UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL, HUMAN AND MATHEMATICAL SCIENCES

School of Education

Quality Assurance of Teaching and Learning in Indian Higher Education Institutions.

by

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Thesis for the degree of Doctor of Philosophy

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ABSTRACT

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QUALITY ASSURANCE OF TEACHING AND LEARNING IN INDIAN HIGHER EDUCATION INSTITUTES

by Adesh Joshi

Prompted by concerns about the reputation of Indian higher education's quality assurance system, this study compares the espoused theory of quality assurance for teaching and learning with its perceived practice by staff and students in four Indian universities. The data for this study was generated from policy documents, via interviews and online surveys; and analysed using a mixed method approach.

A key finding was that there are disparities between policy and practice. Stakeholders comprehend quality in terms of transformation, fitness-for-purpose, and value for money. The policy appears aligned with transformation whereas both lecturers and students want fitness for purpose. Additionally, only lecturers seem focused on transformation whereas students expect value for money. The concepts of quality as exceptional and quality as perfection did not apply to the current state of participating universities as currently the curriculum design is not sufficiently robust, staff are seen as lacking teaching skills, and the student-staff ratio is perceived as too high.

The conclusions of this research are that the current quality assurance mechanism is ineffective; lecturers lack communication skills; curriculum design is insufficient in fostering change to promote more autonomy for lecturers and, independent and critical thinking for students. This research proposes definitions of quality, specific to Indian higher education sector and suggestions to address the identified disparities.

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Academic Thesis: Declaration Of Authorship

I, ...Adesh Joshi... [please print name]

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

[title of thesis] ...... **Quality Assurance of Teaching and Learning in Indian Higher Education Institutes**..

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;

2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

3. Where I have consulted the published work of others, this is always clearly attributed;

4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;

5. I have acknowledged all main sources of help;

6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;

7. Either none of this work has been published before submission, or parts of this work have been published as: [please list references below]:

Signed: ....

Date: ....28 July 2017...

To my mother,

I miss you every day …

Acknowledgements

My deepest gratitude goes to my mother Sneh Joshi, my life's *guru* and the best friend I could have ever asked for; your teachings linger on and provide a new dimension to learning every day even when you are not with us anymore and that is why I owe this research to your blessings; thank you very much.

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Definitions and Abbreviations

AICTE: All India Council for Technical Education

AQAR: Annual Quality Assurance Report

ARWU: Academic Ranking of World Universities

ASQ: American Society for Quality

BTEC: Bachelor of Technology

CABE: Central Advisory Board of Education

CSIR: Council of Scientific and Industrial Research

GER: Gross Enrolment Ratio

HEFCE: Higher Education Funding Council for England

ICAR: Indian Council of Agricultural Research

IEQA: Institutional Eligibility for Quality Assessment

IIT: Indian Institutes of Technology

IMC: Indian Medical Council

IQAC: Internal Quality Assurance Cells

MHRD: Ministry of Human Resource Development

NAAC: National Assessment and Accreditation Council

NBA: National Board of Accreditation

NCTE: National Council for Teacher Education

NEFC: National Education Finance Corporation

NPE: National Policy on Education

OECD: Organisation for Economic Co-operation and Development

QAA: Quality Assurance Agency's

TQM: Total Quality Management

TRIP: Trilateral Research In Partnership

UGC: University Grants Commission

UNESCO: United Nations Education and Science Council

WUR: World University Ranking

Chapter 1

Overview and Context

Introduction

There is universal agreement that the development of the knowledge economy is crucial for countries that are economic forerunners. Most advanced economies of the world today attribute their success to technology and knowledge (Carayannis and Sipp, 2005). For this reason, many governments have been investing substantially in higher education to strengthen their economic prosperity, and in 2000, the British Government published a report containing new developments in higher education arising from a combination of external pressures including modern technologies, globalisation and the growth of the knowledge economy (UUK, 2012). To keep pace with the emphasis on higher education and its fitness for purpose to contribute to, or even facilitate, growing economies, the assessment of the performance and accountability of education has had to receive significant attention. After all, the key to success may lie in the quality of the education provided, and the qualifications awarded. In the case of India, the main challenges it faces in such an endeavour are "expansion of the system, equity of educational opportunities and enhancement of the quality of teaching and research" (British Council, 2014, p.11); the inference being that a far-reaching transformation programme is required by India to respond to the evolving dynamics of higher education, which can no longer simply cater to the needs the country alone. In the climate of global massification, education has to be equipped to meet universal expectations.

The increasing demand for higher education provision has inevitably led to an expansion in the number and make-up of government funded higher education institutions, as has dependency on private institutions. For instance, the private sector in India, which accounted for just 15% of the seats of engineering colleges in 1960, rose to nearly 87% of seats by 2003 (Kapur and Crowley, 2008). The growing complexity of higher education systems has made central oversight increasingly inadequate, and most countries in which it was prevalent have engaged in reforms to revisit higher education steering mechanisms (Dobbins et al., 2011). To manage organisations of such grand scales requires an approach which moves away from central control and towards more institutional autonomy but with clear definitions of accountability to the state and society to ensure quality of performance and value for money.

While it has been stated that "an academic revolution has taken place in higher education in the past half century, marked by transformations unprecedented in scope and diversity" (UNESCO, 2009, p.i), it may be said that it was a much-needed response to the changing dynamics around the globalisation of higher education. Indeed, this has been reflected in the interpretation of the purpose of higher education, which was described in the 1990's as being production of qualified human resources; training for a research career; efficient management of research careers; and a matter of extending life chances (Barnett, 1992). This appears to encompass paradigms or links between education and industry, and thereby economy, acknowledging the importance of research, improving the quality of teaching and opening up opportunities for students. Only a few years later, in keeping with the changing drivers and impetus of globalisation, the report of the UNESCO International Commission on Education in the 21st Century, "Learning: The Treasure Within", built upon the functions of higher education with the following purposes: "to promote international cooperation through internationalisation of research, technology, networking and free movement of persons and scientific ideas" (UNESCO, 1996: n.p.n).

Higher education represents a critical factor in innovation and human capital development and plays a significant role in the success and sustainability of the knowledge economy (Dill and Van Vught, 2010). The higher education sector in India is faced with challenges of providing appropriate standards in teaching and learning which are acceptable in the country itself, even before it can consider competing on a global platform. In 2014, the British Council reported on what was described as "low quality of teaching and learning", stating that "the system is beset with issues of quality in many of its institutions: …poor quality teaching, outdated and rigid curricula and pedagogy, lack of accountability and quality assurance" (British Council, 2014, p.4). Taking into consideration that "by 2030… one in every four graduates in the world will be a product of the Indian higher education system" (Kuriakose and Iyer, 2016, p.214), it would require a separate research in itself to explore how many of such graduates would have been able to secure employment in or outside of India. If the quality of teaching is questionable, then surely the quality of students would suffer. In simple terms, it may not be enough just to have been awarded a degree from an Indian institution, as it also has to be recognised by employers on a global level as meeting their expectations and a reflection of high calibre.

Structure of Higher Education in India

The Indian higher education system has been expanding in number of colleges and universities at rapid speed, increasing its student population to more than 8 million in a decade from 2000-01 to 2010-11 (UGC, 2012). However, multiplying the number of institutions in itself is perhaps not enough to meet the demands of growing student numbers, or indeed in the wider contexts of employers and the economy. Such expansion, it could be argued, needs to be paralleled with an enhancement of quality. Whilst the quantity of teaching institutions has been increasing, the same cannot be stated for the level of quality of teaching without further investigation through this research.

In the context of India, the responsibility for higher education is shared between central and state governments and the definition of a university is "a university established or incorporated by or under a Central Act, a Provisional Act or a State Act, and includes any such institution as may, in consultation with the University concerned, be recognised by the University Grants Commission (UGC)" (NIC, 2016, n.p.n.). There are three main categories of universities in India – central, state, and private – each category being indicative of its source of funding (central/state governments or private). Private universities are also approved by UGC; however, they are not eligible for funding. State universities also have affiliated colleges attached to them for teaching undergraduate courses, and therefore "form by far the greatest element of higher education in India" (British Council, 2014, p.14). All three types of universities develop their own syllabi, conduct their own examinations and have the authority to award degrees, so in theory their leadership teams have the autonomy to monitor the effectiveness of teaching and learning processes within each institution. Thus, the obvious questions that emerge are that if autonomy and accountability rest with the vice-chancellors/chairpersons of universities, how is the quality of teaching and learning actually assessed and assured at that level; and how do such processes align with the central and state government visions for higher education in India?

Quality in Higher Education

Defining quality in the context of higher education is not an easy task for the concept of quality has, is and perhaps forever will remain contentious. Whilst the concepts and dimensions of quality are explored in detail in the second chapter, some definitions of quality in the higher education context are assimilated as follows in two categories: holistic and subjective. On a

holistic plane, quality can be defined as a system in higher education comprising input, process, and output, which meets both obvious and latent stakeholders' expectations and thereby provides complete satisfaction to its internal and external stakeholders (Cheng and Tam, 1997).

On a subjective level, quality in higher education can be associated with: the character of the educational development and educational achievements of students (Barnett, 1992); and in the transformation of individuals, in their knowledge, their characteristics, and their behaviour (Tsinidou et al., 2010). This view closely relates to the 'processes' of education and its 'output'. In terms of stakeholder categorisation, it focuses only on the 'teaching and learning' segment and does not address the viewpoints of the other stakeholders. Quality can also be defined in terms of standards and therefore can be likened to academic standards which include; abilities, skills and knowledge [or, 'ASK' – see King, 1997] that students achieve through higher education (Dill, 2003).

Arguments over the criterion set by World University Ranking systems (Marszal, 2012) to measure quality also remain ongoing, and one such form of measurement can be the global rankings itself. Of the world's 17,000+ universities, as low as 1% are the focus of the world university rankings published by three of the most prominent ranking houses (Soh, 2016). Whilst pros and cons of the ranking system can be debated for years to come, rankings can help improve transparency and accountability in the global market of higher education (Marope, Wells, and Hazelkorn, 2013). The criteria of assessment for such rankings are outside the scope of this research; however, an exploration of India within such rankings and its implications for quality assurance mechanisms will be included in this research.

The Times Higher Education league tables indicate that 31 (of the 165) UK universities were amongst the top 200, and in contrast, none of the (approx. 39000) Indian higher education institutions made it to the rankings (TSLE, 2013). This, rightly or wrongly, provides a reflection of their performance and reputation. On this basis, it could be suggested that the perceived quality of UK higher education is much higher than that offered by its Indian counterpart. This view is further endorsed by the then Indian Prime Minister, Dr. M. Singh who, at a Conference of Vice Chancellors of Central Universities- Feb 2013, stated that, "We must recognise that too many of our higher educational institutions are simply not up to the mark." (UWN, 2013). Whilst the author cannot define precisely what Dr M. Singh meant by "up to the mark", The Cambridge Advanced Learners Dictionary (Cambridge University Press,

2015) describes the terminology to mean "to be good enough", and so the Indian Prime Minister's statement can be considered to indicate an assumption that the quality of Indian higher education is not perceived to be good enough, or to meet expectations, whether that means for India itself, or for the global market.

As such, an acknowledgment of the requirement for change in the Indian higher education sector is well underway. This change involves expansion of the higher education sector on a mammoth scale, which could possibly address the future demands of increased higher education places, but what about the quality, and thus recognition and reputation, of the academic qualifications?

Performance Accountability and Regulatory Mechanisms

Economic motivation is awakening higher education institutions to become more accountable, more efficient and more productive in the use of publicly generated resources (Alexander, 2000). The inability of state-funded institutions to meet the demands of an increasing student population can be said to contribute to the establishment of a thriving private sector supply of higher education institutions in India. This has resulted in institutes having to prove and justify value for money, be it through content of courses, teaching capability, and learning outcomes, or whether the service they provide is fit for purpose for the requirements of their range of stakeholders. Higher education institutes therefore have to operate as businesses with clear goals, demonstration of capacity and capability to deliver, measurable outcomes and ownership/leadership in a competitive field.

Furthermore, distance education and open learning programs have been effective in increasing access at modest costs, especially for the underprivileged groups that are usually poorly represented in university enrolments. India has 3 million part-time students enrolled in correspondence courses, in addition to the 4 million regular full-time students (Johnstone, Arora and Experton, 1998). Such examples are illustrative of the economic reforms that have been introduced in Indian higher education to address the demand/supply gap in the provision education to the masses through innovative and cost-cutting policies.

Accreditation of all colleges and universities in India became mandatory in 2013 (UGC, 2013). There is a new impetus to strengthen national systems through mechanisms which grant more autonomy and funding to states linked to greater accountability (British Council, 2014). Under

such pressure, performance accountability within higher education institutions is a multi-faceted concern and can be perceived to have a number of dimensions. Given the intangible nature of quality and the complications in measuring the concept, accountability is a challenge to achieve in the higher education sector. While institutions are already accountable – to their faculty, students, regional/state authorities, accreditors, and multiple stakeholders including employers – the key to success may be in their governance structures to ensure transparency, and through regulation (both internal and external) to monitor progress and performance. "With greater expectations being placed on it, higher education is being obliged to examine itself, or be examined by others" (Barnett, 1992, p.16).

To achieve the ambition of holding higher education institutions accountable for their performance, recent years have seen a global drive to link funding/grants to performance, and in effect, the quality of their performance via outputs through measurable outcomes. In India, which historically has practised central state control, with minimal autonomy for higher education institutions, its 12th Five Year Plan recommended that the country's higher education institutions be granted more autonomy over curriculum, staffing, and programs offered (Daugherty et al., 2013).

Corruption and Quality Assurance

Given the above, the strong development of quality assurance systems is one of the most significant developments of higher education since the early 1980s (Aggarwal, 2009). Quality assurance expanded in response to the massification of participation, the growing diversity of educational offerings and the expansion of private provision (El-Khawas et al., 1998; Dill and Beerkens, 2013). It is the role of the quality assurance regulators to provide reassurance to stakeholders that the higher education institution is performing with integrity and transparency, and is achieving its purpose in delivering the outcomes expected.

