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Quality Assurance in Higher Education: A Framework for Distance Education

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Abstract

Quality assurance is a widely used term in academia. Quality assurance and enhancement is possible only when the term 'quality' is defined clearly with a special focus on pedagogical differences. Quality and its parameters can be different in different instructional designs just as they can be different for different industries. Quality of higher education in conventional and distance pedagogic design cannot be measured through the same gauge. The paper is an attempt to rethink the concept of quality which is necessary for a clearly distinctive instructional approach for higher education in distance/online education. As comprehensive parameters are required to define quality in distance and online Education, a framework is developed in the paper by creating an inventory of factors with the help of System Approach for Program Evaluation to define the parameters of quality in distance/online education.

Key words:

Distance Education, Online Education, Higher Education, E-learning, Quality Assurance

Introduction

'Quality assurance' and 'quality enhancement' are two widely discussed topics especially in higher education. However, the centrality of discussion about quality assurance and enhancement is certainly based on the question "What is quality?" The notion 'quality' does not have a unanimous definition so far and remains a vague concept that needs clear description. Due to its vague boundaries, assurance and enhancement of the quality in education are badly affected. Quality assurance and enhancement are possible only when the term 'quality' is defined clearly with a special focus on education in general and higher education in particular.

In higher education, two dominant pedagogical modes are in practice: a) conventional system which is principally instructor-driven and b) distant/e-mode which is acknowledged as learner-driven. There is a significant difference between these two modes of delivering knowledge. Both are dissimilar in many aspects like structure and delivery, academic support, performance expectations, interaction level (both on student-teacher and student-student level). These factors affect the scope of quality within both types of educational systems. Learner-driven and instructor-driven learning in higher education can also be distinguished on the basis of input given and the process through which the knowledge is delivered to the students. One can distinguish traditional learning as instructor led based of instructivist approach and online learning as learner-driven based of constructivist approach (Bennett & Green, 2001; Dabbagh, 2000). Constructivist approach is concerned with the co-construction of knowledge with student-student and student-instructor interaction whereas instructivist approach is based on instructor generated knowledge and delivery (Dabbagh, 2000). The constructivist pedagogy is used in distance and online education due to its hallmark of reliance on learner's autonomy and self-directed learning (West, 2010). In short, the main difference between the two modes is the shift of paradigm from teaching based to learning based.

The strong learning base determines the quality of education in higher education. With the shift in focus of knowledge deliverance from instructor-driven to learner-driven or vice versa the conceptualization of quality demands readjustments. There has always been a considerable discussion throughout academia about what constitutes quality in higher education (instructor-driven or learner-driven) and how to ensure it (Stella and Gnanam, 2004). This paper is an attempt to brighten the blurry notion of quality with categorization of the factors determining the quality itself. The focus of this paper is distance/ online higher education. Rich and distinct categorization of quality parameters can help researchers to define the concept taking into consideration the pedagogical differences in different modes. A framework is developed in this paper by creating inventory of factors with the help of System Approach to Program Evaluation and Components of Distance Learning to define the parameters of quality in distance and online learning.

Literature Review

Higher Education

The drive to find the essence and extent of quality in higher education is based on knowing what makes education "higher" or what is 'higher' in higher education. There is a debate among the stakeholders of education and they are attempting to determine the solution for that. Researchers and educationists ranked the education "higher" on the basis of level and depth of the gained knowledge. The level in higher education includes college or university level while depth of knowledge means, knowing more and more about less and less (Mishra, 2007). Higher education contains narrow specialization covering wider perspective of certain issues and is generally understood to cover teaching, research and extension (Mishra, 2007). The core purpose of higher educational institutes is to prepare the students for teaching and research, provide training to the students to cope with the economic and social issues, cater educational needs and promote international cooperation (Delors, 1998).

