More Value to Defining Quality

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ABSTRACT *There are lots of definitions of quality, and also of quality in education. Garvin (1984) discerns five approaches: the transcendental approach, the product-oriented approach, the customer-oriented approach, the manufacturing-oriented approach and the value-for-money approach. Harvey and Green (1993) give five interrelated concepts of quality as: exceptional, perfection (or consistency), fitness for purpose, value for money and transformative.*

A new definition of quality is needed to explain recent quality issues in higher education. This article describes a quality concept with four constituents: object, standard, subject and values. The article elaborates on the values. Four value systems derived from Beck and Cowan (1996) are transformed into four value systems on quality and quality management: control, continuous improvement, commitment and breakthrough. These value systems make it possible to explain some recent developments in quality management in higher education.

Keywords: quality; quality management; values; EFQM; ISO9001:2000; external evaluation systems

Introduction

The popularity of the use of the European Foundation for Quality Management Excellence model seems to have decreased. On the other hand, more universities are applying for an ISO9001:2000 certificate as part of their internal quality management system (Mira *et al.*, 2002; Hutyra, 2005). Almost every country in the world has adopted an external evaluation system for higher education (mostly an accreditation system, some institutional audits). These are interesting developments in the field of quality management in higher education.

Former ways of thinking about quality (Garvin, 1984; Harvey & Green, 1993) are not sufficient any more to explain what is happening. Our preconception is that the recent changes in internal and external quality management are related to changes in values. First the constituents of the quality concept are described. Also explained is why 'value' has been

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chosen as the main constituent. Four definitions of quality are presented out of different value systems. The usability of the value systems on quality is presented by tackling three recent developments in higher education.

What is quality?

Many authors have been engaged in the definition of quality. Garvin (1984) discerned five approaches: the transcendental approach; the product-oriented approach; the customer-oriented approach; the manufacturing-oriented approach; and the value-for-money approach. In the transcendent approach quality is absolute and can be objectively judged. Quality is what is indisputably the best, the quality without a name. Vinkenburg (1985) called it the 'approach from the ideal image'. Often Pirsig is cited in this respect: 'Quality is neither mind nor matter, but a third entity independent of the two....even though Quality cannot be defined, you know what it is' (Pirsig, 1974). Lundgren (1983) transferred this to education: 'But what is quality of education? There is probably no answer to that question as there is no simple answer to the question: "What is life?". Garvin is little used in education. Many academics did not find it easy to translate this to education. What is the product, the customer, the manufacturing process in a university? One of the most cited articles on quality in higher education was written by Harvey and Green (1993) under the title 'Defining quality'. Also Harvey and Green stated that quality is a slippery concept. They chose to group the differing conceptualizations of quality into five interrelated concepts of quality. The authors stated that quality can be viewed as exceptional, as perfection (or consistency), as fitness for purpose, as value for money and as transformative. Especially the last definition does more justice to education as a process wherein learners are the centre of the action: they get the added value, are the added value, transform.

Constituents

A quality concept can be described by four constituents: object, standard, subject and values. Quality needs first a clarification about the object. The quality of 'what' are we talking about? Are we talking about the quality of the lecture or the lecturer, the syllabus or the curriculum? Or about the quality of the organisation of the curriculum or about the content of it? Are we talking about the quality of the students? Or even the quality of the university as a company? The object can be a product, a process or a system. ISO9001:2000 focuses on the quality management system of an organisation. Garvin speaks of a product-oriented or manufacturing-oriented approach. De Groot limited the quality of education to the quality of the learning results. 'Quality must show'. And: 'In the case of education in the end it is not important how beautiful we teach it, but how much pupils learn from it, what the outcome is. In the end it is about the independent variables, results, learning effects' (De Groot, 1983). Vinkenburg argued that the object of quality is more than learning results. 'In the context of services and interaction driven services specifically the concept of quality does not refer to a thing or its qualification, but to an event or meeting that touches the ones involved' (Vinkenburg, 1995, p.194). In the words of Pirsig (1974): 'Quality is not a thing. It is an event'.

   It is important to be clear about the object of quality. Harvey and Green, for example, focused on the object of quality in one of their definitions, when they defined quality in education as transformation. 'The transformative value system of quality is rooted in the notion of "qualitative change", a fundamental change of form. Ice is transformed into water

and eventually steam if it experiences an increase in temperature' (Harvey & Green, 1993, p. 24).

Quality furthermore needs standards. The American Society for Quality (2007) defined standards as such: 'The metric, specification, gauge, statement, category, segment, grouping, behaviour, event or physical product sample against which the outputs of a process are compared and declared acceptable or unacceptable'.