A climate where public funds are being invested and pressure is being applied from external sources to demonstrate value for money, particularly with inadequate means of transparency and governance, can serve as a temptation to fraudulent activity. A report by Transparency International found that reductions in the amount of public money allocated to universities have been fuelling corruption within higher education worldwide. India was ranked second for the prevalence of corruption in its higher education sector, with 61% of people surveyed reporting

that they believed the country's education system to be "corrupt" or "very corrupt" (Parr, 2013: n.p.n).

The pervasiveness of corruption in Indian higher education is further validated by the observation that no one knows the extent of the problem, although consistent news reports indicate that it is widespread particularly in countries that send large numbers of students abroad, including China and India (Altbach, 2012). It is clear that in a country where corruption is widespread in all sectors, reliability cannot be assumed in quality assurance reporting, without the existence of confidence of transparency in process and accessibility of valid data. Investigating quality assurance processes in isolation will not provide the real picture without consideration of the wider influential factors. In the case of India, there is endemic corruption ranging from appointments of Vice Chancellors which have become subject to caste and communal considerations (Singh, 2007), to corruption amongst the assurance organisations, all against a backdrop of a very weak legal infrastructure in the country.

The governance and quality assurance approach in India has been described as "an ineffective quality assurance system and a complete lack of accountability by institutions to the state and central government, students and other stakeholders" (British Council, 2014, p.16). The nature of the regulatory and accreditation mechanisms in Indian higher education will be addressed in the second chapter, but are they fit for purpose and do they meet the requirements of all the stakeholders; are they corruption-free and able to provide genuine assurance, and do they have a role to play in inculcating confidence on an international level in the qualifications being awarded to students graduating from Indian institutions, so as to provide global recognition to qualifications gained from India?

Focus of this research

As India is geographically a huge country, with a multitude of higher education institutions of different make-ups, this research will specifically research the essential factors required to ensure the success of quality assurance measures in regulating the teaching and learning processes of central, state and privately-run institutions. In doing so, it will investigate the relevance of specific concepts of quality, as defined by Harvey and Green (1993), to the teaching and learning elements of higher education in India; and how these concepts are operationalised through internal and external quality assurance infrastructure.

Key elements of this research, therefore, will be to:

1. Establish the existing quality assurance processes in teaching and learning within the selected Indian higher education institutes, as stipulated by government and regulating bodies;

2. Explore how quality assurance processes are being practised in selected Indian higher education institutions to meet the expectations of government and regulatory bodies;

3. Determine proposals that can be implemented by government agencies and higher education institutes to assure the quality assurance process for teaching and learning

Contribution to New Knowledge

Raising the quality of teaching and learning emerged as the highest priority of most higher education institutions in India, particularly state institutions (British Council, 2014), and accordingly this thesis will specifically focus on quality in relation to teaching and learning, with the aim of contributing to this item of priority for India's higher education. Additionally, the author travels to India almost three times a year and tries to find and attend seminars and conferences focused on the current state and future of higher education in the country. Discussions help in identifying current issues surrounding quality of the Indian higher education sector, and informal chats during breaks help identify 'soft issues' or 'intangible issues' most of which cannot be documented, such as 1) the social attitude of '*chalta hai*' (which means 'everything goes' or 'it's ok') and the other which is '*toh kya*' (which means 'so what'); 2) corruption at almost all levels of institutions, and 3) breakdown of the legal system in the academic arena, none of which can possibly be addressed in the short term. In this way, the research will be informed by an analysis of cultural norms or influences significantly affecting higher education practice, and its quality assurance in India.

Whilst there is significant reporting of India's ranking (or lack thereof) within the global higher education league tables when they are routinely published, there appears to be minimal investigation from an academic focus on the contributory factors influencing India's failure to be represented in the top 200 universities of the world. Viewpoints about the transparency and

validity of the rankings are continuously being exchanged, but this thesis will only provide knowledge on the issues outlined under the section on 'Focus of this Research'.

Methodological Design

As this research will mainly be investigating the perceptions of quality and quality assurance mechanisms within the Indian higher education sector, the methodological approach will be one of mixed methods, with both quantitative and qualitative research being undertaken to produce the most comprehensive outcomes. This will allow for the causes behind the effects to be realised and therefore lend themselves to more inclusive and coherent findings. To ensure validity, reliability and trustworthiness (discussed later in the third chapter), a mixed-method approach is envisaged and as such various methods of data collection will be used for data collection such as surveys, interviews and documentary analysis which also play an "…explicit role in data collection in doing case study research" (Yin, 2014, p.107). It is hoped that these methods will complement the validity and reliability of the data collected from the other.

Moreover, the following processes are envisaged to assist in the collection of data for this research: analysis of documentary evidence to include quality assurance and accreditation documents at government and higher education institution level; semi-structured interviews of a number of key stakeholders in the institutions' quality assurance departments. Following data collection, the most suitable software to analyse it would be used, and data sets will be verified against each other to ensure validity and reliability of this research.

Main Limitations of this Study

This research is subject to a number of limitations. As part of this research will be based on the current experience in Indian higher education institutions, physical access to such institutions in India or key Indian government or university officials, due to geographical separation, would be costly and could be highly challenging, especially during term times. As such, any publication accessed to explore the Indian higher education sector would necessarily have to be Internet-based, an approach that can restrict access to confidential data. If access to confidential data is granted, information is more likely to be sent via post, involving possibly longer time spans to gain access to material. Furthermore, the research will be restricted to only the teaching and learning elements of higher education in India, and limited to three types of institutions: central, state and private.

Outline of Subsequent Chapters

To help navigate through this thesis, an overview of the next and subsequent chapters is presented in this section.

Chapter Two of this research analyses the key concepts relating to perceptions of quality amongst higher education stakeholders and quality assurance mechanisms in higher education. Many authors have commented on these concepts from various different perspectives at different times in the past. This has not only had an enriching effect on the arguments, both for-and-against the very concepts in question but is also likely to lead to the formulation of new knowledge on the same concepts. Chapter Two will conclude by formulating the research aims or questions and a set of propositions which will form the preliminary framework for analysing the perceptions of quality amongst higher education stakeholders and quality assurance mechanisms in higher education within India.

Chapter Three describes the specific methodologies after outlining the rationale for choosing various data collection methods for this research. Relevant researcher's positionality and epistemology are discussed to allow for a foundation of the qualitative research approach. The research design, which includes semi-structured interviews online surveys, is also discussed, concluding with credibility and transferability of this research.

Chapter Four is where the first research aim is addressed based on documentary data analyses. Data is collected from relevant publicly available documents from Indian government agencies and Indian higher education institutions. The chapter facilitates an in-depth understanding of the espoused theory of quality assurance by Indian government through a study of the themes that emerge from data analysis.

Chapter Five describes the perceptions of quality amongst Indian higher education stakeholders based on data collected from staff interviews and students survey data from different higher education institutions. The findings present a contextual background for carrying out a comprehensive analysis of empirical data collected for this research. The findings have also helped in the identification of two finer concepts of quality especially related to the Indian higher education context.

Chapter Six presents the analysis of perceptions of how quality assurance is practiced in the selected four Indian higher education institutions based on staff interviews and student survey data. The chapter facilitates an in-depth understanding of the perceived practices of quality assurance in Indian higher education institutions through a study of the themes that emerge from interview and survey data analysis. A constant comparison of findings and concepts of quality helps in identifying the most applicable concepts of quality in the Indian higher education sector.

Chapter Seven presents the significance of this research through cross analysis of findings from the preceding chapters. These findings contribute to the current understanding of the application of concepts of quality in Indian higher education institutions at undergraduate level. The cross analysis also helps in presenting the current gaps between the desired and perceived practices of quality assurance in Indian universities. Based on these findings, a model is developed to address the current gaps in quality assurance processes in Indian universities. The limitations of this research are presented with suggestions for areas of further research.

Chapter Eight presents the conclusion of this research with recommendations based on the gaps identified in the preceding chapter to help and serve the higher education sector in India as well as other similar settings. The proposed recommendations will need to be implemented at government, institutional and departmental levels for the higher education sector to have a purposeful and efficient outcome from such applications.

Chapter 2

Literature review

Introduction

In the previous chapter, the fundamental areas of interest that stood out were quality and quality assurance amongst Indian higher education stakeholders and the relationship between the quality assurance mechanism of Indian higher education and the global reputation of its graduates' qualifications. Defining quality and its assurance has proven to be complex due to the intricacies associated with these concepts, examples of which are the numerous dimensions and stakeholder perspectives involved. The fact that this multi-faceted concept itself is difficult to define lends itself to the debates around how quality, and indeed what aspect of quality, is to be measured to assess and assure the global ranking of universities. How can standards be benchmarked, and what is the baseline criterion or yardstick that quality can be compared with? Both these concepts have thus been debated, especially in the higher education context, yet there appears to be no consensus on what quality is, and how it can be effectively assured. Whilst the reviewed literature refers to such dilemmas, it is crucial that some parameters are established to measure and assure quality to facilitate the identification of areas of enhancement or improvement. As stated in Chapter One, success for a higher education institute can be related to the quality of education provided and qualifications awarded if it is to distinguish itself from its competitors. As such, this section of the thesis aims to review literature on the concepts of quality and quality assurance in the Indian higher education context. The analysis of such literature has lent itself to the identification of research aims which have been presented at the end of this chapter.

Since definitions provide both common and contended notions, these can help in comprehending and conceptualizing the core vocabulary within the subject-area being researched. As such, all topics and terminologies used in this literature review have been approached through their definitions. These definitions, as well as other factors associated with this study, were researched in peer-reviewed journals published in the preceding twenty-five years. This time-frame mainly helps in addressing inter-alia the evolution of various concepts of quality and quality assurance within the context of recent changes experienced in the higher education sector. Most of the articles were based on research carried out in the United Kingdom

(UK) and Australia, although few research-based articles from other countries e.g. India, Taiwan and America were also included.

In addition to the literature stated in Chapter One, Research into Higher Education Abstracts published by the Society of Research into Higher Education (SRHE) was also searched with the following key terms: quality in higher education, quality assurance in higher education, accountability and performance in the context of quality in higher education. Each of these search phrases were combined with context phrases e.g. *in India,* some of which yielded results in several hundred but accountability and performativity in the context of quality in higher education yielded no results. All material referenced in this review was used for this study. Additionally, this study is also informed through reading many articles during the search process which have not been included, as the contents therein did not have the same focus as this study, although they engendered a wider knowledge base for this research. It also became apparent during this literature search that it would be possible to focus only on a narrow segment of higher education. As such, this review focuses only on quality and quality assurance in the context of teaching and learning in higher education at the under-graduate level and not quality associated with research, although it is acknowledged that the reputation of institutions for quality stems from more than teaching quality, especially in an era of research-led institutions.

The subsequent sections provide an interpretation of various key areas of this research which are: quality; quality in higher education; quality assurance in higher education, quality management and policy perspective in higher education. Each of these sections have further subsections in which attributes associated with the key areas are discussed.

History of Quality

The author's initial search on how quality was assured during World War II led to an impression that the concept of quality in higher education was imported from the military. While trying to locate the earliest recorded concept of quality, one interesting piece of literature dated 3000 before Christ (BC) in Babylonia was found in the code of Hammurabi (ruler of Babylonia): "*The mason who builds a house which falls down and kills the inmate shall be put to death*", (Akhila, 2012, n.p.n), suggesting that the concept of quality existed in 3000 BC. It appears to promote customer-oriented quality-assurance and indicates the responsibility of quality resting on an individual's shoulders, as opposed to the way it has evolved today through

industrial revolution, wherein the responsibility rests on organisations and is related more to mass production and services.

Yet another record of quality is provided by the American Society for Quality (ASQ) which suggests the evolution of quality…

> "...*from the end of the 13th century to the early 19th century, stating that craftsmen across medieval Europe were organized into unions called guilds. These guilds were responsible for developing strict rules for product and service quality. Inspection committees enforced the rules by marking flawless goods with a special mark or symbol. For example, stonemasons' marks symbolized each guild member's obligation to satisfy his customers and enhance the trade's reputation. These marks served as proof of quality for customers throughout medieval Europe. This approach to manufacturing quality was dominant until the Industrial Revolution in the early 19th century*". (ASQ, 2013: n.p.n)

The foregoing indicates various key features associated with quality, such as the relationship of quality with strict rules of production and services; through special marks or symbols by guilds to establish quality of products from member craftsmen; quality assurance mechanisms through inspection committees; and a commitment to pursue customer satisfaction by all craftsmen of a guild. These features can perhaps be related to *standards* today, and appears to be a holistic approach to quality, albeit mostly oriented to products rather than services. On comparing these times with life today, the societies of the world appear to have greatly advanced together, not only with the evolution of products and services fuelled by the advent of technology, but also the quality assurance mechanisms for said products and services on a mass scale – the seed of which perhaps was planted during the industrial revolution.

The Industrial revolution (1760 to beyond 1870) influenced large scale changes in society and was associated with a growth of population, the application of science to industry, and a more intensive and extensive use of capital. It was also associated with the conversion of rural into urban communities and a rise of new social classes (Ashton, 1948). When mass production took the centre stage, businesses grew to previously unimaginable sizes and encompassed not only production of goods but also the provision of service on a mass scale. Management of these businesses evolved to cope with new (at the time) processes of mass-production of goods. These processes needed to adopt a new management approach particularly like the one developed by Frederick W. Taylor (ASQ, 2013). The desired mass production was achieved through this new management approach, but it had a negative effect on the quality of products that were produced. To rectify this problem, the factory managers created inspection

departments (ASQ, 2013) to assure customers of product quality. Thus, perhaps, a separate department of quality assurance came into being. The industrial revolution soon demanded educated people to work for the newly formed and very large-scale organisations and enrolments in Higher Education Institutions started soaring too, as is evident from Altbach et al (2009: v) who state that, "This expansion [of higher education] has been driven by the shift to post-industrial economies, the rise of service industries and the knowledge economy". There was a similarity here – mass production on one hand and providing education service to increasing masses on the other. In either case, the requirement to satisfy the customer, which was dependent on the quality of products or services, was of paramount importance.

As this research is specifically focused on quality in the higher education sector, it would be useful to iterate what comprises this sector after investigating the existing understanding and concepts of quality.

What Is Quality?