Quality in Higher Education

One can trace extensive debate on quality in higher education. Concerns about quality are not new and can be found in academic discussions since 1980s (Green, 1994). The movement of quality in education started in 1964 with the establishment of CNAA (Council of National and Academic Awards) in Great Britain to guarantee quality and standards in new polytechnic sector (Green, 1994). This movement boosted the receptiveness of the scholars about quality in higher education and initiated the debate about what constitutes quality in higher education. In initial years, Total Quality Management (TQM) in manufacturing concerns were adapted and applied for quality in higher education (Kanji, Malek, & Tambi, 1999; Kanji & Tambi, 1998) which were later negated by academic scholars (Madu & Kuei, 1993). Barnard (1999) argued that the education sector is not comfortable with TQM approach. Quality in general has been defined by many scholars in different business terms starting from the excellence in limited supply utilization to TQM concept and it has also been mapped in education (Nicholson, 2011). Many authors termed it a "slippery concept" (Pfeffer & Coote, 1991) and they argued that concept of quality in business is ill suited in education and for this purpose quality in education has been re-defined by dividing it on different basis including the stakeholders (Nicholson, 2011) and used different definitions from business to map the concept in education. Garvin (1988) has defined quality in business enterprises in five different dimensions including transcendent quality, manufacturing based quality, product based quality, value based quality and user based quality. Seymour (1992) has further mapped those definitions in higher education. Cullen, Joyce, Hassall, and Broadbent (2003) argued that quality is the issue which facilitates the perspective of a range of stakeholders. However, Chua (2004) established an argument that application of

consumer behavior theory in education can determine the 'students' as 'customers' hence TQM approach can be useful to define quality in higher education. Nicholson (2011) devised a framework to define quality combining the ideas of Seymour (1992) and Cullen et al. (2003).

Not only agreement on a single definition of quality in higher education but also the quantification of quality is a cause of disagreement in higher education (Stella and Gnanam 2004). What constitutes quality in education is not determined universally; therefore, different educational institutes have developed standards and criteria to measure the quality of their educational programs. Chua (2004) argued that people perceive quality differently so one needs to know what the parameters of quality are. The trend of developing different standards and criteria is because of non-availability of concrete definitions of quality in higher education. The scholars are widely viewing academic enterprises as totally different from business/product oriented enterprises (Koslowski III, 2006).

To define this fuzzy concept, many scholars have classified it in different groups which include value based definitions (value as compared to cost), user based definitions (customer satisfaction based variables), transcendence definitions (subjective and personal) manufacturing based definitions (achieving standards in manufacturing) and product based definitions (measureable variables), (Lagrosen, Seyyed-Hashemi, & Leitner, 2004).

Value based quality is more concerned with the value in the eye of the consumer which is determined in comparison to the money spent on that (Garvin, 1988). In education, the students and parents are those who actually spend money and gain value. So, these basic stakeholders are more concerned with the quality in comparison to the time and money spent.

User based quality is concerned with the quality which is defined by the user as every user has different requirements individually (Seymour, 1992). In education, requirements of all students, government, employers and accreditation agencies may be different but the ultimate goal of knowledge creation is the same.

Transcendent quality is mainly concerned with the expertise of a teacher where teacher knows what is best and how to deliver it (Koslowski III, 2006). Here the main participant is teacher who helps in execution of objectives set by the institute.

Manufacturing based **quality** is about the educational aims and objectives. Ideally, higher education institutes are self-regulatory. They set their objectives and execute the process to meet those objectives, and for this purpose main stakeholder should be the institute itself. But this self-regulation view negates the external environmental issues which in turn block the way of improvement. For this, the external bodies play a vital role to assess and execute the process

neutrally. Main contributors in this area become those external bodies which play an important role in confirming the desired outcomes.

Product based quality is concerned with the confirmation of the presence of the particular ingredient in a product. In education, the product is the set of knowledge which is not measurable other than assessment techniques (Koslowski III, 2006). Employers and accreditation agencies mainly contribute towards the assessment of the set of knowledge provided by the institute, by either putting students in real time problems or evaluating the assessment techniques.

Table 1

Definition of Quality, Perspectives and Stakeholders

	Garvin (1988) Business Based Definition	**Seymour (1992) Education Based Definition**	**Stakeholders**
Transcendent Quality	Quality is produced from producer's expert training. It is unique to every producer	The quality of education is a result of the reputation and expertise of the teacher	Faculty
Manufacturing Based Quality	Product conforms the specifications and fits the purpose it was made for	Educational aims and objectives	Accreditation agencies
Product Based Quality	a definitive state that reflects the presence or absence of a specific ingredient	Evidence of enhanced student learning and outcomes (linked with assessment of product)	Accreditation agencies, employers
Value Based Quality	acceptable performance at an acceptable price	Pay back advantage of tuition fee with expected salary	Parents, students
User Based Quality	Satisfying consumer needs and preferences	Outcome meets the specific requirements	Students, government, institution (depends who is defined as customers)