What features should be taken into consideration and what standards should be used to judge its quality, if the content of a curriculum is concerned? If it is the student, should the end terms or competences at bachelor degree level be the specifications, like the Dublin descriptors that are in use in Europe for this purpose? Garvin, as well as Harvey and Green, used 'value for money' as a specification in their line-up of definitions. 'Quality is the degree of excellence at an acceptable price and the control of variability at an acceptable cost' (Garvin, 1984).

This leads to the next question: *who* says what is value for money, and *who* sets the standards? Is it the lecturer who knows what is necessary for graduates to know in their discipline? Is it the world of work that knows what competences alumni need to have when they start to work? Talking about the way of teaching as an object the student will be an important judge of this. 'What the hell is Quality? What is it? And what is good, Phaedrus? And what is not good?—need we ask anyone to tell us these things?' (Pirsig, 1974). Like beauty, quality lies in the eyes of the beholder. Garvin then talks about the customer-oriented approach. In education we rather speak about stakeholders.

A distinction can be made between external and internal stakeholders. The world of work can be seen as an external stakeholder, they employ the alumni of our institutes. The method for improving the quality of higher education based on the EFQM model also mentions the government, the supplying schools (secondary education) and partners with whom the university cooperates as stakeholders (Van Kemenade, 2004).

Internal stakeholders include staff. Giertz (2000, p. 7) stated:

> The traditional value system is that, as academics, we work within the same framework and share the same values and even though we might not be able to explain to outsiders what quality in higher education is, that constitutes no problem, since *we* still know—*we know it when we see it*.

Other employees and management are internal stakeholders, as is the student. Others rather call the student a participant in the learning process. Again if we are not clear from whose perspective we are discussing, our discussion on quality will get us nowhere.

The purposes of each of these stakeholders can differ and that makes quality difficult to define. 'At best perhaps, we should define as clearly as possible the criteria that each stakeholder uses when judging quality and for these competing value systems to be taken into account when assessments of quality are undertaken' (Harvey & Green, 1993).

Harvey and Green elaborated further on the issue. In a paragraph entitled 'The nature of quality' they state that 'quality is a value-laden term: it is subjectively associated with that which is good and worthwhile'. Garvin speaks about a value-oriented approach but immediately narrows it down to value for money. Literature on values might help us to discover what different value systems on quality there might be and to make a more homogenous classification. Values are the motor of our behaviour. As Robbins (1991) noted: 'We need to realise that the direction of our lives is controlled by the magnetic pull of our values. They are the force in front of us, consistently leading us to make decisions that create the

direction and ultimate destination of our lives. This is true, not only for us as individuals but also for the companies, organisations, and the nation of which we are a part'. Values are: 'the way things get done around here' (Oppenhuisen, 2002). Quality education matches our values.

Value systems

Many scientists have tried to define value systems (Graves, 1974; Deal & Kennedy, 1985; Ginger, 1995; Beck & Cowan, 1996; Hofstede, 1996; Barrett, 1998). Beck and Cowan (1996) discerned eight value systems but, for the sake of transparency of our argumentation, only four are presented here, which suggest four new value systems on quality and quality management: process control, continuous improvement, commitment and breakthrough.

1. Control

In the first value system derived from Beck and Cowan (1996) the world is a potential chaos, and needs to get into order. So people stick to rules and procedures. They are loyal or comply. Stability and one-track minds are dominant. They called it 'order' or 'truth force'. In quality management, control is a preferable title.

Jouslin de Noray (2004) called process control the first revolution in quality management. This is about rules, procedures, standards. Standards have been in use from the time of the Egyptians building their pyramids and the guilds in the Middle Ages controlling the quality of the output of the craftsmanship. This value system on quality can be recognised in the scientific management of Taylor (1856–1915) and in Shewhart's publication *Economic control of quality of manufactured product*. Also the ISO standards originally were meant to control the quality of the products of suppliers and fit in this value system. The object can be a product, a process, a system or a person (personal certification).

Shiba (2005) gave a symbol to this value system. 'Process control is symbolically indicated by a flat line indicative of the goal of synchronizing and minimizing the variation of all the parts of an industrial process so that mass production was possible'. Control will not result in quality improvement but in quality standardisation.
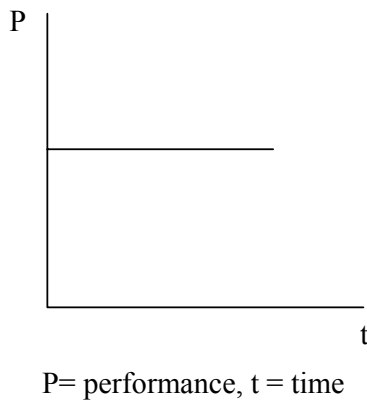

P= performance, t = time

FIGURE 1.   Value system on quality = control

Shiba recognised in this value system the Theory X of McGregor (1985) stating that people want stability and want to be managed. Then the middle manager plays the central role in quality. We might change the processes, but keep the standards unchanged.