This subsection intends to explore the definitions of quality in the higher education context but to understand the common notion of quality amongst various stakeholders, one definition from industry is included i.e. Shell, mainly as its product is expected to be used by all stakeholder groups. This is followed by the UK government agency – Quality Assurance Agency's (QAA) perspective on quality in higher education. Various other definitions on quality have also been selected, most of which have been written in the context of higher education. The rationale behind selecting these sources is three-fold: Firstly, Shell is an oil (fuel) giant with a global footprint. Its definition of quality is expected to relate to most readers, many of whom may also be Shell's direct customers. Furthermore, Shell's notion of quality is also likely to be similar to businesses engaged in production, as opposed to service. Secondly, QAA's notion of quality is in direct contrast to this business-product-oriented ethos. The reason for teasing a quality definition from QAA is also two-fold: firstly, it would perhaps be suited to organisations that are engaged in providing an education service e.g. higher education institutes; secondly, it is the apex autonomous national body which is responsible for the quality of higher education in the UK. Definitions of quality in the context of higher education have been chosen from recognised academic journals and peer-reviewed articles spanning over twenty-five years. The aim is to tease out and understand various elements (themes) of quality that may exist within these definitions.

First, consider the definition(s) of quality as published by Shell company:

> "*Quality is something that is 'fit for purpose'. In other words, it means that relates to meeting expectations. As well as doing what it is supposed to, it must also suit the customer in terms of standard, cost, delivery, and so on. Consequently, we are taking as our quality definition, 'meeting customers' needs*". (Shell- livewire, 2013: n.p.n)

Furthermore, it states:

> "*Alternatively, quality can be defined as something that explains 'customer satisfaction through meeting customer needs'. In business terms, this suggests that by eliminating defects from occurring during a process, savings can be made in terms of time, scrap, energy and even human stress*". (Shell-livewire, 2013: n.p.n)

In the first definition by Shell, the phrases 'fit for purpose' and 'meeting expectations' are positioned side by side. While the concepts 'fit for purpose, standard, cost and delivery' all appear tangible and more product-oriented, the other, 'meeting expectations', is certainly very broad and more related to the 'feel factor' situated in the minds of the customers. The latter part of the definition and explanation of quality by Shell once again sits on the fence in terms of the tangible and intangible aspects of quality. While 'customer needs' can be met, does that automatically imply that 'customer satisfaction' has been achieved? It may be argued that 'customer needs' are tangible and can be achieved through standards, but can 'customer satisfaction' be measured? While organisations often use tools such as surveys to measure customer satisfaction, it may be very challenging to measure as it is a higher-level abstract of subjectivity; therefore, the interpretations of such survey results may be hugely diverse. Another key aspect about Shell's definition of quality is that it is product-oriented and thus has an objective underlay. That is to say, the 'product' can be held, felt, measured etc. Thus, customer satisfaction can be achieved through some form of measurement. It can be argued that the perception of this 'satisfaction' may be subjective based on different stakeholder standpoints e.g. manufacturers would perceive 'customer satisfaction' differently than the customers' themselves. One of these (manufacturer perspective) is directly related to the product, the other (customer perspective) resides in the mind as a 'feel factor'. But what if there was no product to hold, feel, or use before deciding its quality? What if it was a service like that offered by psychiatrists, or the experience of a stage drama or a film, or education? The commonality in these examples is that no material has exchanged hands, but people have walked away after an experience that existed only as a feel factor. How would one perceive quality in this case? QAA explains this through its write-up on quality in higher education as higher education institutes are considered to be service providers.

QAA (2013) has published a code for higher education institutes that sets out the expectations of UK higher education institutes. It does not define quality but sets out the parameters for UK higher education institutes to ensure quality:

> "*Academic quality is concerned with how well the learning opportunities made available to students enable them to achieve their award. The Quality Code sets out Expectations which higher education providers are required to meet to ensure that appropriate and effective teaching, support, assessment and learning resources are provided for students; that the learning opportunities provided are monitored; and that the provider considers how to improve them*". (QAA 2013, p.11)

…and it sets out a separate expectation for standards:

> "*Threshold academic standards are the minimum acceptable level of achievement that a student has to demonstrate to be eligible for an academic award. The Quality Code sets outs Expectations which higher education providers are required to meet to ensure that academic standards are set and maintained*". (QAA 2013, p.11)

The most significant element here is that QAA, by way of its code for UK higher education providers, neither attempts to define quality nor provides a specific definition for 'quality' in academia, but it does clarify its intent about what it expects with respect to quality from UK higher education institutes. The expectations are set out in the code and the outcomes are summarised in the definition - *support, assessment and learning resources*. All these outcomes are tangible and focused on two stakeholder categories i.e. provider and learner.

Similar to definitions by Shell, the QAA also couples tangibles with intangibles e.g. provision of *learning opportunities,* and *how well they are made available to students,* respectively. The QAA states *appropriate and effective teaching,* where perhaps *'appropriate'* may be a universally/locally accepted norm, but how does one measure *'effective'* in e.g. students from the same cohort averaging different scores, though equipped with the same set of resources and infrastructural support? Likewise, elements like *support, assessment and learning resources provided for students,* and *'monitoring of learning opportunities'* are all measurable; but how each one of these elements is perceived by various stakeholders is intangible and highly subjective.

For now, the foregoing could fairly establish that quality is a concoction of various elements that can be subdivided into two large categories; tangible and intangible. It is perhaps because of the intangible elements and aspect of quality, that it is highly contested and perceived difficult to define. In order to dig deeper what follows is a more focused research on quality in higher education.

Quality in Higher Education

Defining *quality* in the context of higher education has not been easy for, as mentioned in Chapter One, the concept of quality has, is and perhaps forever will remain heavily debated, as portrayed in the following antithetical definitions of quality:

> '*Even though quality cannot be defined, you know what it is*' (Pirsig, 1974, p.231); it … '*is neither mind nor matter, but a third entity independent of the two… the point at which subject and object meet*'. (Pirsig, 1974, p.302-304); *notoriously elusive* (Gibson, 1986; Neave, 1986; Scott, 1994; and Michael, 1998); *slippery* (Pfeffer and Coote, 1991); '*…in graduate programs…*[it]*… is an abstract notion that defies precise, objective definition*' (King and Wolfle, 1987, p.99); *relative* (Middlehurst, 1992; Vroeijenstijn, 1992; Harvey and Green, 1993; and Baird, 1998); '*… has been used as a term of art in higher education, a mental abstraction that varies depending upon the perspective of the user*' (Dill, 1992, p.39); *embodies both intrinsic and extrinsic elements* (Ball, 1985; Barnett, 1992, and van Vught, 1994) *dynamic* (Boyle and Bowden, 1997); *philosophical concept… lacks general theory in literature* (Green, 1994); '*Education quality is a rather vague and controversial concept*' (Cheng and Tam, 1997, p.23); '*… few actually know what constitutes quality in higher education*' (Michael, 1998); '*… is a notoriously ambiguous term given that it has different meanings to different stakeholders*' (Pounder, 1999, p.156); *multidimensional* (Campbell and Rozsnyai, 2002); '*quality in higher education… often intangible and difficult to measure*' (Tsinidou, Gerogiannis, and Fitsilis, 2010, p.1);

The foregoing collection of quotations depicts a dilemma related with the perception of quality per se, especially in the higher education sector. In most of these antithetical definitions, there are thought-provoking adjectives like notorious, slippery, defiant and vague associated with respect to, perhaps, the measure of quality. In some quotations, the notion of tangibles and intangibles are placed side by side, alongside assumptions of agreement e.g. 'you know what it is'. Some clearly state that quality cannot be defined. Interestingly, a common thread of subjectivity runs through all these anti-definitions indicating that there is a sense of quantifying quality, albeit on an individual basis. As such there appears no commonly accepted or a working definition/s for quality in higher education, although there do appear to be common themes around the conceptualisation of quality. These include for instance "excellence" (Cheng

and Tam, 1997; Harvey and Green 1993); and "transformation" (Harvey and Green 1993; Haworth and Conrad, 1997). Once again, however, this only serves to thicken the plot further as the interpretation of such themes will be very much dependent on the stakeholders' subjective perception.

In direct contrast to the foregoing, some definitions of quality in the higher education context were identified but these were more from students' perspective e.g. associating quality in higher education to both the character of the educational development and the educational achievements of students (Barnett, 1992). On similar lines, Dill (2003) draws a likeness between quality and academic standards (standard is defined later in this chapter) which include specific levels of knowledge, skills, and abilities that students achieve through higher education.

Furthermore, quality can be defined as a higher education system that comprises input, process, and output; which meets the explicit and implicit expectations and provides complete satisfaction to its internal and external stakeholders (Cheng and Tam, 1997). Similarly, Tsinidou, Gerogiannis, and Fitsilis (2010) refer to quality in terms of *output* of the higher education sector by drawing a relationship of transformation of individuals, their knowledge, their characteristics, and their behaviour, after they have been educated at higher education institute/s. This view encompasses two of the three elements suggested by Cheng and Tam (1997), i.e. *process* and *output*. While this approach to quality covers some stakeholder groups i.e. provider and learner, it fails to incorporate the view of other stakeholder groups.

Almost in contrast, Vroeijenstijn (2006) states that quality is subjective, and any definition of quality therefore must consider the views of different stakeholders; indicating that these views could be could be dissimilar (Watty, 2003) and even contradictory. A similar yet different perspective of quality is observed in the work of Mortimore and Stone (1991), who do not define quality but identify four uses of the term: an attribute or defining essence; a degree or relative worth; a description of something good or excellent; and a non-qualified trait. The interpretation of these uses is expected to define quality in the mind of individuals and as such matches the suggestion of Vroeijenstijn (2006), for it is apparent that subjectivity is interwoven in these four uses, the outcome of each of which would be oriented to a specific stakeholder group.

The differences are so many, based on diversity of higher education in terms of various disciplines of education and individuals' standpoint, that perhaps it would not be feasible to have a single definition of quality that could satisfy all stakeholder groups. As such, various authors have attempted to explain quality in different ways ranging from quality as having 'dimensions' (Harvey and Green, 1993) or 'constituents' (Van Kemenade et al., 2008) or 'value systems' (Van Kemenade et al., 2008) or 'relationship with satisfaction' and even as 'wicked problem' (Krause, 2012). The following sub-sections discuss these categories starting with that of Harvey and Green (1993).

Five Dimensions of Quality

Harvey and Green (1993, p.11) assert that quality consists of five dimensions which are distinct and interconnected simultaneously; capable of providing a framework and a basis for collecting and analysing data in the context of this research as discussed here.

Quality as exceptional. Here quality is considered in terms of excellence. But what is excellence? At an individual's level: it is a relative term. What is good to one may even be of poor quality for another. An individual's inference of quality may be based on the comparison with their last best experience. This inference by individuals is highly subjective and intangible. At a higher education institutes' level; it could be about exceeding exceptional standards of academic performances and achievements, perhaps to attain an elite reputation. But Harvey and Green (1993) argue that due to the absence of formal agreed international standards of performance measurement, higher education institutes differ in their perception of quality and operate differently.

However, World University Ranking (WUR) league tables that rank higher education institutes (by invitation only) are developed by independent organisations like TSL Education (TSLE) popularly known as 'Times Higher Education' (THE). The need for rankings is perhaps related to the elitist notion of higher education. In attempting to recreate this notion in an age of massification, excellence is identified through predetermined performance criteria (TSLE, 2013) of higher education institutes. The criteria set out by *THEWUR* is however not the same as that set out by other similar organisations e.g. Academic Ranking of World Universities (ARWU) and Quacquarelli Symonds World University Ranking (QSWUR); comparing league tables of which, against *THEWUR,* have led to identifying discrepancies (Soh, 2015). The

discrepancies are perhaps due to the underlying subjective concept embedded in the predetermined performance criteria which are highly intangible and as such [league tables] are vehemently and vigorously debated (Holmes, 2012).

Irrespective of the foregoing, higher education institutions' ranking seems to be widely acceptable amongst the international higher education sector as is evident from the attention and coverage it gets in various leading media channels across the globe e.g. BBC (UK), CNN and Fox (USA), and ABC (Australia). The effect of such publicity appears to be progressively influencing society's and stakeholders' beliefs in the fact that those higher education institutes which rank high in league tables offer exceptional quality of higher education. As a result, highly ranked higher education institutes on WUR tables are more than likely to select staff and students of higher (than average) calibre to keep/enhance their competitive advantage and their position on league tables and image of excellence.

This dimension can be used for exploring factors that influence the failings of Indian higher education institutes in WUR league tables and the un-acceptability of the current Indian qualifications.

Quality as Perfection or Consistency. This dimension can be vigorously argued. Harvey and Green (1993) argue that there is another type of excellence that differs from being exclusive. It is 'excellence [that] subverts exclusivity' (Harvey and Green 1993, p.15) and 'transforms quality into something everybody can have' (Harvey and Green 199, p.15); relating excellence of products or services to 'specification' to achieve 'zero defects'. In the higher education sector, this relationship of excellence to specification may not work. Simple examples can show this concept as a misfit in the higher education sector e.g. higher education institutes could possibly never produce identical or defect-free graduates (Watty, 2003). Other everyday examples can include: governments cutting back funding and simultaneously demanding a progressive increase in accountability; expanding the higher education sector to meet local demands (MHRD, 2013); and deteriorating standards in secondary education reflecting poor calibre of higher education student intake, coupled with a lack of good quality higher education staff (British Council, 2014). All these factors are dynamic and seem to escalate year-on-year, nullifying consistency. What happens to the suggested 'specification' to achieve 'zero defects' in such a dynamic context? Whilst specifications can lead to consistency, the current dimensions are far too dynamic for this notion to be considered valid in the higher education

sector, thus leaving only the remaining four dimensions of quality to be considered in the context of higher education (Lomas, 2004).

Quality as Fitness for Purpose. The third dimension is 'fitness for purpose' and 'meeting customer needs'. This dimension can be debated two ways – for and against – each of which is discussed here.