With many dimensions, definition of quality has become a complex concept and poses many philosophical questions but Green (2014) persuades to accept and recognize the multiple dimensions of the concept and rejects the possibility of accepting a single definition. Thus, quality becomes a broad concept to be studied with an extensive scope and a wide range of stakeholders. It is only possible to define quality in higher education with a special focus on specific researches. Hence, the quality of higher education for this paper can be defined as "when mission of higher education is met by using the expertise of a teacher in particular areas to enhance students' knowledge and capabilities with value provided in such a way that goals of all stakeholders are aligned with each other".

Distance Education (DE)

Distance education (DE) at university level has existed since the early half of the nineteenth century (Bell & Tight, 1993). In the past, definitions of DE served a useful purpose of revealing assumptions (Garrison, 2000) and dimensions of DE, yet the definitions of DE differ in scope and

features (Shaban & Qureshi, 2013) . DE is shaped into various systems attributable to type, purpose, intensity and the usage of technology. Because of the emergence of diverse systems of DE, different scholars define DE differently.

For instance, Holmberg (1986) defined DE as a form of education without continuous, immediate supervision of teachers present with their students in classrooms, but providing in tutorial form. Taylor (2001) discussed the change in the definition of DE with the developments in technology. Anderson and Dron (2011) described three generations of technologically determined DE which included postal correspondence, mass media and interactive technology based DE. Michael Grahame Moore (2013) defined DE as a form of education in which learning and teaching takes place in different spaces through communication technology.

Over the last two decades, Information and Communication Technologies (ICTs) have changed the definition of knowledge based society by introducing distributed learning model (Punie, Cabrera, Bogdanowicz, Zinnbauer, & Navajas, 2005). Over the past one and a half decade, teaching has become boundary less and moved from the main periphery of university extension. The foremost boundary less education system which was known as 'distance learning' is now acknowledged in the modern-day form as "e-learning" or "online learning" due to the diffusion of ICT replacing conventional class rooms by exhausting various utilities of technology (Guri-Rosenblit, 2005). However, Michael Grahame Moore (2013) is of the view that DE is a generic term and other terms including tele-learning, e-learning, distributed learning, open learning and flexible learning are subordinate concepts. Many researchers in education use electronic learning (EL) and DE as replaceable terms using the common theme, philosophy and pedagogical designs of these education models (Arnold, 2007; Evans, 2000; Ryan, 2002; Selinger & Veen, 1999; Taylor, 2001; Twigg & Learning, 2001) and they create main distinctions on the basis of the use of technology for communication (Taylor, 2001).

In e-learning, the learners and teachers are physically detached; however, due to ICT use, this separation has hardly influenced the learning/teaching processes. In fact, the ability to transfer the content of textbooks and lectures to students at a distance is much easier and faster by providing support lectures and interactive diagnostic, adaptive or recorded tutorials. The embrace of e-learning is rapid because of the acknowledgement that learning is all about what the learner is doing, rather than what the teacher is doing. Through interactive ICT support, many different types of capabilities are developing among learners due to the Internet access to the digital resources which are necessary for learning. To stimulate intellect and thoughtfulness, inquiry-based activities are designed in e-learning and the universities driven by these insights are shaping teaching and learning processes that help thriving of e-learning for higher education (Laurillard, 2006).

The diffusion of e-learning is also observable in higher education as there are many researches available that highlight the importance and provide the link of e-learning with higher education (Cope & Kalantzis, 2001; Laurillard, 2006; Salmon, 2005). There are many reasons of this diffusion and one of the reasons is World Declaration on Higher Education (1998) by UNESCO. According to that declaration, there is an extraordinary call for and a great divergence in higher education. In order to respond to that call, e-learning is welcomed by all universities. This is the reason that the scope of higher education has expanded and it is not restricted to national or regional boundaries now. E-learning is now bringing increased flexibility, opportunity to extract economic benefits and engage in the complex challenges of globalization. E-learning in higher education has multiple focuses depending upon the mission of the institute. The general focus is to provide distance and technology based education to traditional students as well as services to the corporate world.