Hardjono (1995) mentioned in this value system a focus on effectiveness and efficiency. The definition of quality in this paradigm is: the extent to which the object fits to the standards. In the educational setting this could mean: does education provide society with graduates that have the knowledge and skills society needs?

2. Continuous Improvement

In the second value system the world is a universe full of chances to improve your own position as long as you put effort in it. Possibilities are unlimited. Results and profit are dominant. Beck and Cowan (1996) gave it the colour orange and called it 'success' or 'strivedrive'. In quality management the title 'continuous improvement' is preferable.

Jouslin de Noray (2004) called this the 'second revolution in quality management'. It is about results and success. In this value system the customer has an important role to judge the success you have reached. One even has to delight the customer. Here the plan-do-check-act cycle is crucial. Models used are the Malcolm Baldrige Award, the Excellence Model (EFQM), methods such as the Balanced Scorecard and Six Sigma. Shiba (2005) called it 'incremental improvement', which is symbolically indicated by the staircase graph, indicative of the goal of incrementally and repeatedly improving the business's product or service.

Then the shop-floor worker plays the central role in quality. We might change the standards but keep the business unchanged. Continuous improvement will not result in innovation. The definition of quality in this value system is: the extent to which the object exceeds the expectations of the customer. In an education stetting, this could mean: are the learning results that are asked for by students and the world of work exceeded?

3. Commitment

In the third value system the world is a place where people live that are equal. Contact is cherished. People become members of a community, seek for harmony. Dominant are the human factor and connection. Beck and Cowan (1996) called it 'community' or HumanBond.
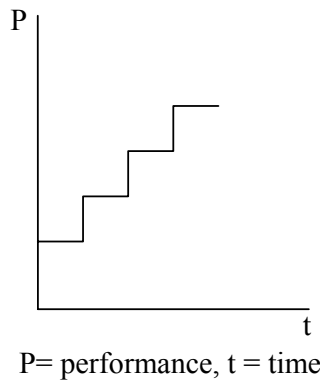

P= performance, t = time

FIGURE 2.   Value system on quality = continuous improvement

TABLE 1.   Control versus commitment

Control	Commitment
Explain, laws, cause-effect	Understand, intention, empathy
Try to manipulate and rule the outside world	Try to understand, accept the inside world
We want to shape the world	We want to make the world worth living in
Science, cool, ratio, calculable phenomena	Art, warm, feeling, incalculable phenomena
Rational convincing	Rhetorical seducing
To measure is to know	Who measures, still knows nothing
Criteria like profitability, effectiveness, alertness	Criteria like curiosity, wisdom, concern
'Herrschen als Grundmotiv der Weltanschauung'	'Lieben als Grundmotiv der Weltanschauung'
To rule as basic motive of the World value system	To love as basic motive of the World value system

The title 'commitment' suggested by Vinkenburg (2006) is preferable here. Vinkenburg (2006) compared a commitment and a control value system.

Shiba and Walden (2006) did not mention the value system of commitment, although they dedicate a chapter of their book to communities and societal values. They see an increasing need for shared learning and integration with a variety of extra business societal concerns. The move from continuous improvement to breakthrough can have arrogance as a barrier. The arrogance here is that the producer thinks that what is already being made and sold is what customers will always want. Also in education competences needed change. To break this barrier involves relooking at the fundamental objectives of the business and seeking new societal values beyond current business interests. For that, Shiba and Walden state, communities are needed.

Organisations in this value system have socialisation competence (Hardjono, 1995). Organisations are oriented towards flexibility. The organisation is focused not only on the success here and now but also in the rest of the world and for future generations. Quality is the extent to which the goals of all stakeholders are fulfilled, taking into account here and now and the future. In an educational setting this could mean: do the students get transformed into citizens of the world?

4. Breakthrough

In the value system of synergy, the world is complex and full of choices and dilemmas. Everything changes fast. People create space to think and analyse. Systems thinking and intellectual freedom are dominant values. Beck and Cowan (1996) named it 'synergy' or flexflow. In quality management, the title breakthrough is preferable.