Against: In the context of higher education, both words '*fit*' and '*purpose*' are unclear. The *purpose* of higher education is often debated with apparently no consensus. (Schwartz, 2003). In a similar vein, '*fit*' can be considered as there are debates in all aspects of the higher education sector e.g. Graduates from majority Indian higher education institutes are found to be lacking basic skills by their employers, indicating a mismatch of qualifications with industry requirements and/or the lack of transferable skills. This in turn leads to disenchantment amongst the industry players with respect to graduate capabilities.

Furthermore, the gist of this phrase *fitness for purpose* relates to the notion that 'bare minimum will do' which bears a stark contrast to the first dimensions of quality as *exceptional.* It is this contrast that leads "… *academics, who do not conceive quality as fitness for purpose, ... likely to question …*" this dimension (Watty, 2003, p. 217) and also establishes the title of this concept to appear oxymoronic due to two opposite notions positioned besides each other; 'quality' and 'fitness for purpose'. Furthermore, 'fitness for purpose' would perhaps relate to very basic standards that measure quality levels. Standards, according to Ashcroft and Forman-Peck (1996), refer to the minimum threshold by which performance is judged, indicating a relationship with quantifiable attributes. Similarly, Greatrix (2001) argues that standardisation is an industrial model and is inappropriate for academic programmes in higher education. Moreover, in keeping with the common view, 'fitness for purpose' could imply quality perhaps when the 'purpose' relates to 'gold or high standards'.

For: Fitness for purpose in higher education can also be perceived as provision of higher end quality [excellence] of the quality spectrum. Ellis (1993), too, relates quality [in the context] to standards that must be met in order to satisfy customers. Like other dimensions of quality, this dimension should also [in theory] therefore meet/fulfil stakeholders' requirements. However, for the dimension to be effective, stakeholders' requirements and needs should be explicitly stated (Rowley, 1996). As there is a large diversity amongst higher education stakeholders, this

can pose a serious challenge to the effectiveness of this dimension and is thus considered too wide an interpretation of quality in higher education (Westerheijden, 1999). Therefore, in order to attempt establishing quality in consonance with this dimension, perhaps it needs to be accompanied with the notion of 'fitness *of* purpose' rather than 'fitness *for* purpose' (Westerheijden, 1999; Srikanthan and Dalrymple, 2007) e.g. by focusing on individual stakeholder groups' needs and requirements could work well e.g. focusing on the *programme specifications* could suit the needs and requirements of *students and employer* (QAA, 2000a) segment.

The notion of this dimension can also be found embedded in government higher education policies (Watty, 2003) and QAA methodology (Lomas, 2004). Its implementation can be evidenced in the strategies and operations of higher education institutes (Watty, 2003). The higher education institutes in UK take their cue from the QAA's ISO 9000 series-based quality assurance procedures (QAA, 2012) which are rooted in the dimension of fitness for purpose (Lomas, 2002). The requirements on part of Indian higher education institutes then remain to assert, to an independent external organisation [National Assessment and Accreditation Council, NAAC], how they achieve what they say they intend to achieve (Seddon, 2000) or prove how a higher education institute is fit for its stated purpose.

Overall, whilst the foregoing indicates the contentious nature of quality, more specifically, the analyses indicates the dimension's suitability to assess quality for various stakeholder groups, and has the potential of overlapping across various stages from macro to micro level higher education operations e.g. from an institute's mission statement which indicates the institute's intention as a whole to programmes' aims and learning outcomes at a more precise academic level (Watty, 2003). This example can, in the Indian context, further facilitate alignment between curriculum and industry requirements; meeting the expectancy of funders, students and employers; value for money (explained later); and service to society.

Quality as Value for Money. This dimension is related to a populist notion of 'value' (as a verb) that is partially quantifiable. The concept appears to emerge from a product-oriented setting based on tangibles like 'how much something [product], for how much money?' (Rowley, 1996) with more product contributing to a feel-good factor which is, however, intangible (Lomas, 2004). Zeithaml (1988, p.16) refers to a range of work (Aaker and Ford, 1983; Dickson and Sawyer, 1985; and Zeithaml, 1982) and state that "*studies on the use of unit*

price information indicates that many consumers use unit price information (i.e. a measure of value) in making product choices in supermarkets". The notion today is perhaps equally applicable to higher education where stakeholders seek efficiency e.g. customers of higher education want to know what they would get for their money (Harvey and Green, 1993); the notional relationship between 'post higher education salaries' to the 'cost of higher education course'. The notion appears tangible but since the product in higher education is a qualification, the perception of quality as 'value' for money has a large subjective element.

Governments funding the higher education sector would perhaps perceive 'value for money' to equate to transformation and betterment of their societies. Students may value their higher education qualifications as lifelong achievements, and as a means of self-satisfaction, better jobs, and self-association with higher social circles, as well as licenses to carrying out and contributing to research. Likewise, industries funding collaborative research with higher education institutes may perceive 'value for money' as that which offers pioneering design and technology, or that which affords it market leadership, or that which enhances their positions on WUR [league] tables. Above all, societies [through paying taxes] would perhaps perceive 'value for money' in higher education as provision for a better future, and for cohesion, not only amongst national groups, but also amongst international communities, in turn contributing to world-peace through joint education and research.

Quality as Transformation. This dimension focuses on the process of change experienced by the learner. Harvey and Green (1993) argue that in a higher education setting, students are consumers and when something is done to the consumer by the provider, the consumer experience a change of form – a very liberal view. This reflects a presupposition that the fundamental purpose of higher education is to affect its students favourably (Astin, 1982) by transforming all aspects of students' life including self-image, attitudes and assumptions (Caul, 1993). This relates to the transformation of learners through higher education experience that encompasses attributes such as acquisition of new knowledge, development of confidence, being motivated, exploitation and application of knowledge to real-world challenges, forming higher personal values and ethics; a holistic effect. It is perhaps for this reason that the transformation dimension is argued by Harvey and Knight (1996) to be a meta-quality dimension in that it encompasses all other dimensions, each of which singularly could at best be responsible only for operationalising the transformative process as opposed to offering the

holistic effect themselves. Harvey (2002) therefore suggests that the transformation dimension should be considered the core attribute of quality. This dimension, due to its multi-faceted attributes, can then be studied at several levels.

At micro-level, the change is, inter alia, associated with the students' level of knowledge upon completion [exit level] as compared to the students' previous [entry level] knowledge and, as such, used as evidence of institutional impact upon students (McMillan and Forsyth, 1991). It can be argued that through a process of examining students' results, it may be possible to measure their transformation and relate it to quality of teaching and learning. However, quantifying the transformation can be difficult as it will be highly subjective, thus making this dimension highly intangible. Although, in the context of this research it can help in understanding how Indian higher education stakeholders establish transformation.

Conclusion to Five Dimensions of Quality.

Even though the impressions of 'dimensions of quality' is that they fit well and are relevant to the service industry, Lomas (2004) refers to this work of Harvey and Green as a heuristic framework for attempting to define quality. However, the underlying essence of these dimensions, as discussed, is that they attempt to capture an 'image' of what may be addressed as 'soft issues' or 'feel factors', which are more often than not, subjective and thus intangible. It should be noted that there is nothing to suggest that all five dimensions of quality suggested by Harvey and Green have to be applicable as a notion of quality for all stakeholder groups of any given organisation. The dimensions do suggest a measure of these intangible elements, but due to the diversity of higher education stakeholders, the question remains – can it (ever) be done? Van Kemenade et al. (2008) attempt to address the question from the outset in their work which is reviewed next.

Quality as Having Constituents

In order to define and elucidate quality, Van Kemenade et al. (2008, p.176) state that quality has four constituents: Object, Standard, Subject and Value. These are explored in detail along with the author's arguments in this section and are as below.

Objects in the higher education sector are diverse and can be categorised under products, processes or systems e.g. *"lecture… lecturer… syllabus… curriculum… curriculum's*

organisation… curriculum's content… students… university…" Van Kemenade et al. (2008, p.176). Furthermore, each of these is subject to observers' perceptions. The main object that, in the context of this research, is the 'process of learning' and the quality of this object [process] will remain elusive due to their intangibility.

Standards in most countries would be defined differently [for product manufacturing, processes and services], as these are necessary for ensuring quality (Van Kemenade et al., 2008, p.177). This fortifies the 'standard – quality' relationship as discussed under quality as fit for purpose, which was also alluded to by the QAA in the preceding section e.g. the National Assessment and Accreditation Council (NAAC) of India, British Standards, The American Society for Quality definition of standard. On probing these definitions, they seem to provide an indication of trying to capture the image of the feel factor - as referred to in the conclusion of the section on 5 dimensions. Whilst a set of standards in itself may be objective, the process of setting standards is rooted in subjectivity and power tensions of those at the helm. Implementation too, in the absence of explicit guidelines, is open to subjective interpretation.

Furthermore, the "*subject - standard*" relationship as suggested by Van Kemenade et al. (2008, p.177) can be argued to be meant as a 'standard - quality' relationship. This description highlights the diversity amongst stakeholders and their individual or collective perspective of what should contribute towards quality, making this component highly subjective, elusive, intangible, and capable of influencing all other components.

Various notions of value and what it means have been presented by Van Kemenade et al. (2008, p.177), quoting various authors on criteria that formulate the conception of quality (Harvey and Green, 1993); approach to various aspects of value-based quality (Garvin, 1984), value as a driver of human behaviour (Robbins, 1991); value as the force that is the ultimate influencing factor which dictates the destination of people and organisation (Graham, 2010); influences on the manner in which people function (Oppenhuisen, 2002), all of which may not be measurable, but which need to be measurable, if any reasonable assessments of quality are to be undertaken (Harvey and Green, 1993).

However, measurements of values through indicators and comparisons with other higher education institutes may be possible, but could be laden with disagreements, mainly because of an absence of consensus on measurement criteria. Like quality, value is also very subjective,

intangible and influenced by a diverse range of factors. As such it may be highly unlikely that a consensus on measurement criteria could be obtained to indicate values within any part of higher education. As stated by Van Kemenade et al. (2008, p.177), '*values drive our behaviour*' which may influence quality. The foregoing arguments present a mix of variable that will make it extremely difficult to measure values in higher education sector for any meaningful assessment of quality.

Summary. The concept of quality having constituents further fortifies the belief that quality is multifaceted. The four constituents of quality could fit in well with any stakeholders' standpoint. However, on delving deeper, it becomes evident that, in this context, quality is related to object and subject, bringing objectivity and subjectivity to coexist side by side.

While the author agrees with the notion of this value systems' association with quality in the context of higher education, he remains concerned about the mention of the European Foundation of Quality Management (EFQM) model by Van Kemenade et al. (2008) in their work. The essence of the EFQM model is control and centralisation as opposed to the much-needed liberalisation and autonomy in the Indian higher education sector. For these reasons, its application will perhaps hamper continuous improvement especially in a vast context like that of India. Also, the assertion that innovation will not be seen as forthcoming through continuous improvement is debatable. Innovations are conceived out of desires to do better, which relates to continuous improvement. Furthermore, it could be stated that accreditation processes of higher education institutes are conducted in accordance with this value. Reviews are undertaken to ensure not only that standards have been met, but also that they are being sustained i.e. through continuous improvement.

While the notion of quality having four constituents, as asserted by Van Kemenade et al. (2008), seems comprehensive, it does not relate quality to satisfaction in a holistic sense. Fortunately, Zineldin and Vasicheva, (2012) address some soft issues that relate to satisfaction that impact upon quality and are briefly discussed next.

Framework of Five Quality Dimensions

Zineldin and Vasicheva, (2012, p.70) expanded the traditional technical–functional quality models into a framework of five quality dimensions (5Qs). The revised dimensions for education are:

"Q1. Quality of object: the technical quality (what customers receive). It measures the education itself; the main reason why the student is studying at the university.

Q2. Quality of processes: the functional quality (how higher education institutions provide the core service). It measures how well education activities are being implemented.

Q3. Quality of infrastructure: measures the basic resources, which are needed to perform the education services.

Q4. Quality of interaction: measures the quality of information exchange (for example, the percentage of students who are informed about the course, examination results), financial exchange and social exchange.

Q5. Quality of atmosphere: the relationship and interaction process between the parties are influenced by the quality of the atmosphere in a specific environment where they cooperate and operate. Especially in poor developing countries, lack of a friendly atmosphere contributes to poor quality of education; in order to avoid this, the atmosphere indicators should be considered critical." (Zineldin and Vasicheva, 2012, p.70)

It is worth noting that Zineldin and Vasicheva have brought soft elements into the mix of constituents of quality through these dimensions. While most of the questions ask for both tangible and intangible information that is similar to what has been discussed in the previous sections, 'quality of atmosphere' significantly stands out and appears more relevant to this research. The inference from all these dimensions could help in including soft issues as one of the constituents of quality e.g. feel factor and the overall satisfaction level of various stakeholder groups; particularly the satisfaction of students in the Indian context.

Quality Versus Students' Satisfaction

In the last decade, there has been an increased focus on students' satisfaction in higher education. Athiyaman (1997) linked service quality with student satisfaction and concluded that perceived quality depends on the level of satisfaction. Due to intense competition amongst higher education institutes in current times, the key to sustainable competitive advantage is satisfied customers through the delivery of high quality teaching and learning [service]

(Shemwell, Yavas, and Bilgin, 1998). Using qualitative techniques, Martensen et al. (2000) applied the 'European Customer Satisfaction Index' to measure quality through students' perception of quality and satisfaction. In contrast, on a quantitative note, Sureshchandar, Rajendran, and Anantharaman (2002) investigated links between service quality and customer satisfaction in terms of the same operationalized factors. They concluded that these two are directly proportional indicating that an increase in one (quality) is likely to lead to a rise in the other (satisfaction).

Perception of quality referred to above is a result of what one feels after experiencing the service offered by an institution. It is this perception that will be documented in various quality monitoring processes within universities. Like quality, feelings are also multifaceted and complex to comprehend or document, as the scale differs from one individual to another e.g. differences in academic ability of students (Shure, Jansen, and Harskamp, 2007). But it is the composite whole of the stakeholders' experience that will formulate the feel factor and thus their perception of quality as a whole.