Quality in DE

Quality in education is emphasized to enhance the satisfaction of all stakeholders such as students, parents, faculty and employers (Ghouri, Abbasi, Qadri, & Nawaz, 2013; Harvey & Newton, 2007; Chua, 2004). The quality of programs offered in educational institutes is of prime concern for them as it not only determines the worth of their institute but also defines future of their students. However, in this debate, the quality itself is a vague concept and needs a clear description. Shaban and Qureshi (2013) argue that regardless of the mode of education, DE in general encounters the question of quality. As far as vagueness of the concept 'quality' is concerned, DE and e-learning, irrespective of the pedagogical differences, are on the same deck facing mal-narration of the concept. In addition to the vagueness of the concept of quality, the diversity of issues in online education also makes it difficult to define this multi-dimensional concept. Overall, the term 'quality in education' is used in a blurred way (Olojede, 2008).

Why Define Quality in DE?

Vroeijenstijn (1992) is of the view that it is a waste of time to try to define quality. The underlying assumption of this view is the stakeholder's perspective for quality and interests in the product and services. Green (1994) states that quality in education is a philosophical term but still we need to clarify the term due to the rapid expansion in the number of students, general quest of public interest, increasing competition in education market and tension between efficiency and quality. However, along with the continuous tension between the defenders of the existence of quality definition and those who oppose it, many have defined the term 'quality' in educational perspective adapting different business terms in education (Green, 1994; Harvey & Green, 1993; Mishra, 2007; Nicholson, 2011).

Some scholars are of the view that there is no significant difference between conventional mode of instruction and Distance Education Instructional Mode (DEIM). They consider DE a long established mode and hence consider the quality practices same in both modes (Stella & Gnanam, 2004). There is an ongoing debate throughout academia about the quality issues in DL and conventional learning. Due to the philosophically, theoretically and pedagogically different modes of education (Herrington & Herrington, 2007; Taylor, 2001), quality issues in DL and conventional learning need to be dealt differently (Shaban & Qureshi, 2013).

Framework to Redefine Quality in Online Distance Learning

Quality is a fuzzy concept and needs to be re-defined in alignment with online learning mode in higher education. In this study, an attempt is made to revisit the notion by developing a framework, using the System Approach to Program Evaluation (SAPE) and the basic components of DL. Michael G Moore and Kearsley (2011) favor the system approach in DL by arguing that this approach not only clearly separates the conventional learning from DL but also clearly distinguishes the good DL from the bad one. The basic components of DL are adopted from the work of Summers, Waigandt, and Whittaker (2005) where they identified factors of DL by arguing that technology is packaged with learning tasks, learner characteristics and instructors to serve the institutional purpose of delivering quality education.

The framework has identified the areas at each level of SAPE that are helpful in determining the quality in DL and categorized each component of quality from different orientations (learning tasks, learner's characteristics and tutor's characteristics). This framework has identified the areas of quality at four levels and from three different positions. Future researches can be done on the basis of the framework provided to develop the key indicators of each component of framework to measure the quality.

The quality of higher education includes three factors (learning tasks, learner characteristics and instructors) combined with the mode of delivering knowledge i.e. traditional face to face or technology based (Summers, Waigandt, and Whittaker 2005). Rovai (2003) has used this system approach to program evaluation as it addresses the internal and external key factors of an educational system. System approach of evaluation seems better as it adds input also along with the process and impact. In this paper, we can assume that higher education is evaluated on the basis of the quality of input (faculty expertise and level of student), process (delivery of knowledge and mode of delivery), output (knowledge enhancement) and impact (long term effects) (Rovai 2003). Combination of the framework presented by Rovai (2003) and Summers, Waigandt, and Whittaker (2005) can help in developing a new framework of factors that are to be evaluated to ensure quality of higher education in distance mode. The proposed framework combines three factors (learning

tasks, learner characteristics and instructors) and four system parts (input, process, output and impact) to better understand quality in DE.

In Figure 1, the three components of DL are linked with the four factors of SAPE. Summers, Waigandt, and Whittaker (2005) have defined three components of DL as the tasks designed to meet the DL program requirements named *learning tasks,* those features that distinguish online / distance learners from the conventional learners as *learners' characteristics* and necessary capabilities required to deliver distance education as *tutors' characteristics*. These components of DL are linked with the different levels of SAPE in the framework defined above. To further elaborate how these three components are linked to four factors, Worthen, Sanders, and Fitzpatrick (1997) have used different sets of strategies. These strategies have multiple focus including stakeholders, faculty, management and institution itself.

