level of the individual, rather than the dominance of educational mechanisms means that some providers could specialise and focus on particular capabilities as service providers to students and other providers. This would see potentially a disaggregation of existing educational organisations and far greater collaboration between different organisations, including community groups, non-government organisations and employers.

Van Damme (2004) identified five categories in their accreditation framework that can provide some clarity and structure to a quality as sense-making framework extending beyond the common input, process and output focus to address both the context for learning and the use of feedback as a tool for improvement. **Context** measures may not be amenable to direct influence but provide information that can contextualise any analysis of the educational activity being assessed. They include potentially information on demographics and economic activity, the history of an organisation and other factors, which can influence the measures in other categories. Sense-making focuses on context through the recognition of the importance of organisational and stakeholder identities and the recognition of the impact of past activities through retrospection.

**Input** measures are the resources that support educational processes. As well as financial and personnel measures they include information on the students such as prior educational success, which may guide selectivity and consequently influence the starting point for future educational development. Input quality measures are popular with some elements in the sector as they speak to the adequacy of the level of funding provided or to the élite nature of the education being provided. Retrospection is important in understanding how these inputs have influenced the qualities currently evident but inputs also can generate sense-making cues, particularly if they reflect the changing environment.

**Process** measures speak to the dynamic state of educational activities. The level and type of activity being undertaken, the pedagogical structures being used and the ways feedback mechanisms are affecting the decisions being made. Process measures focus on the mechanisms of education. From a sense-making perspective, the process is fundamental to the property of enaction and the need for on-going activity that can generate additional cues for change or evidence that sustains it.

**Output** measures increasingly dominate international quality frameworks as they speak to the dominant quality narratives of accountability and value for money while avoiding any need to take direct responsibility for the educational process. Pedagogically meaningful output measures are challenging to define (Gibbs, 2010) but sense-making is more interested in the plausibility of outcomes rather than their rigorous measurement and so it is much more amenable to the ambiguous and uncertain measures that typify much of education.

The **Feedback** category is for measures that reflect holistic judgements by stakeholders in the educational process that are able to subsequently directly or indirectly influence the measures in the other categories. Examples include the impact of reputation or the good will of alumni. Sense-making is itself a form of active feedback, with all of the properties stimulating a holistic and dynamic quality conversation capable of encompassing diverse, disparate and even contradictory ideas.
| Focus                        | Context                                                                 | Input                                                                 | Process                                                                 | Output                                                                 | Feedback                                                                 |
|------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Individual learner           | What is the personal situation of the learner and what is motivating the desire to learn? | What is the learner bringing to the educational process that is enabling successful engagement? | What activities sustain the learner, motivates learning and generates outcomes the learner values? | What evidence is the learner using to demonstrate the value of the learning experience? | What helps the learner understand the impact of the learning experience and motivates ongoing learning? |
| Provider-Individual learner  | What is the provider doing to understand the context of individual learners? | What is the provider doing to guide learners into appropriate programmes of study? | What is the provider doing to enable learner autonomy? | What evidence is the provider using to demonstrate the impact of their activities on learners? | What is the provider doing to help learners choose the next steps for their education? |
| Provider                     | What is the provider doing to understand its organisational and educational strengths, weaknesses and values? | What resources are being invested into educational activities? | What is the provider doing to maximise the effective and efficient use of the resources invested in educational activities? | What evidence is the provider using to show that resources were used effectively and efficiently? | What is the provider doing to improve its capability to educate learners now and in the future? |
| Provider-Provider/Stakeholder| What other providers and stakeholder groups contribute to the targeted learner population and educational context? | What differentiates the provider from other providers and defines the contribution that they make to the learner population being served? | What is the provider doing to maximise their own and other provider or stakeholder contributions to the success of the targeted learner population? | What evidence is there of a collaborative contribution to learner success with the provider drawing on the strengths of other providers and stakeholders? | What are providers and stakeholders doing to strengthen their collaboration and address gaps in the services provided to the targeted learner population? |
| Provider-System              | What role is the provider playing in the system and how does that role relate to those of other stakeholders at a system level? | What capabilities, systems and resources are contributing to the role played by the provider? | What is the provider doing to effectively operate within the system? | What evidence is there of the nature of the impact the provider has had on the system and the value of its role within that system? | What helps the provider continuously re-evaluate their role in the system and respond with systematic improvements? |
| System                       | What does society need from its educational system and are those needs being met in a diverse set of contexts? | What capability and resources are contributing to the range of societal needs made of the system? | What is enabling learners and providers to operate effectively and efficiently within the system? | What evidence demonstrates the impact of the system on individual learners and the value contributed by specific providers? | What helps learners identify effective learning pathways enabled by the system? |
|                              | What is being done to support systemic responses to a changing context and needs? | How are providers encouraged to diversify and change? | What is being done to enable experimentation with new or different approaches? | How are diverse outcomes recognised? | How are provider roles sustained while encouraging diversity and change? |
|                              |                                                                          |                                                                      |                                                                          |                                                                          | How is useful and informative failure recognised and valued? |
Applying the CIPOF framework to a sense-making conception of quality suggests a series of questions that can be posed from a variety of stakeholder perspectives (Table 1) that are intended to stimulate quality sense-making and sense-giving responses.