Furthermore, Bigne, Moliner, and Sanchez, (2003) found that service quality, in a holistic sense, has a significant relationship with satisfaction. This was confirmed by Ham and Hayduk (2003) who stated that there exists a positive correlation between perception of service quality and student satisfaction, which also relates to students' accomplishment-to-dropout ratio (Shure et al., 2007). This perception of quality that emerges from students' satisfaction has further ramifications. Most popular is the popularity of higher education institutions based on students' experience. This, amongst other factors, will have a direct impact on factors like admission numbers, students' dropout rate and the employability of students upon successful completion of their respective courses. Lee and Tai (2008) investigated critical factors that affect students' satisfaction in higher education and their impacts on the management of higher education organizations, which supports the foregoing.

Additionally, Elliot and Shin (2002) stated that students' satisfaction has a positive effect on students' motivation, students' retention and recruiting efforts on part of the university's management. Hence, knowledge of students' satisfaction in this research can help in identifying one stakeholders' perception of quality. But student satisfaction and thus quality as discussed above is concerned with just one group of stakeholders; what about the rest? The

challenge appears to be very daunting and wicked. Krause (2012) tries to explore the wicked nature of quality in the next section.

Quality as a Wicked Problem

Kraus (2012, p.287) quotes from two publications - one by Rittel and Webber, and the other by Conklin – to build the foundation of her argument to theorise the subject of quality in higher education in a more rigorous manner. Quoting Churchman (1967), Kraus states that a wicked problem is where proposed "*solutions often turn out to be worse than the symptoms*" (p.286). According to Rittel and Webber (1973, pp.160 - 161), "*wicked problems comprise several characteristics: they are ill-defined, views on possible solutions vary widely across diverse parties with a vested interest in the problems and how to address them, the problems change in scope and nature on a daily basis and according to the setting in which they are addressed, and today's apparent solution is no guarantee of tomorrow's success*".

Thus far, this review has not even alluded to a working definition of quality in the higher education sector, let alone an agreed definition, and the universal desire of the higher education sector is to address the issue of quality in the context of higher education. As such, the characteristics of a wicked problem seem to fit well with current perceptions of quality in the context of higher education: quality is multi-faceted, has no agreed definition, stakeholders have vested interests and diverse views on how quality should be ensured, there is no agreement on how to manage it, and any perceived current solution for these dilemmas is not likely to work in the future due to the dynamic state of the higher education sector. Since there is no clear definition and it is perceived as a wicked problem, then how is one expected to find the solution to the so-called problem? The debates over quality will perhaps go on forever – chasing notions and intangibles, the desire to measure what is elusive, to be able to document and define what cannot be explained; something that perhaps is akin to beauty that rests in the eyes of the beholder or love that resides between two souls, both of which can be perceived or felt but not defined.

A tabular synthesis is provided on the following page depicting which elements of quality are tangible, intangible or both followed by conclusion.

S.No	Model	Elements of Quality concept	Tangible	Intangible	Author
1		Fit for purpose	x	x	Shell live-wire, 2013; Harvey and Green, 1993;
2		Meeting expectations		x	Shell live-wire, 2013; Cheng and Tam, 1997
3		Support (resources)	x		QAA, 2013
4		How well		x	QAA, 2013
5		Appropriate	x		QAA, 2013
6		Effective		x	QAA, 2013
7		Monitoring	x		QAA, 2013
8		Character of the educational development		x	Barnett, 1992
9		Educational achievements of students	x	x	Barnett, 1992
10		Academic standards	x		Dill, 2003
11	Quality as having dimensions	Transformation[1] of individuals' knowledge, characteristics, and behaviour			Tsinidou, Gerogiannis, and Fitsilis , 2010; Harvey and Green,[1] 1993;
12		Satisfaction		x	Cheng and Tam, 1997
13		Good[1], excellent[1], exceptional[2]		x	Mortimore and Stone,[1] 1991; Harvey and Green,[2] 1993;
14		Perfection		x	Harvey and Green, 1993;
15	Quality as having dimensions	Value for money	x	x	Harvey and Green, 1993;
16	Quality as having dimensions	Quality as exceptional		x	Harvey and Green 1993, Stone 1991,
17	Quality as having constituents	Object	x		Van Kemenade et al., 2008;

Table1 2.1 Assimilation of Components of Quality (cont.)

S.No	Model	Elements of Quality concept	Tangible	Intangible	Author
18	- Do -	Standard	x		Van Kemenade et al., 2008;
19	- Do -	Subject		x	Van Kemenade et al., 2008;
20	- Do -	Value		x	Van Kemenade et al. 2008; Harvey and Green, 1993;Graham, 2010; Oppenhuisen, 2002
21	Framework of five quality dimensions	Quality of object		x	Zineldin and Vasicheva,, 2012; Van Kemenade et al., 2008
22	- Do -	Quality of processes		x	Zineldin and Vasicheva, 2012; Tsinidou, Gerogiannis, and Fitsilis, 2010; Harvey and Green,1993;
23	- Do -	Quality of infrastructure		x	Zineldin and Vasicheva, 2012; Dill, 2003; QAA, 2013
24	- Do -	Quality of interaction		x	Zineldin and Vasicheva, 2012;
25	- Do -	Quality of atmosphere		x	Zineldin and Vasicheva, 2012; Van Kemenade et al. 2008; Harvey and Green, 1993;Graham, 2010; Oppenhuisen, 2002 ; Tsinidou, Gerogiannis, and Fitsilis, 2010;

Table1 2.1 Assimilation of Components of Quality

Conclusion to Attributes of Quality

Having explored the multifaceted dimensions, perceptions and definitions of quality in higher education, there appears to be a gap in the higher education sector for a working, if not an agreed-upon, definition and meaning of quality. At this stage, where further review on closely related topics like quality assurance and management is yet to be carried out, it is almost compelling and of paramount importance that an appropriate definition for quality be agreed upon. As such, based on various suggestions, debates and arguments emerging from a range of schools of thoughts over defining quality that have been discussed in the preceding sections, a multiple definition approach is suggested. This entails that there can be different set of definitions for different stakeholder groups with a different focus specific to their needs that can provide them with the desired level of satisfaction. As the perception of quality appears to be a psychological reaction based on an individuals' past experience, a tacit comparison in the perception of the observer is evidenced via prefixes to quality e.g. good, bad, poor, and excellent. In the context of this research, psychological response to a product or a service is considered.

Furthermore, if standards are considered instead of quality, psychological response to a standard product or service would not be the same, as there would be expectancy [subjective] of some sort amongst stakeholder groups. However, standards can help achieve quality, but the reverse may be hard to achieve as perception of quality through mental reactions reside in every individual and would thus be different for all. While standards are carefully thought through and set on the basis of mass appeal, once followed, quality may be forthcoming [only if the standards are high].

Looking into the future; with an ever-increasing speed of change, reform and betterment, the current standards of high quality would perhaps be a norm or may even be looked upon as basic or elementary standards and [all] stakeholders would expect to see these standards in place. Quality [good/excellence] in the future would then be perceived only if products produced or services rendered are to a higher level than current high standards [which today offer excellent quality]. This notion befits the dimension of continuous improvement, with a backdrop of continuous comparison with current norms at any given time – philosophy of perception. Part of the intent of this research, therefore, is to consult stakeholders in the teaching and learning segment of Indian higher education to get a deeper insight into how they perceive quality from

their stand-point. Irrespective of what the views may be, quality experience of higher education is likely to get the centre-stage attention, both currently and for a foreseeable future.

A corollary to the foregoing is a lack of consensus on how best to assure and manage quality within higher education. All the same, it is essential to have these mechanisms in place for efficient and effective performance of higher education institutes which can be considered similar to any other service providers. An understanding of 'what comprises a service?' has been addressed after delving into quality assurance and justifying various pressures and drivers that demand quality in the higher education sector.

Quality Assurance in Higher Education

Quality assurance in higher education is considered a complex process riddled with difficulties [e.g. massification, ever increasing rate of technological development, demographics, economies] because of its multifaceted profile, similar to that of quality in higher education (Stella, 2004). Additional complexities arise from factors like accountability and assurance of public funding, a key concern of higher education funders, and assurance of value for money invested in higher education by students/sponsors. Such complexities collectively form barriers and challenges to the use of a single definition of quality assurance which covers/fits all circumstances/scenarios/situations (Aas et al., 2009). This section reviews literature focused specifically on the drivers of quality assurance in higher education but only after exploring its definitions and purpose.

Definitions and Purpose of Quality Assurance

The term "standard" is used in common practice e.g. British Standards (BS), and has earlier been defined under the section on "Quality as Having Standards". Compliance with such standards is usually stated overtly by organisations to assure their customers/consumers of quality product or service, hence the emergence of the term quality assurance. In higher education, once these standards are agreed upon by higher education institutes, the quality assurance process trickles down to every activity within higher education institutes for which [all] concerned staff are held responsible/accountable (Mangnale and Potluri, 2011); a process by which higher education institutes ensure and confirm that students can achieve the standards set by various awarding bodies (QAA 2015).

Quality assurance is the process of measuring the standards of quality in the process of developing products and services. Quality assurance is also known to increase the credibility of companies and increase the confidence of customers in the services provided by the company (Stephenson and Yorke, 2013). Quality assurance can also be adequately defined as identifying defects in the process before introducing the final product in the market. Another definition of quality assurance is a set of programs which monitor and evaluate different aspects of a product, project or service in order to ensure that every part of the project meets the standard of quality (Williams and Harvey, 2015).

Quality assurance can then be thought of as a core process to assure not only the clients or consumers, but also the organisation itself, of the compliance with/to such stated standards on a consistent and on-going basis (Mangnale and Potluri, 2011; Dale, 2003; Ellis, 1993). This implies that quality assurance in higher education is a planned and systematic implementation of various processes that consistently aim to provide confidence of satisfaction to various stakeholder groups (Dale, 2003; Juran and Godfrey, 1999). The main purpose of quality assurance in higher education thus translates into conveying confidence of implementing and ensuring higher education quality to all stakeholder groups of higher education services. The challenge, of course, is how to establish standards that are acceptable to all stakeholders. For instance, the standard perceived by a student of his ability may vary greatly by an examining body; as indeed, a lecturer's perception of a student's ability may again be different to that of the examining body. At individual higher education institutes level, this means providing internal information and assurance associated particularly with accountability, value for money and fitness for purpose of higher education to all groups of higher education stakeholders categorised into two groups: internal and external (Middlehurst and Campbell, 2003; Massy, 1997; Juran and Godfrey, 1999), further discussed below.

Internal and External Quality Assurance

Within the higher education sector, due to its public-sector profile, there exists an autonomous need to provide quality assurance to a wider group of stakeholders e.g. government, society, funders, grant awarding bodies, employers as well as its own employees (Ellis, 1993) which can be broadly grouped into internal and external stakeholders. Quality assurance in higher education can therefore possibly be expressed as a procedure deployed by higher education institutes to consistently meet and satisfy both internal and external stakeholders. It also

improves the purpose of accreditation and accountability (Mehta, Verma and Seth 2014). In order to meet the diverse expectations, and ensure satisfaction, of all stakeholders simultaneously and effectively, as well as to address quality assurance's several inherent dimensions, quality assurance is segregated into two categories: internal and external.

Internal quality assurance is associated with accountability, enhancement, internal validation of policies, effectiveness of mechanisms, and reviews of programmes/subjects by staff and academics within higher education institutes with a specific focus on programme-outcome and quality of learning to ensure on-going compliance with standards (IIEP, 2006; Harvey, 2005; Brown, 2004; Morley, 2003; Harrison, 1994). Quality of learning is based on a host of internal [staff and student] attributes affiliated with higher education institutes' operations, e.g. support, guidance, teaching, learning, resources, quality management and quality enhancement (Kanji et al, 1999). Whilst these attributes may appear robust, there are several arguments against such systems stating that these are simple check-box exercises that serve the process of assurance and not the contents of what is being assured. This could be said to be relevant to India, where, although processes such as management of documentation and outcomes of teaching and learning assessments can be established by higher education institutions, the actual reliability and validity of the content of such documents may be questionable. Furthermore, establishing effective internal assurance is additionally testing for such establishments in India due to the requirements of resources, both in terms of financial and professional staff, to successfully embed such practice. As such, internal quality assurance mechanisms alone may not be adequate to demonstrate compliance with standards. The inadequacy can perhaps be complemented with an external quality assurance system (Haug, 2003).

External quality assurance is associated with reviews carried out by external authorised agencies to ascertain academic/professional standards are being complied with by higher education institutes in order to assure external stakeholders like regulators, employers and the local community (Archibong, 2013; Williams, 2012; Williams and Cappuccini-Ansfield, 2007; Dale, 2003; Juran and Godfrey, 1999). External quality assurance systems can therefore be considered as results and responses to government policies and, as such, need to be capable of adapting to rapid changes (Hoecht, 2006; Harvey and Knight, 1996). However, there can be incompatibilities between the requirements of, say, the regulations set by external quality assurance agencies and the approach which various institutes take to *internally* ensure and confirm quality. This can cause tension in relations between them and external quality

assurance agencies (Campbell and Rozsnyai 2002). This begs the question: why further burden the higher education sector with a quality assurance system within an ambience of difficulties surrounding quality in higher education? The answer, in the context of India, may be that regulation, or an external assurance mechanism, has to be implemented to protect against notorious providers of educations, and against questionable (often described as fake) qualifications (Hallak and Poisson, 2005; Agarwal, 2012).

The challenge is further intensified due to various factors and pressures such as massification of higher education; accountability as demanded by stakeholders; expectations of society; diversity of various sorts amongst students; flexibility of courses and resources; competition between higher education institutions on a global scale, national and global economy, present and the future state of technology etc. This subsection explores these pressures in the run-up to reviewing quality assurance through quality management in higher education.

Pressures and Drivers of Quality Assurance

There appears to be a lot of interest in the area of quality assurance for a variety of reasons, many of which are dynamic. These range from a micro (student) level to macro (higher education sector, government) level and include the need for various types of information e.g detailed and accurate information about courses (educational quality e.g. fitness for purpose, value for money) to help students choose a course and information that assists higher education staff in monitoring and improving courses. It also includes information from, say, results of student surveys, on currency of qualifications, on the employment ratio of alumni, and institutional rankings about quality to help institutes establish their performance in the higher education sector. At the apex level, it is probably the latest information on higher education funding and policies by government bodies which are further shaped by both internal (national) and external (international) factors e.g. economics and demographics (Coates, 2005). For the dynamic and/or evolutionary state of these and other reasons surrounding quality of higher education, the practice of quality assurance is increasingly becoming an integral part of the higher education sectors' structure and, as such, is drawing more and more attention to itself (Coates, 2005). This has led to an expansion of interest in the implementation and management of quality assurance in higher education mainly to address the aforementioned difficulties. The next section explores these pressures and drivers.