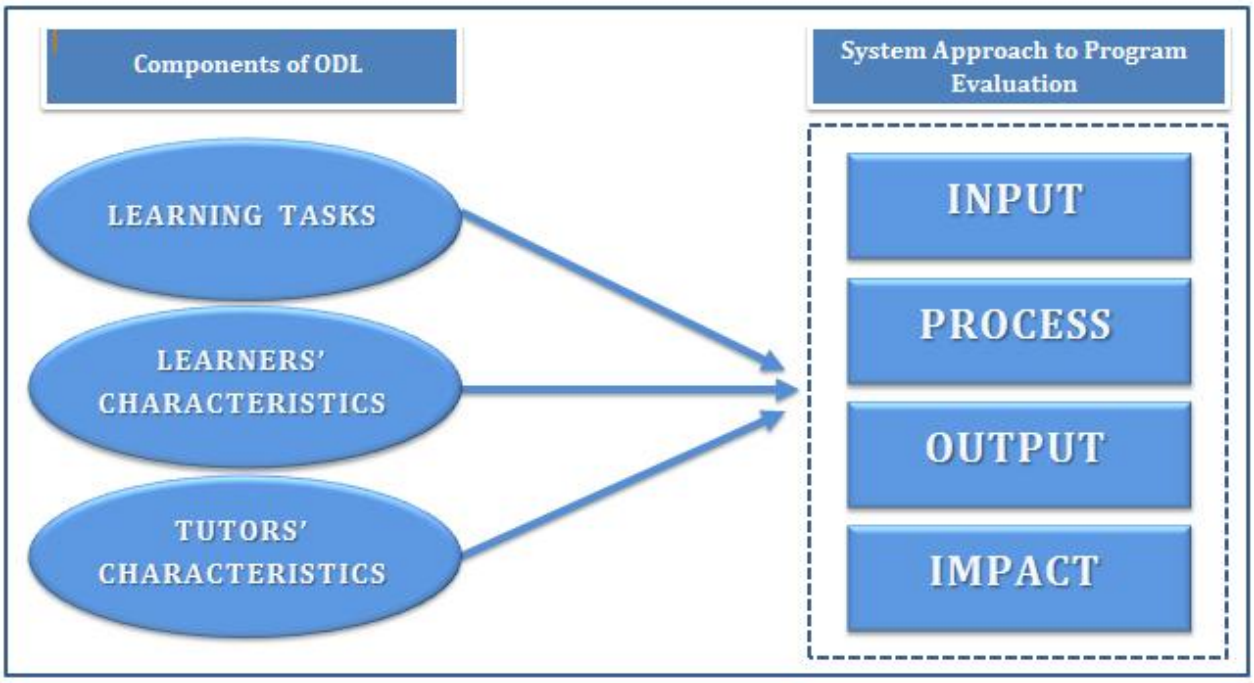

***Figure 1*: The Link between ODL Components and SAPE**

These strategies are helpful in developing the questions and hence making it possible to develop a new framework discussed in Figure 2. Input level is more concerned with those criteria or indicators to be addressed that are relevant with the basic requirement of an institute. The researcher is concerned with the institutional context in DL. For that, at *input level*, strategies used by Worthen, Sanders, and Fitzpatrick (1997) are expertise oriented which focus on the expert opinion and its outcomes at an initial level including the target stakeholders and their characteristics. At *process level* participant oriented strategy is used which has main focus on the characteristics and requirements of the participants of this whole process. At *output level,* objective oriented strategy is proposed which is concerned with the output of the input provided. At *impact level,* participant

oriented strategy is used which focuses on characteristics, change in skills and impact on participants. Mapping the strategies in the framework discussed above, a new model is proposed.