Jouslin de Noray (2004) called breakthrough the 'third revolution in quality management'. It is about innovation. Shiba and Walden (2006, p. 31) defined breakthrough as 'a fundamental change in an organisation's direction—as response to an abrupt, radical change in the business environment'. Shiba (2005) argued that in the 1970s and 1980s incremental improvement was not enough for companies to survive. They had to look for new businesses. Change the business, let the values be unchanged. 'Top-upper managers' play the central role in this breakthrough. In the quest for breakthrough companies must move beyond rational thinking in some circumstances. Shiba called this, besides McGregor's Theory X and Y mentioned above, 'Theory Z'. A business has its own life cycle, before the decrease a company should re-invent itself, redesign its processes and start a new life cycle.
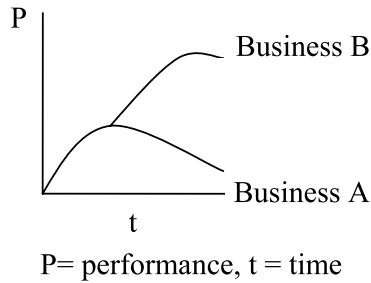
P= performance, t = time

FIGURE 3.   Vision on quality = breakthrough from business A to business B

Organisations in this paradigm have according to Hardjono (1995) intellectual competence. They are oriented at creativity. Quality is the extent to which the goals of all stakeholders will be fulfilled in the future. In the educational setting this could mean: are students grown up to be leaders in the future society? The four value systems for quality and quality management are described in Table 2.

Developments in higher education

What is the use of these value systems for higher education? The different value systems might help to explain developments in the European Higher Education Arena. Three examples are presented here.

External Evaluation Systems

The current external evaluation systems be it accreditation or institutional audits are widely criticized. Newton (2001) talked about the 'facilitation of de-professionalisation of academics'. Harvey (2003) said: 'Accreditation is fundamentally about a shift of power from educators to managers and bureaucrats'. Watty (2003) failed to find any evidence that a majority of academics at the local or departmental level of universities are embracing quality change initiatives. Worthington and Hodgson (2005) stated in their research: 'Ostensibly the aim of quality assurance may well be to improve service provision but in reality it is a subtle form of panoptic power, control and surveillance over the academic labour process'.

In December 2007, the results were analysed of a survey amongst 1500 teachers in higher education (specifically 'hogescholen') in the Netherlands. Focus was on the willingness of teaching staff to cooperate in the accreditation process. Dutch accreditation is compulsory and eventually can have severe consequences for the programme under scrutiny. The results of the survey showed that accreditation was felt to increase the workload and stress. The teachers needed help from quality specialists to do the job. If the teaching staff could choose, they would not choose accreditation.

Academics are in many respects professionals (Polanyi, 1966; Kerr *et al.*, 1977; Weggeman, 1992; Nonaka & Takeuchi; 1995, Drucker, 2000). Professionals are highly-educated people. Their job requires a lot of improvisation. They are internally driven and prefer much auton-omy in their work situation. They do not want to be controlled, unless it is self-control (peer review system). They are committed to the cause of the discipline (the value system of

TABLE 2. Value systems in quality management

Value system	Control	Continuous improvement	Commitment	Breakthrough
Beck and Cowan	ORDER TruthForce 'Everything has a purpose, a place and a reason'	SUCCESS StriveDrive 'People are meant to succeed and become winners'	COMMUNITY HumanBond 'There is plenty of room for everyone'	SYNERGY FlexFlow 'We are open to learning at any time and from any source'
Characteristics	Only one right way Purpose in causes Guilt in consequences Sacrifice for honour	Competes for success Goal-oriented drives Change to progress Material gain/perks	Seeks inner peace Everybody is equal Everything is relative Harmony in the group	Big picture views Integrative structures Naturalness of chaos Inevitability of change
University life (Pupius, 2007)	Rules and regulations Hierarchical structures Budgeting Quality assurance by means of quality control	Goal orientation, enterprise initiatives, managing as a business Business planning Excellence model Balanced scorecard	Consensus management, political correctness, environmental concerns People concerns People development	Systems and processes Reduction in hierarchical command and control Cross-university collaboration Self-managed teams
Quality =	**The extent to which an object fits to standards**	**The extent to which the expectations of the customer are exceeded**	**The extent to which the goals of all stakeholders are fulfilled, taking into account here and now, there and the future**	**The extent to which the goals of all stakeholders will be fulfilled in the future**
Object	Product, profession, process, system	Organisation		
Basic rules	Standards; ISO9000:1994	Phases of development; ISO 9001:2000; Management contracts	Social and psychological contracts, interaction, consensus	Dialogue, 'simple rules' (Stacey *et al.,* 2000)
Subject	Third party audits	The customers	All stakeholders	
In higher education	Accreditation systems	EFQM, Malcolm Baldrige	AISHE	
Names	Taylor, Shewhart	Deming, Feigenbaum, Imai, Crosby	Vinkenburg, 2006	Shiba, 2006, Jouslin de Noray, 2004, Stacey *et al.*, 2000