Accountability. Brookes and Beckett (2008, p.31) refer to the work of Eriksen, 1995; Oldfield and Baron, 1998; Beckett and Brookes, 2006; and state that the two rationales which are largely associated with quality assurance in higher education are its massification and an increased demand for accountability from the institutions. In addition, quoting their own publication of 2007, they assert that "*other environmental forces include: greater expectations and diversity of students as consumers, their demand for increased flexibility in provision, and increasing levels of competition within and across national borders*." (Brookes and Becket, 2008, p.31). Most of these attributes are applicable in the Indian higher education context.

Competition. The competition factor amongst higher education institutes may possibly be a positive notion as long as the competition is managed. If the competition is managed efficiently it may, more often than not, inspire innovation. Competition within the higher education sector could be further categorised e.g. public and private, national and international, amongst the top 10 on the world university ranking tables etc. The reason for this competitive stance amongst higher education institutes emerges perhaps from the notion of elitist status of such establishments. Given the current situation of massification and expansion, institutes perhaps continually kindle the notion of elitism through such healthy competitions. In the given context, it may act as an incentive to demonstrate creativity to improve quality. This competitive environment may be healthy for the higher education sector. All higher education institutes continuously strive for a better reputation. It also promotes selective attitude amongst both students and employers. On one hand, prospective students/ students' parents or sponsors make a choice of a higher education institute based on its reputation and on the other; employers seek to make an informed product choice from reputable institutions.

Economy. National economy is another driver that perhaps is significantly important. The national economic agenda may have a specific focus on higher education sector e.g. the UK's economy is popularly known as a knowledge economy, based on its higher education from which it expects sustained economic growth. For higher education to contribute towards national economic growth, it may prove worthwhile to have reliable quality assurance mechanisms in place for the higher education sector. Other drivers that necessitate the requirement of a robust quality assurance system may include the role of higher education in stimulating national economic growth, and international students in the transnationalisation context. International students may prove to be beneficial to the economies of both countries. The country where the students study benefits from the students' contribution to education and

research, and their country of their origin may receive highly employable citizens in turn. A step further perhaps would be to state that both global and national economies are vital drivers for quality assurance in higher education.

Alignment. Another key driver is the alignment between education and employability. As we move towards internationalisation and, more importantly, trans-nationalisation (exchange of experience between two countries) of higher education, it becomes imperative to have parity between the higher education sector of countries mainly in two respects: quality assurance of courses and mutual recognition of academic awards. These should, in theory, support alignment of education and employability either side of the border. For example, most Indian higher education qualifications are currently not recognised in countries such as the UK and USA. Standardisation of quality assurance between two countries will ensure recognition of (through agreed accreditation) academic awards, albeit in very different cultures.

Collaboration. Collaboration in higher education runs on the back of the desire to increase expansion of knowledge and skills for society to benefit from a better economy and cohesion. (OECD, 2006). As such, a 'new' set of potential (external) stakeholders will be concerned with quality assurance procedures too. These will be the higher education institutes (as in 'overseas or external-to-own establishments') that seek collaboration. The prospective partners would have a sharp focus on quality assurance procedures and the extent to which they show results in delivering quality. Institutions are and will increasingly align their performance with high standards to allure overseas partners/students for collaborative work. This driver, perhaps as elusive as quality, will influence a progressive and perhaps an indexed (to economy, technology and competition) enhancement of quality assurance procedures. It will help in keeping pace with higher education sector developments and in alignment with global economy. Jackson, (1998) suggests that this will require establishments to demonstrate responsible actions in their professional practices and accountability in the results they achieve with the resources used. Harvey (2005, p.264) further clarifies accountability suggesting that it underpins these processes but under the banner of "efficiency and effectiveness". Thus, a question emerges: what measures will indicate an effective and efficient implementation of quality assurance processes in Indian institutions to provide confidence to those, especially based at long distances and scanning with a collaboration lens?

Distance Learning. Another driver that is a relatively new concept in higher education is the Distance Learning (DL) sector. This, coupled with technology, is likely to have a significant share in the future as higher education institutes promote flexible academic, professional, and vocational courses. These courses are tailored around a vast spectrum of students apart from the regular e.g. students living far away in large countries like India and China; organisations seeking specific courses for staff; professionals seeking continuous development; blind/deaf/hearing impaired persons; parents of small children; carers etc. This sector is currently delivering courses such as high school diplomas, journalism, locksmithing, gemology, yacht design… the list is endless. It has course durations ranging a few months to three or four years of conscientious study. (IADL, 2016).

Thus, distance learning offers a capability to expand on-campus higher education, albeit with larger variables because of the inherent flexibility, but not without some challenges. "Distance learning offerings are a particular challenge to accreditation in three areas: alternative design of instruction, alternative providers of higher education, and expanded focus on training" (CHEA, 2002: n.p.n). Additionally, certainly in India, a further challenge will be presented around infrastructure i.e. the availability of Information Technology (IT) in rural areas, and the administration implications of this. To assure quality of distance learning qualifications, the quality assurance processes will have to be well-informed and proactive in order to handle continued growth in the DL sector.

Credibility. Lastly, as the need for global norms and standards for accreditation is widely recognised, the credibility of any higher education system, in the future, (particularly that of, India due to reports of deteriorating quality standards against an increasing number of higher education institutes) will depend, to a considerable extent, on the credibility, regulation and transparency of its accreditation processes. At the same time, it may also be appropriate to build into the quality assurance processes certain features that relate to particular national situations e.g. issues surrounding corruption coupled with lawlessness which perhaps will necessitate critical audit and assessment of accreditation agencies themselves.

To sum up, a diagram showing these drivers on the basis of tangibles, intangibles or both, is developed:

Intangibles

- Expectations of society
- Student diversity
- Flexibility of courses and resources
- Quality assurance recognition (State bias, acceptability)
- Academic awards' recognition (HEI bias, acceptability)
- Different cultures
- Soliciting overseas partners / students
- Distance Learning (too diverse for one set to fit)
- Global norms (student-centric at present)
- Inbuilt flexibility (enhance quality assurance)

In/Tangibles

- Competition of HEI on a global scale (Assessment criteria)
- National and global economy (grey area)
- Present and the future state of technology (Application capability)
- Alignment of education and employability (Unemployment factors)

Tangibles

- Massification of HE
- Accountability as demanded by stakeholders
- Standardisation of quality assurance

Diagram 2.1 Drivers of Quality Assurance

Quality Management

Apart from the drivers indicated above, there appears to be an ever-increasing focus on the application of stringent and transparent quality management processes in higher education institutions. Quality management processes demand a clarification about what is to be managed; as different methods and tools would be required for managing quality for different businesses e.g. production of goods or provision of service or both. The actual term "quality management" refers to "*planned and systematic actions deemed necessary to provide adequate confidence that a product or service will satisfy given requirements for quality*" (Borahan and Ziarati, 2002: 914). To ensure effective quality assurance in higher education institutions, several quality management models have been used across the globe (Becket and Brookes, 2008). Although a number of management models have been used in higher education, only one, Total Quality management (TQM), has been chosen for this study as it apparently is the most popular in India.

Total Quality Management (TQM)

With its origin in the 1920s, the Total Quality Control concept is a philosophy rooted in making all organizational processes aware of quality. Various authors have written elaborately on the approaches taken to implement TQM due to the interest in the TQM model as an alternative philosophy for governance in the higher education sector (Srikanthan and Dalrymple 2002, Deming, 1994). For an effective approach, ASQ (2013) identified eight elements of TQM which are Customer, employees, process, system, strategy, improvement, decision making, and communication, whereas Wiklund et al., (2003) developed a TQM model with only three interdependent components namely Core values, Techniques, and Concrete and well-defined tools; which displays almost contrasting diversities in suggested approaches with hopes for an effective implementation.

However, there are many problems associated with implementing TQM in higher education. These include: problems of identification of customers and products (Wiklund et al., 2003, p.101); role as customers is a debatable issue (Sirvanci, 2004, p.383); specifying a customer-driven definition of quality (Wiklund et al., 2003, p.101); introducing a managed quality culture based on an industrial model (Wiklund et al., 2003, p.101); the limited scope of the definitions of quality (Wiklund et al., 2003, p.101); defining organisational objectives with clarity (Wiklund et al., 2003, p.101); measuring and controlling processes related to teaching and

learning (Wiklund et al., 2003, p.101); exploring the role students play in their own learning (Wiklund et al., 2003, p.101); and indicating that the TQM model has been imported from the production industry. Moreover, there are some thought-provoking findings on the effectiveness of this model, particularly for managing quality within higher education institutes.

Asif et al. (2011, p.784) state that mixed results on the success and applicability of TQM principles in education came to the fore on reviewing literature on TQM, suggesting that the model is only partially successful in the higher education. The author thus infers that success is seen in those institute departments that are common to production industry and higher education e.g. accounting, marketing, administration. This is partially echoed by Vazzana et al. (1997, p.314) and Muhammed et al (2011, p.1885) who, based on their analyses, assert that the three potential areas to implement TQM in higher education institutes can be curriculum, non-academic functions, and academic administration. Additionally, Ardi, Hidayatno, and Yuri (2012, p.410) states that TQM practices have different patterns in various countries suggesting another possible cause of the model's failure. Therefore, the opportunities for developing research in TQM in higher education provide opportunities to research the effects of different patterns in each country.

However, those in favour of the model argue that TQM offers: its inclusion in higher education institutes' strategy; implementation in a systematised manner across institutes; management in a methodical manner; and assistance in the effective implementation of quality assurance which in turn yields continuous improvement (see American Society for Quality, 2013; Ardi, Hidayatno, and Yuri, 2012; Srikanthan and Dalrymple, 2002; Muhammad et. al., 2011; Vazzana et. al., 1997; Venkatraman, 2007; Wiklund et al., 2003). Briefly delving into the construct of the higher education sector would help one identify what business category it falls into.

Construct of the Higher Education Sector

What comprises higher education sector is common knowledge. For the purpose of this research, higher education sector stakeholders have been categorised into five main groups: funders, providers, learners and researchers, employers and society. Funders include both groups from the public and private partnerships i.e. governments and private parties (parents, employers, public/private organisations and charities). Providers are the higher education institutes with large departments within themselves e.g. management, academics and administrators/facilitators. Learners and researchers include all students of varying age groups,

socio-economic background, gender, ethnicity, nationality marital status, full/part time enrolments; spanning across all courses ranging from undergraduate courses to postdoctoral researchers. Employers comprise entrepreneurs, individual-run or other private organisations, and government, public, public-private, not for profit, non-governmental, charity and volunteering organisations. Society today is not restricted to a geographical domain or political boundaries. It is more multi-national and global than ever. One only has to look at how current 'school-going students' (not in higher education) solve assignments and mathematical or scientific numerical using the Internet, contact friends in other parts of the world, sign up for online tutorials and tuitions originating in another country/continent etc. A corollary would be that by the time such students enrol into higher education sometime in the future, one would expect them to be more akin to citizens of a multinational, if not a global, society. One only has to imagine a concoction of these variables in the future context of higher education and figure out what 'then' would be an individual's perception of quality.

What Comprises a Service?

Three well-documented characteristics of services, as acknowledged by Parasuraman et al., (1985, p.42), are: intangibility, heterogeneity, and inseparability. Ladhari, (2009, p.174) adds a fourth feature [by Parasuraman et al., (1988)]: perishability. These four characteristics have been significant in developing the concept of service quality. Quoting Lovelock, (1981) and Khan, (2003); Ladhari, (2009) explains, 'service quality is intangible' because services, much like performances, are difficult to assess. Parasuraman et al., (1985, p.42) endorse this stating "*As a result of ...intangibility, service providers can have difficulty in ascertaining how consumers perceive their services*". They further explain 'Services are heterogeneous' because they can differ from day to day, from place to place, from producer to producer, and from customer to customer; moreover, the involvement of the customer as co-producer of service delivery means that the service provider has less control over the consistency of the service experience. Services are perishable because they cannot be stored and/or sold on another day. Finally, services are inseparable because many of them are simultaneously produced and consumed. These four distinctive characteristics mean that service quality is a more elusive and abstract construct than product quality (Parasuraman et al., 1985, p.42, Parasuraman et al.,1988, Ladhari, 2009, p.174).

Lehtinen and Lehtinen's (1982) basic premise, as quoted in Parasuraman et al., (1985, p.43), is that service quality is produced in the interaction between a customer and elements in the service organization. They use three quality dimensions: physical quality, which includes the physical aspects of the service (e.g., equipment or building); corporate quality, which involves the company's image or profile; and interactive quality, which derives from the interaction between contact personnel and customers as well as between some customers and other customers. They further differentiate between the quality associated with the process of service delivery and the quality associated with the outcome of the service. An element that also needs consideration is the service experience of the recipient.

Service quality differs from objective quality in that one that can be measured and the other (service) can only be experienced, making its measurement and management ever so complicated (Parasuraman et al., 1988; Zeithaml, 1988; Sureshchandar et al., 2002). In order to overcome these challenges, Ardi, Hidayatno, and Yuri, (2012, p.408) assert that higher education institutions have started to implement Total Quality Management (TQM) as a solution to ensure that the quality of their education continuously improves. The quality management models including Total Quality Management (TQM) are discussed in later sections but it is almost necessary that the policy perspective on quality in higher education is explored prior to that as the models can only be implemented effectively when there is a complete understanding of the wider context in which the higher education institutes would operate e.g. law of the land for, that trickles through to every institute in the form of higher education policy.