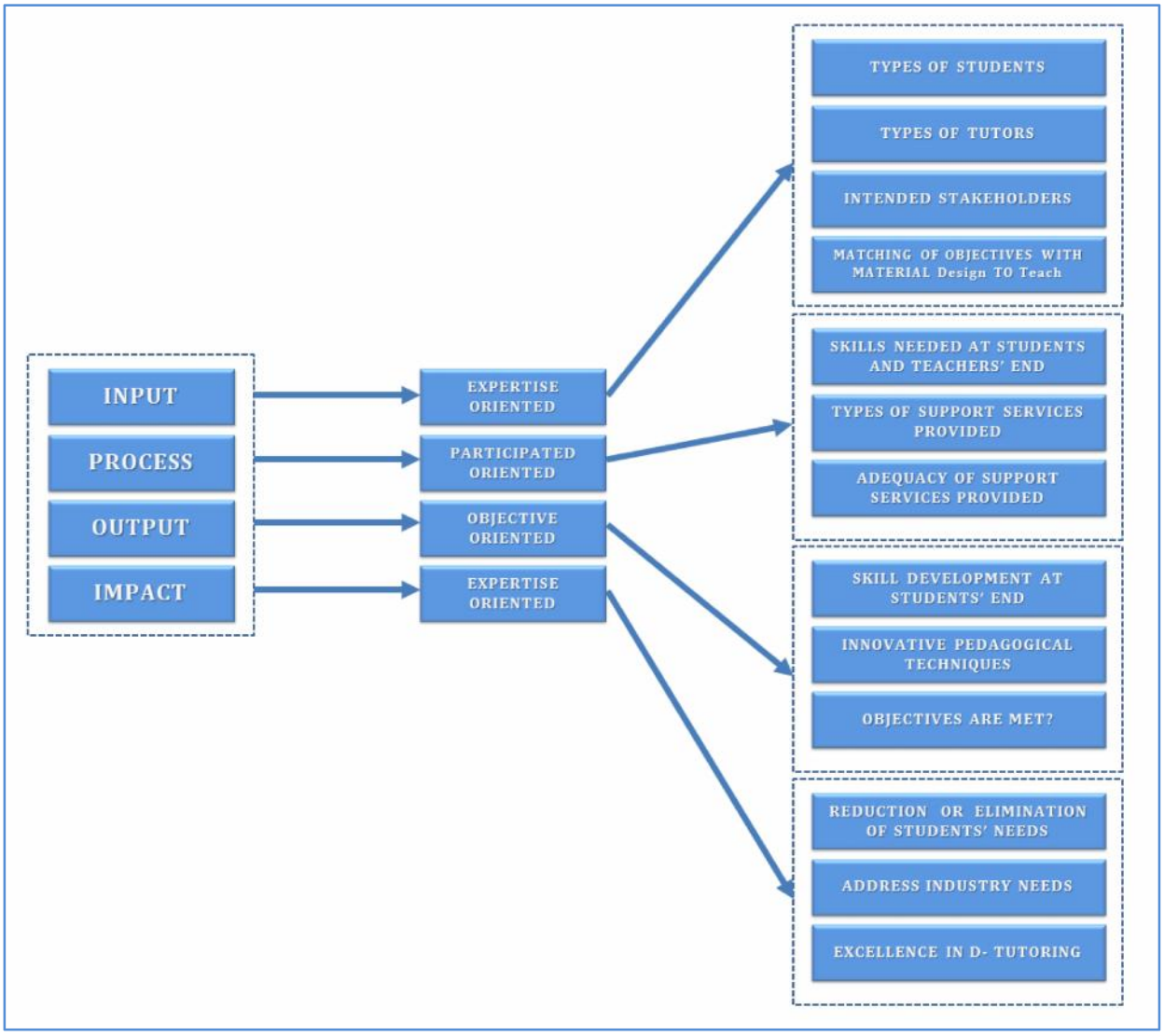

***Figure* 2: The Link between SAPE, Strategies and Quality Indicators**

As suggested by Gillespie (1998), learning tasks in online learning are to develop higher level thinking skills and self-evaluation of learning. If we look at this learning task in input context of the framework provided by Rovai (2003) which evaluates the system capabilities at input stage to meet the requirements, we find curriculum development as a tool of meeting learning tasks at input level of e-learning. It is suggested that in the process evaluation, the evaluator not only examines what is happening but also what should be. In this way, process evaluation also suggests the desired tools required to meet the target. According to the framework presented by Summers, Waigandt, and Whittaker (2005) framework, the process must be an interactive and collaborative form of education mode in the learning tasks. Output evaluation is directly concerned with the immediate and direct

effect of the program. In learning tasks, output evaluation will be the assessment of the extent to which the objectives of the program are met.