TABLE 2.   *(Continued)*

Value system	Control	Continuous improvement	Commitment	Breakthrough
Jouslin de Noray revolutions in QM	Process control	Integral quality management	Breakthrough	
Shiba	Process	Standards	Business	
Change	Standards	Business	Values	
Unchange	Theory X	Theory Y	Theory Z	
Human being	Middle manager	Shop floor workers	Top–upper managers	
Key player				
Vinkenburg	*Control paradigm*		*Commitment paradigm*	
Hardjono	Orientation on effectiveness and efficiency Material and commercial competence	Orientation on flexibility Socialization competence		Orientation on creativity Intellectual competence

continuous improvement) or the student (the value system of commitment). The actual external evaluation systems and its largely bureaucratic procedures belong to another value system : the value system of control (Jeliazkova & Westerheijden, 2002). Also Harvey (2003) argued that control contrasts with the very nature of quality.

The Excellence Model

In the Netherlands and many other European countries we have seen a growing interest in the Excellence Model as developed by the European Foundation for Quality Management (EFQM). A flourishing network of universities, called the Education Community of Practice, took part in meetings exchanging experiences in the use of the model. The network decided to stop its activities under the umbrella of EFQM in 2007. EFQM wanted only paying EFQM-members to be allowed to join the meetings.

Seven institutes for higher education in the Netherlands called the HBO-Expertgroup, developed a version of the model for higher education that has been translated into English, French, German, Spanish, Latvian, Czech and even into Vietnamese (Van Kemenade, 1999, 2004). This 'method for improving the quality of higher education based on the EFQM model' was quite popular for more than 10 years. It provided a matrix model for programmes to score themselves on nine criteria and five stages of development. The HBO-Expertgroup also decided to stop its EFQM membership in winter 2007 and to stop the distribution of the book. It is not that the ideas behind the Excellence Model have been left. The Hanzehogeschool, one of the main promoters of the method, is now making its own Excellence Model. The EFQM model originally was designed to help organisations on their way to continuous improvement. Organisations could apply for the European Quality Award. In the beginning mostly profit-making organisations applied. Later on more and more educational institutes joined. The EFQM model however, like Hardjono said: 'degenerated to a control model' (Hardjono, 2005) and the EFQM institute in Brussels tries to stay in control. Its regulations have become more and more detailed and strict. The two cases show that what was meant for continuous improvement and largely accepted for that reason is now felt as an instrument for control that does not meet the needs of academia any more.

ISO9001:2000

In contrast, ISO9000:2000 is becoming more and more popular in higher educational institutes in Eastern European countries (Hutyra, 2005) but also in some cases in the rest of Europe like Spain (Mira *et al.*, 2002) and Greece (Besta & Georgiadis, 2004) and even beyond in developing countries such as Yemen and Vietnam. The government in the Philippines is considering using ISO-standards for its national accreditation of higher education (Arcello, 2003).

The ISO9000:1987 version was little used in education (Storey, 1993). Although little has changed between this version and the next ISO9000:1994 more higher education institutes got interested (Lundquist, 1997; Waks *et al.*, 1999). In the beginning mostly technical programmes or support processes were certified.

The new ISO9000:2000 seems to be also popular in the core processes and other fields of study (Hutyra, 2005; Mira *et al.*, 2002). There might be an easy explanation. The new ISO9000 standard is very different from its predecessors: it incorporates the customer and moved from control in the direction of continuous improvement (Magd & Curry, 2003; Vouzas & Gotzamani, 2005; Bayati & Taghavi, 2007).

Conclusion

The value systems as presented in this article give way to the explanation of actual developments in internal and external quality management. The lack of acceptance of external evaluation systems in higher education by academia might be connected with too much control and too little improvement, let alone commitment. The decrease in use of the EFQM model in higher education might be caused by its degeneration from continuous improvement to control, and some signs of increase of use of ISO9000:2000 might be caused by its greater focus on continuous improvement than its former versions ISO9000:1994 and ISO9000:1987.

The value systems might even show the way for the future. 'The strategic choice of an organisation should be based on an equilibrium between outside and inside orientation on the one hand and between an orientation based on control and change on the other' (Hardjono, 1995). Breakthrough will only be possible if the organisation has enough control and enough stability as a solid base to build on. Community, continuous improvement and control are needed to get to breakthrough.

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