Policy Perspective

As suggested earlier, for national economies to benefit from its higher education sector, it may prove worthwhile to have reliable quality assurance mechanisms in place for the higher education sector. Education, if imparted appropriately, will create opportunities for the economic development of society under the aegis of knowledge and 'new knowledge'. The immediate interest of any government is the economy of its country and thus education is increasingly becoming a popular, attractive and sought-after target on the radars of national governments. In fact, it has been recognised that for India to maintain its economic growth fuelled by the knowledge economy, it needs to nearly double the number of students in higher education by 2012 (Dukkipati, 2010). Indeed, it may not be incorrect to say that the economy

of a country is the end-user of education, and therefore it would be prudent to involve would-be employers in the design of curriculums to ensure fitness for purpose and value for money and thereby contribute to the quality of Indian higher education.

In the case of India, the then Indian Minister for Human Resource Development (MHRD), Dr. M. M. P. Raju, echoed this in his address at a conference on 'Higher Education and Economic Growth' in Dubai, UAE (25th September 2013, p.1) stating, "Economists have established a clear correlation between growing economies and increasing participation (enrolment) rates". With increasing demands for higher education institutions in the future to meet India's shifting demographics, this concept appears as a plausible variable.

Future Demands

Comparing the past with the present and looking into the future the MHRD minister stated that,

> "…*Higher education participation and enrolment has expanded considerably over the past century, and growth predicted by 2030 is likely to be higher than that experienced in the past. Globally, the number of students enrolled in higher education by 2030 is forecast to rise from 99.4 million in 2000 to above 414 million in 2030 – an increase of 314%. This growth is being fuelled by the transformation that we are witnessing in the developing and emerging regions and countries of the world – a growth that will only accelerate in the next decades*." (Raju, 2013)

It is this increase in tertiary education sector enrolment numbers that is alarming. But how do governments propose to deal with such alarming figures? The answer is perhaps through funding and supporting the development of the private higher education sector. How can measures be put in place? The answer is perhaps through policy. The higher education sector is charged with the responsibility to not only provide good quality (whatever that phrase means) education but are also indirectly responsible in shaping the local economy and providing for a more cohesive society (international, in this day and age) through social mobility. Government plans are in place to transform the sector in the next five years (British Council, 2014). This appears to be an ambitious plan for a nation with a substantial number and mix of higher education establishments, and with other external influencing factors (outlined later in this section). Whilst only time will tell how successfully this vision will be realised, this section will consider the quality assurance mechanisms in place in India and the challenges faced in raising an awareness of quality, let alone assuring it at a local level.

Governance

India's higher education system is the third largest in the world, after China and the United States (MHRD, 2013), and in 2013 was calculated to have 46,000 higher education institutions (Daugherty et al., 2013). For any organisation to succeed, effective governance, with clearly identified leadership, responsibilities and reporting lines have to be in situ as a tool for assurance purposes. In the case of higher education, it could be stated that for the governance model to be truly effective, it should not only assure that the academic objectives are being met, but also that the output of higher education is meeting and contributing to the requirements of the social and economic objectives of the Government. Thus, in many ways, higher education can be seen as the supplier to the demands of the country's (or even global) economy.

Currently in India, accreditation for higher learning is overseen by 12 autonomous institutions established by the University Grants Commission (UGC), which enforces standards that relates to the 'standard constituent of quality' by Van Kemenade (2008). The University Grants Commission (UGC) prescribes the service conditions of teachers, provides curricular guidance through its subject panels, accords recognition to universities, and funnels maintenance /ad hoc grants to the Central Universities and supplementary funds to other universities. Many states have their own UGC to regulate the functioning as well as to provide financial aid to universities in their own jurisdictions. "*Concerns relating to the dysfunctional regulatory environment*" (Agarwal, 2006, p.iv), have been highlighted by various authors, and yet standards of the majority of institutions are poor and declining (Agarwal, 2006).

A significant difference in the regulatory organisations between other countries such as the UK and India is that whilst the Quality Assurance Agency (QAA) in the UK is a comparatively independent body from the Government, and has no association or influence with the funding decisions for higher education institutions, the University Grants Commission in India has responsibility for both funding and the coordination and determination of standards.

Regulatory Bodies

The functions of the University Grants Commission were originally structured largely on the University Grants Commission in England. In the UK this has since been replaced by two independent agencies – the Higher Education Funding Council for England (HEFCE), and the Quality Assurance Agency. In India, this is not the case.

Beneath this, the regulatory structure is multi-layered. The National Assessment and Accreditation Council (NAAC), the Indian counterpart for the Quality Assurance Agency, was established in 1994 to enforce quality through an external review process, and by peer-reviewing universities and colleges. NAAC generally does institutional assessment of the conventional universities, while the National Board of Accreditation (NBA), which is an independent organisation, undertakes assessment of technical education programmes. There are also a number of other statutory bodies which mainly undertake review exercises to recognise institutions. Amongst others, these include All India Council for Technical Education (AICTE) and National Council for Teacher Education (NCTE). The essence of all these regulatory bodies can be linked to the 'Check' element of Deming's 'Plan-Do-Check' (Deming, 1950) concept, and also to the 'standard constituent' by Van Kemenade (2008).

An issue that should be clarified on the onset is that an *accreditation* measures compliance against standards external to the institution which are usually regulated nationally. It should be noted that institutions in India have standards determined and enforced by the state, which inadvertently is illustrative of the lack of flexibility and autonomy available to higher education institutions in India. Is this a hindrance to continuous improvement in quality management? Whilst not proven, this will be further explored in this research through different perspectives of different stakeholders.

Accreditation

The NAAC has 7 criteria for assessment of excellence as follows: curricular aspects; teaching; learning and evaluation; research; consultancy and extension; infrastructure and learning resources; student support and progression; governance and leadership, and innovative practices (NAAC, 2016). Two elements of significance are the inclusion of 'governance and leadership', and 'innovative practices' in this criteria list. These criteria appear to encompass the core values alluded to earlier. "Governance and leadership" links in with the delegated control or autonomy from the state to institutions; whilst 'innovative practices' appears to have a direct link with continuous improvement as stated under the section Quality in Higher Education. Although practice may prove otherwise, it is, in theory, a progressive approach whereby quality is considered in terms of excellence through continuous improvements. The effectiveness of this approach in terms of how successful it is at an individual institution level will be analysed as part of this research.

In today's world, where quality and excellence in higher education are the buzz-words, investigating quality assurance processes in isolation may not in itself provide a comprehensive or coherent picture, as many other influencing factors need to be taken into consideration. In the case of India, there is endemic corruption ranging from appointments of Vice Chancellors, which have become subject to caste and communal considerations (Singh, 2007), to corruption amongst the quality assurance organisations, all against a backdrop of a very weak legal infrastructure in the country (Altbach, 2012). Another issue is the lack of verifiable data available for comparison with that of the UK, and that which is collected through a voluntary approach, with no evidence of any regulating process to test data accuracy (MHRD, 2013). Poorly regulated, unaccredited and often entirely fake colleges have sprung up in India (MHRD, 2014; Laxmi, 2012). Indeed, under the circumstances, it does not inspire hope when government ministers themselves are being investigated for fake degrees which include the Law minister (BBC, 2015) and Education minister (BBC, 2015)

Mishra, (2007, p.65) states that, "*the system of quality assurance in the UK is similar to India in philosophy, though in practice the reporting mechanisms and details in criteria differ significantly*". Whilst this statement is valid, it could be argued that it is not just the mechanisms and criteria that are different, but also the cultures, both socially and ethically, are significantly varied, and therefore similarities or differences have to be considered within this wider and significant context, taking into consideration the factors outlined in the preceding paragraph.

The debate on quality assurance and policy practice is perhaps incomplete without the inclusion of the issue of international rankings of higher education institutions, and the criteria applied for evaluation, as global consistency in the practice for assessment and its criteria is crucial to policy. Quality assurance can be undertaken in a number of ways, and whilst accreditation is one such manifestation of the assurance process, rankings can also be considered as a form of external quality assurance. "*International university rankings affect public policy and the choices of students and their families. Rightly or wrongly, they are perceived as a measure of quality and so create intense competition between universities all over the world*" (UNESCO, 2015: n.p.n.).

Reputation and Funding

Indian higher education institutes and qualifications appear not to attract respect and standing on a global level, and its institutes do not feature in international rankings. This can be partly

attributed to the fact that no Indian university ranks in the world's top 200 institutions. In the Times Higher Education league tables of 2013, Panjab University was ranked between 226-250 and four Indian Institutes of Technology (IITs) – in Delhi, Kanpur, Kharagpur and Roorkee – between 351-400 (Pushkar, 2014). In comparison, there is a high degree of prestige awarded to higher education institutes and the qualifications gained from them in the UK, Oxford and Cambridge being the prime examples. It is no wonder therefore that Altbach (2005) has labelled India as "a *world class country without world class universities*" (Altbatch, 2005, p.18), although he has also stated "*For India, or other developing countries, to obsess about the rankings is a mistake. There may be lessons, but not rules…*" (Mishra, 2013, n.p.n.). Whilst rankings and league tables can be considered subjective, based on criteria that may not be a priority for any given country, what are the factors that are holding Indian institutions back from recognition on a global level? Is it the quality of teaching and learning, or even the qualifications, that are responsible for the poor rankings? Will it require policy changes or wider fundamental transformations to improve the perception of higher education institutions in India? The aim is to provide the answers to these dilemmas as part of this research. Finally, the issue of higher education academic research budgets: "Most developed countries spend a significant amount of research budgets through higher education institutions. In UK, 22.6% of all government expenditure is made through such institutions, and in comparison, in India, it is only 4.1%." (Agarwal, 2012, p.282). Nearly one-third of institutions do not receive any government funds at all. Of the remaining, about half get some funding from central government. In fact, eighty-five percent of central funds go to only a handful of central institutions and these schools enrol less than two per cent of the students in India (Bhatia and Dash, 2010). However, the Trilateral Research In Partnership (TRIP) awards (Shimmi and Stanfield, 2013), which promote research collaborations between India, UK and US, is further evidence that headway is being made in encouraging creativity within higher education institutions in India in terms of innovative research. To inform this study of quality of teaching and learning, and quality assurance in other countries, the next section provides an insight into some empirical research carried out in Australia and Canada.

Quality assurance in Australia and Canada

As this research is also exploring the quality assurance of Indian higher education with respect to teaching and learning, this section briefly examines the attributes of quality with respect to teaching and learning in Australian and Canadian higher education sector and how various

concepts of quality discussed earlier in this chapter, do or not, have a correlation with the attributes of quality assurance processes in those settings. The attributes are simultaneously compared with the concepts of quality discussed earlier. The Australian higher education sector is considered before the Canadian higher education sector which has been included in this review due to its uniqueness. The overarching perspective of quality in the context of Australian higher education sector is approached through literature focused on the perceptions of specific stakeholder groups in specific settings as also through the literature on Australian higher educations' quality assurance system, all published in the last two and a half decades.

Quality Assurance in Australian Higher Education

It is not essential that only one of the concepts of quality can be a perfect fit for any given higher education context and therefore a combination of concepts of quality proposed by various authors could perhaps be considered as a template of quality.

However, a study on the perceptions of quality in higher education by Kalayci, Watty and Hayirsever (2012) focused on comparisons between Turkish and Australian academics associated with Business studies. Their study found that the perceptions of academics on quality in Turkey related to Harvey and Green's (1993) concept of excellence, whilst the perceptions of academics in a similar survey when conducted in Australia were more aligned with the concepts of fitness of purpose. Conclusions of both these surveys resulted from questionnaires that were based on Harvey and Green's (1993) concepts of quality (Kalayci, Watty and Hayirsever, 2012). Nevertheless, these findings are based only on one stakeholder group, the academics. While this study does provide an idea of perceptions of quality for a given stakeholder group in the Australian context, it should not be interpreted as representative of other stakeholder groups as well e.g. university administrators, employers, quality assurance staff or students.

Thus, to get a broader perspective, another study focused on students' perception of teaching quality in Australian universities by Ramsden (1991) was also explored. Ramsden's (1991) study was identified as identical to this research in that its aim was directed at the entire higher education sector of Australia; whilst the authors developed a Course Experience Questionnaire (CEQ) (Ramsden, 1991). Other similarities were that the sample size of staff and student numbers was significantly negligible compared to the total numbers of staff and students in Australian universities. The students' responses were also submitted directly to the researchers.

Furthermore, only two universities were ultimately selected for testing the definitive version of the questionnaire (CEQ). The study mentions participation of 100 students (Ramsden, 1991; p. 133) in the first version of research but does not state the number of staff that participated. The 57-part questionnaire was based on 5 criteria (Ramsden, 1991; p. 133) which can be considered in alignment with the concepts of quality proposed by Harvey and Green (1993) such as fitness for purpose, perfection and value for money.

Nevertheless, there were dissimilarities too in that the Ramsden's (1991) research focused only on students' and staffs' perception of teaching quality and not on other factors such as the robustness of the syllabus, whether the syllabus was up-to-date or not, learning quality, quality assurance measures and alignment with the requirements of employability. Furthermore, the student survey was based wholly on a questionnaire with responses based on a Likert scale with 5 options (Ramsden, 1991; p. 134) but there were no options for subjective responses. The final stage of the survey was conducted across Australia and staffs' and students' responses were compared to identify the validity of the CEQ (Ramsden, 1991). The conclusion suggested that feedback on teaching quality collected through any means can assist in augmenting the lecturers' performance through lecturers' transformation, another concept of quality proposed by Harvey and Green (1993) but focused only on one stakeholder group – the lecturers.

The foregoing suggests that students' perceptions of the higher education experience has become more important because universities are attempting to become more student-oriented (Robert, 1996). As the general approach for teaching and learning is more along a student-centric focus, there may be an argument for perceptions from this category of stakeholder group to have a more significant value for the assessment of quality in higher education per se. An example of this is observed in a study on students' perceptions of the quality of education in Australia (Newell, Susilawati, and Yam, 2010) albeit in a specific segment of higher education related to Property studies. Given the focus on improving the quality of teaching and learning experience in Australian universities and the increased focus by the Australian government on students acquiring skills needed by industry (Thomas and Busby, 2003), this study specifically researched the categories of good teaching and overall satisfaction. The authors considered these categories to serve as a valuable indicator of the students' perception of quality of teaching and learning, and thereby an effective tool for the assessment of the quality of education in that specific field. Such an approach builds on the theory that "judgements of the

quality of higher education can only be made by the individual who is experiencing or has experienced the process first hand" (Turner, 2012; p. 3).