Summers, Waigandt, and Whittaker (2005) discussed in their paper some learner's characteristics required for online learning. They suggested some particular characteristics a student must possess to be called a good online learner. Seeing those characteristics as a part of quality education is as necessary as quality of education itself. The pedagogical differences make it clear that students are the most important part in online learning (Dabbagh, 2000). At input level where the system's capabilities to meet the program objectives are significant; student's characteristics support to make system workable for them. These characteristics are familiar with the technological base and the system provides ability for self-regulation. Similar to the process evaluation side, the student's ability to grip the system's requirement is necessary. When the output is evaluated, students must possess an enhanced set of knowledge required by the program. Impact evaluation can be discussed as the long term results of a program and need fulfillment. In learner's characteristics, impact evaluation will be the extent to which the program helped students in fulfilling the knowledge needs. The last characteristic of Summers, Waigandt, and Whittaker (2005) in their framework is tutor's characteristics. It is suggested that tutor must possess pedagogical foundations. For this, at input level, training for distance mode is required and at process level, grip over the system's requirement on teacher's end is necessary.

Rethinking Quality

Whatever the reason or definition one can present, which may help to make education "higher", the level and depth of knowledge is core of all. This depth of knowledge and the fulfillment of objectives are possible through evaluation of the quality the education institute is providing. There is a misconception that the quality of higher education in conventional and online pedagogical design can be measured through the same gauge. There is a need to rethink about the quality in higher education considering the pedagogical differences. Michael G Moore and Kearsley (2011) take instructional and course design as the first component of the system model of DE at the design level.

Learning Tasks and SAPE

Understanding the *learning tasks at input level* takes curriculum development along with instructional design as the most important thing. The strategy used here is expertise oriented at input level using Willis' (1994) point where he discusses the need of effective instructional design for DE. Curriculum compatible with the institutional objectives and instructional design is necessary for achieving the objective of effective learning. Hence, the indicators of quality at input level of learning tasks can be identified as a fitted curriculum and instructional design with the institutional objectives.

Moving towards the *process level of learning tasks*, interactive and collaborative format of knowledge delivery and student support services are those elements that can enhance student's experience. Rumble (2000) argues that DL is more focused on student support services and customer care as compared to the traditional universities. More collaboration and interactivity during the learning process along with institutional support makes the institutional process effective. Michael G Moore and Kearsley (2011) considered interaction at tutors, counselors, administrative staff and students' level as a part of DE model to enhance good practices. Simpson (2000) and Tait (2000) make it clear that student support services are integrated efforts of the administrative staff along with the faculty. Support services at every level including tutors and students can be used as the indicators of quality at process level of learning tasks using participant-oriented strategy where the participants of the system are those who, one way or the other, contribute in improving student support services.

Quality of *learning tasks at outcome level* can be measured by the extent to which the objectives of stakeholders are met (Rovai, 2003). Here, the objective oriented strategy can be used to determine the quality. Harvey and Knight (1996) identified the meanings of quality as fitness of purpose by stating that quality is the judgment of the product or services in terms of the extent to which the stated purpose is met.

Impact level at learning tasks is the long term results of the program on society at large (Rovai, 2003). Koslowski III (2006) discussed quality as the extent to which the product conforms to specifications and becomes fit to be used for the purpose it was made. The met objectives and their long term impact are the indicators of quality where impact level at learning tasks is specifically linked with the assessment of quality thinking.

Learner Characteristics and SAPE

Reading the second element of DL, a system component can take start from *learner's characteristics at input level*. Bocchi, Eastman, and Swift (2004) have discussed different characteristics that need to be present in online learners. Kearsley (2002) identified a set of skills that need to be present in a student prior to starting the DE course which includes self-learning, motivation, capability to adapt to technological changes and many more. Ramsden (1997) is of the view that student's intention to reproduce or understand material is clearly related to his/her own interest to carry out learning tasks. This shows that successful completion of a degree is highly dependent upon the characteristics of learners where 'successful completion' means the objective attainment at institutional as well as student level. Hence, using the expertise oriented strategy at input level, institutions need to identify the required characteristics of learners to meet the institutional as well as program level objectives.

Learner's characteristics at process level are also helpful in defining overall quality of DE. These characteristics address those skills that a student must possess after enrollment which includes system requirements, for example, tools for learning, interaction mode, response time and way etc. Using participant oriented strategy to enhance familiarity of an enrolled student with system and ensuring retention at this level (Kearsley, 2002) can be an indicator of quality at the process level of learner's characteristics.