The three major foci shown here (individual learner, provider and system) form the unit of analysis but are also capable of being aggregated in meaningful ways to help manage the complexity of the resulting body of quality information. The learner focus can be analysed by source cohort (that is, school leaver, employment, profession, or community), or by cohort within the institution (qualification, location). Similarly the organisational focus can be differentiated by the type of institution within a sector (university, polytechnic, for-profit) and the sector itself can be contrasted with other national systems.

The diversity of views that can be constructed of the sense-making foci can be used to generate a rich diversity of opportunities for leadership and ways in which the organisation’s strategic goals can be achieved. The goal is not to generate a unified and homogenous conception of quality but, rather, to enable a range of alternative conceptions to co-exist in a way that builds organisational resilience and supports multiple changes simultaneously.

It is important to re-emphasise the point made earlier. The questions in Table 1 are not a sense-making quality framework, they are provided as ideas for how a sense-making conversation might be started. The purpose of sense-making is stimulating a process of engagement with quality that will generate a range of products of outcomes that may resemble a formal framework but these are merely transitory tools that should be abandoned or re-invented as part of continuous and on-going engagement directly with the educational process.

Success in the sense-making conception of quality is apparent in the diversity of educational initiatives that are attempted. Any one initiative is highly unlikely to respond to the diverse range of qualities need for the future and a diverse range of approaches increases the likelihood that one of them will anticipate an unexpected shift in the context of the organisation.

Recognising the value of this diverse approach and actively engaging with it, means the organisation is more likely to encourage further engagement and learn how to develop in ways that respond to change in real time.

Conclusion

A key feature of a future focused quality system is its ability to provide guidance and support in real time to the stakeholders of educational systems (students, teachers, employers, educational leaders, government agencies and others) formatively allowing agility, choice and responsiveness in the face of changes in the educational environment, rather than reporting summatively after the moment to act has passed.

What would encourage educational organisations to start examining their capability to make substantive changes and to systematically improve their activities? The pace of change means that the skills needed by organisations are those that enable agility and responsiveness to new opportunities. Success in this space is a consequence of strong leadership working with a sense-making approach to quality that builds commitment and motivation from people throughout their organisations.

How can these shifts in capability be enabled and sustained? The questions in Table 1 illustrate the range of interfaces between stakeholders that a quality system for education
needs to consider. Quality as sense-making flows from a recognition that education is too complex and too important to be defined by a small number of qualities relevant to a privileged group of stakeholders, or by limited performance indicators, such as financial efficiency or direct employment outcomes, instead it is experienced through an on-going conversation challenging complacency and the status quo.

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ORCID

Stephen Marshall http://orcid.org/0000-0003-1404-9254

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