Learner's characteristics at output level can be used to indicate quality using objective oriented strategy. Rovai (2003) discussed the change in skills, attitude and knowledge set in the output evaluation of system approach. Similarly, he discussed students' needs in impact evaluation of system approach to program evaluation (Rovai, 2003).

Tutor Characteristics and SAPE

The third component of DL is t*utor's characteristics* that contribute in the overall quality of DE at every level of system evaluation. Scardamalia and Bereiter (2006) stressed the importance of tutor's characteristics by elaborating the knowledge building pedagogy evolution where the teacher's innovation is combined with technology. At input level, tutors determine the quality by aptitude to deliver knowledge in a distance mode, willingness to deliver knowledge in a distance mode, and training need for the tutor to fit in the system and fulfill the institutional as well as other stakeholder's requirements. Rovai (2003) discussed that input evaluation is concerned with the technical expertise, equipment, design and strategies where Kearsley (2002) takes competency of tutors a core issue to deliver knowledge which is to be ensured at the entry level of the system. Expertise oriented strategy can determine the type of required competencies at the input stage of the third component of DL.

At the *process level of tutor's characteristics,* the skill set required for distance tutoring is an important indicator of quality. The quality of education is a result of the reputation and expertise of the teacher (Koslowski III, 2006). Ongoing efficiency in tutoring, community building, communication and collaboration (Garrison, 2000) can be the quality indicators. Many studies reveal that intelligent tutoring system can enhance student's knowledge experience (Jeng, Wu, Huang, Tan, & Yang, 2010). Skill sets of a distance tutor, at the process level of tutor's characteristics can indicate quality.

The *output level of tutor's characteristics* is the emergence of new innovative pedagogical practices which are useful not only to impart learning to increase student's satisfaction but also contribute to achieve excellence for distance institution. The *impact level of tutor's characteristics* can be included here due to the fact that innovative practices in tutoring, effective interaction (Michael G Moore & Kearsley, 2011), value addition in student knowledge (Nicholson, 2011) effective feedback

and enhanced flexibility at tutor end (Kearsley, 2002) can be the indicators of quality by achieving excellence in tutoring.

Table 2:

The link between SAPE, Proposed Strategies and Quality Indicators

Component of ODL	Components of System Approach	Proposed Strategy	Indicator of Quality
Learning Task	Input	Expertise Oriented	Fitted Instructional Design Fitted Curriculum with Instructional Objectives
	Process	Participant Oriented	Fitted Support Services for D -Students Fitted Support for D-Tutors
	Output	Objective Oriented	Met Institutional Objectives
	Impact	Participant Oriented	Enhanced Institutional Performance Nourishing Industry Needs
Learners' Characteristics	Input	Expertise Oriented	Superior D-Learners Characteristics
	Process	Participant Oriented	Skillset for D-Learners
	Output	Objective Oriented	Change in Skill set of Learners
	Impact	Participant Oriented	Change in Learners Learning Needs
Tutors' Characteristics	Input	Expertise Oriented	Superior D-Tutors Characteristics
	Process	Participant Oriented	Skillset for D-Tutors
	Output	Objective Oriented	Innovative Pedagogical Practices
	Impact	Participant Oriented	Excellence in D-Tutoring

The framework defined above can be used to define quality and its parameters for all stakeholders at all levels collectively and separately at different levels and for different components. For example, quality at input level for three components of DL can be defined for one single component as well and one single component of DL can be used for quality definition at all system wide levels also. However, quality parameters need to be operationalized and item generation is necessary to make this framework fully functional.

Conclusion

Defining quality and rethinking it from three different strategic orientations along with four process levels can be helpful in operationalizing the dimensions of quality at each level and developing a composite form of quality assessment tool. It is also helpful in assessing the quality at each and every level i.e. from input to output and from the perspective of teacher, learner and process with different strategic focuses. This framework not only redefines the quality but can serve as a good tool to find the quality issues at minute levels also. As Chua (2004) identified parents, students, teachers and institution as stakeholders of DE, the proposed framework is equally useable for all the stakeholders of DE. The framework developed above can be helpful in defining the quality from

different perspectives. For example, the learning tasks i.e. the necessary and fundamental tasks to be performed in the execution of effective educational program, as divided into four levels, are equally important and helpful in defining the framework for quality.

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