The overall, quality assurance of higher education in Australia, operates a premise of self-regulation by institutions, as well as external auditing by the likes of the Australian Universities Quality Agency (AUQA) until 2011, after which it was superseded by the Tertiary Education Quality Standards Agency (TEQSA), the independent national higher education regulator which now incorporates AUQA (TEQSA, 2017). Watty, (2002) suggests evidence-based findings that AUQA and Australian universities considered quality in terms of 'fitness for purpose', where the purpose is defined by the provider and/or 'value for money'. This example showcases that the Australian authorities and universities consider quality in terms of a mix of two concepts of quality proposed by Harvey and Green (1993). Having said that, the establishment of TEQSA (2017) with the specific mission to "protect and enhance Australia's reputation for and international competitiveness in higher education" (Griffin, 2013; p. 242), seems to align it with a reform agenda. This TQSA (2017) mission in relation with enhancing reputation of Australian higher education implies going beyond fitness for purpose and the ambitious nature of competitiveness indicates a desire to provide a better provision for students than other institutions, and therefore relates to yet another concept of quality; that of 'transformation' proposed by Harvey and Green (1993). There is also a clear link with the concept of value for money (Harvey and Green, 1993) by the provision of an incentive in that, from 2011 those universities meeting specified targets were eligible for additional base funding (Griffin, 2013; p. 243).

Additionally, the Australian regulatory approach is based on compliance of institutions to the Higher Education Standards Framework (TEQSA, 2017). These standards include specific requirements on teaching and learning, as well as others, and are "set implicitly within the curriculum, the practice of teaching, and the expectations of students" (Thompson-Whiteside, 2012; p. 32). Referring to the Australian Higher Education Standards Framework, Thompson-Whiteside, (2012) suggests that often terms like quality, standards, excellence and criteria overlap considerably and are often used without precise meaning. As discussed earlier in the chapter, it should be borne in mind that whilst standards affiliate with the concept of fitness of purpose (Harvey and Green, 1993); standards have the potential of accommodating a wide spectrum of attributes especially in comparison with the concept of quality e.g. fitness for purpose where setting a benchmark could range from a minimum to very high expectations.

Quality in Canadian Higher education

In stark contrast to Australia which has a centralised approach and national strategies or frameworks, Canada does not have a national accreditation body. "There is no national "system", no national ministry of higher education, no national higher education policy and no national quality assessment or accreditation mechanisms for institutions of higher education" (Jones, 2014; p. 1). Instead Canada has a multi-layered approach to quality assurance of its higher education sector (Universities Canada, 2017).

Almost all Canadian universities are governed by provincial legislation; however, each university has autonomy over its academic matters, establishes its own quality assurance processes based on standards and procedures that it develops itself (Universities Canada, 2017). Additionally, Canadian universities work to a framework of standards that are common across the Canadian higher education sector (CICIC, 2017) implying that all Canadian universities have common academic credentials and standards.

This could be perceived as a far greater level of autonomy, and thereby accountability, to institutions. Allowing such a level of autonomy provides institutions to introduce innovative methods for regulation and assurance, and indeed whilst some institutions take it upon themselves to undertake internal quality assurance processes, some provinces have now created agencies to review quality (Weinrib and Jones, 2014). In the absence of a national framework however, "the majority of the provinces have adopted nearly identical frameworks for the evaluation and accreditation of universities" (Weinrib and Jones, 2014; p. 230). Such an approach whereby all Canadian universities adopt a similar framework gives an impression of regimented standards within the Canadian higher education sector albeit guised oxymoronically under the autonomous nature of quality assurance practiced by universities. The perceived regimentation of the Canadian higher education sector's standards and aligning the quality assurance processes with frameworks that are known to work, align best with the concept of quality as fitness of purpose (Harvey and Green, 1993) which, as discussed earlier, could have a significantly wide spectrum. Other concepts proposed by Harvey and Green (1993) such as 'value for money' or 'transformation' were not readily visible in the documents analysed.

Conclusions and Research Aims

This review set out to identify and examine the extent and validity of a range of quality attributes with respect to tangibility and intangibility of each in regard to definitions; concepts; dimensions; policy on quality assurance; current empirical research; and, influencing factors.

The findings through literature review were that there is no agreed definition for quality but the inference from all these dimensions could help formulate one that includes soft issues e.g. feel factor and the overall satisfaction level of various stakeholder groups. The concept of quality having constituents or components further fortifies the belief that quality is multifaceted with different takes on quality by different stakeholders of higher education. Thus, there appears to be a gap in the higher education sector for at-least a *working*, if not an *agreed-upon* definition and meaning of quality. It also was evident that quality is related to object and subject bringing objectivity and subjectivity to coexist side by side within quality.

The aforementioned dilemma is likely to have an impact on the operationalisation of the variables. From the review, independent variables identified in the context of Indian higher education institutes were: age, size, governance, faculty and student numbers, central and state legislation, regulating bodies, funding, and culture of the universities being studied. The dependant variables identified were suitability and effectiveness of the Indian quality assurance system.

Through the measurement of these variables, it is intended that this research makes a contribution applicable in practical terms to the quality assurance of Indian higher education sector within the teaching and learning segment at the graduate level. It is also expected that the research findings will be useful to those at the helm of Indian higher education policies.

It is evident from the literature review that the Indian higher education sector is going through a transformation, particularly in making provisions for a very large number of students, expansion of the number of central and state higher education institutes, as well as the quality assurance mechanism. There are issues surrounding the reputation of both old and new institutes and their awards and as such the current state of both internal and external quality assurance and applicable legislation is questionable.

Thus, the key issues are associated with the perceived quality of the Indian higher education institutes' quality, and quality of teaching and learning in these institutes – all related to the quality assurance of Indian higher education. Thus, the aim of the research is to:

1. Establish the quality assurance processes currently practiced in teaching and learning within the selected Indian higher education institution;

2. Explore how quality assurance processes are being practised in higher education institutions to meet the expectations of government agencies;

3. Determine proposals that can be implemented by higher education institutions to assure the quality assurance process for teaching and learning.

The current intention is to address the aforesaid aims using the following methods:

Aim 1: Analysing quality assurance documents published by higher education institutions and quality assurance organisations of India e.g. NAAC. This will hopefully provide information of the espoused theory.

Aim 2: Carry out interviews with staff and send out questionnaires to students in order to understand what really happens in the context of teaching and learning i.e. theory in use.

Aim 3: Carry out cross analysis of findings for the first two aims and then make suggestions based (if at all) on the gap between process and practice. This will also help in identifying how the current quality assurance processes can be enhanced.

As such, this research focuses on concepts of quality and more importantly, quality assurance within the context of graduate level Indian higher education qualifications which will be explored through a range of basic questions such as: what is the current perception of quality amongst students and lecturers; what is the current state of internal and external quality assurance? It is hoped that answers to these will help in understanding and providing evidence of the socio-cultural influences associated with the concepts being explored.

It is the researcher's perception that socio-cultural influences are rooted in the collective calibre of a society which has the potential to cause an effect upon, in this case, the quality assurance of the higher education sector and can therefore be considered an independent variable.

Exploring said calibre can be attempted through assessing qualifications of both staff and students. Furthermore, exploring the suitability of the curriculum, the assessment process leading to an award, and its alignment with the curriculum, can all help in operationalising this variable.

The foregoing should help in identifying various aspects of the internal quality assurance systems in all three different types of institutions highlighting both good practices and impediments to implementing such practices. It is expected that such data may help to establish the suitability and efficiency of the quality assurance system - the dependent variable. This in turn can help reveal strengths and weaknesses of the quality assurance system within the Indian social setting, providing an opportunity to suggest recommendations for circumventing the identified impediments and enhancing good practices. An overview of the foregoing indicates that the stance of this research is oriented to pragmatist approach along with use of mixed methods. The next chapter, methodology, discusses the operationalisation of the identified variables in more details.

Chapter 3

Methodology

Introduction

This chapter explains the methodology adopted for this research, a methodology rooted in the conceptual understanding and focused on the research aims posed in Chapter Two. The aim of this chapter is to set up an enquiry framework to address the theoretical concerns identified in the previous chapter. It commences with a section on variables and their operationalisation which were identified through the conceptual framework in the preceding chapter. The variables and their operationalisation is explained first to clarify the tangible and intangible attributes associated with quality and quality assurance, as also the reliability and validity of this research. Collectively these processes influenced the research paradigms and research methods of this study. The section on methodology-paradigms explains the reasons behind the use of mixed methods. Thereafter, the researcher's positionality is presented in the follow-on section to further establish reliability, validity and trustworthiness of this research, followed by brief sections on data collection methods and data analysis techniques, which are presented before the conclusion of this chapter.

Variables and Their Operationalisation

This section commences with the researcher's assumption that higher education institutions, much like many organisations, transform inputs into outputs. In this context, students are chief inputs into the higher education system who are transformed from school leavers into professionals e.g. doctors, engineers and lawyers. The transformation process entails several aspects making the process of quality assurance dependent on a range of tasks involved in the entire transformation process. At the same time, these higher education institutions operate in a specific legal, socio-political and economic environment. Within this context, the key task for such higher education institutions, world over, can range from education and research, to vocational training and community engagement which is popularly evidenced in the higher education institutions' mission statement, perhaps more eloquently in those of Indian higher education institutions, due to cultural reasons.

However, in the Indian context, higher education institutions have, on the face of it, focused on, and still appear more engaged in, teaching and learning. Due to lack of funding, they also focus more on vocational training than on the other key functions like research and community engagement, something which apparently is not evident within their mission statements – in fact quite the contrary. As referred to in Chapter Two, the Indian Government's focus on higher education is very evident through its emphasis on expansion of the higher education sector by way of supporting an increase of higher education institutions to facilitate the high, current and on-going, enrolment demands on the post/graduate courses. In consonance with this, the conceptual framework was also presented in Chapter Two, wherein the variables of this research were identified to be: age of Indian higher education institutions, governance in Indian higher education institutions, size of Indian higher education institutions, Indian higher education institutions' faculty and students, Indian higher education institutions' quality culture, Indian socio-cultural element, funding of Indian higher education institutions, suitability of quality assurance, and effectiveness of quality assurance. These variables are operationalised in this section, as operationalisation can help in quantifying variables [including abstract concepts like quality] and also help in establishing cause-and-effect principles of any research along with reliability and validity of the methods employed (Creswell, 2013).

Based on the foregoing, this research focused specifically only on the teaching and learning function within the Indian higher education institutions' transformation process and not on any of the other aforementioned functions. For the purposes of this research, the independent variables identified for this study can be categorised under two headings: types of Indian higher education institutions, and, higher education institutions' environmental factors. Likewise, the dependent variable in the context of this research is quality assurance. The next subsection explains both independent and dependant variables and, through a set of measures, their operationalisation (Creswell, 2013). This has formed the basis of empirical research of the quality assurance system and practices in the Indian higher education sector.

Independent variables

As stated earlier in Chapters One and Two, this research focused on the study of three different types of Indian higher education institutions. These are central, state and private higher education institutions, each as complex an organisation as the other with differences based

mainly on how each is funded. Teaching and learning, the key function researched, in each of these higher education institutions was found to be dependent on the environmental circumstances of each [type] of these higher education institutions. Of these, most of the central higher education institutions have a rich history and a large footprint with differing governance style, and a very large number of staff and students. Based on the funding source – each is expected to have a different [significant in some cases] quality culture which is known to have a significant impact on the [internal] quality assurance processes. The operationalisation of each of these attributes is considered next.

Types of Indian Higher Education Institutions

Age of Indian Higher Education Institutions: This variable provided an insight into cultural practices associated with teaching and learning in Indian higher education institutions. The earliest higher education institution in the country was established in 1857 (MHRD, 2015) making it older than 150 years, and it coexists with higher education institutions that are being established in current times [2017]. With such a vast range of higher education institutions' ages, it has proven to be worthwhile to choose each of the higher education institutions from different age brackets so as to, among others, study the impact, if any, age may have on the dependent variables.

Governance in Indian Higher Education Institutions (external and internal): This variable has helped to explore the role of India's central and state government (external governance) officials as conceptualisers, designers, implementers, engagers and monitors of quality initiatives in the higher education sector, an imperative precursor for the design and implementation of suitable quality assurance mechanisms in Indian higher education institutions. In this research, governance of the higher education sector with respect to quality assurance has been measured on the basis of the following indicators:

- commitment [national level] for consistent quality improvement
- capacity to establish a coherent framework of quality policy and strategies, resources and structures
- provision and implementation of quality audit of the quality assurance body [meta-quality assurance]

The assessment of these indicators was based on data collected from a review of relevant documents published by government agencies.

Internal governance of quality assurance on the other hand was measured through indicators such as:

- the position and responsibility of quality assurance within higher education institutions' governance with respect to teaching and learning,
- effectiveness of measures through evidence of faculty members' participation in the planning and implementation of such measures with respect to teaching and learning for the purposes of quality assurance.

For this research, the assessment of these indicators was based on data collected from a review of relevant quality assurance documents which, where possible, were publicly available and the transcripts of staff interviews.

Size of Indian Higher Education Institutions: This variable was measured on the basis of figures e.g. total number of students, faculty members and laboratory assistants. Since the focus of this research is primarily on teaching and learning, only the lecturing staff have been included in this study. The assessment and measurement of this variable was based upon data collected from relevant government and universities' documents and records.

Indian Higher Education Institutions' Faculty and Students: This variable helped in representing the academic profile of faculty and students in the Indian higher education sector, a sample of which was obtained from the three different types of higher education institutions. Teacher training in higher education is currently as big a challenge as is the credit transfer systems for students and the movement of credits between higher education and vocational skills streams within the Indian higher education sector (British Council, 2014). The focus of measurement for this variable was on areas surrounding numbers and suitability of faculty members' qualifications to their respective subject areas, the academic background of students, and the engagement and commitment of each stakeholder group to teaching and learning. The assessment of this variable was based on data collected from relevant documents, staff interview transcripts and completed students survey.

Indian Higher Education Institutions' Quality Culture: This variable has helped in encompassing the articulation of shared perspectives and practices, values (both as a noun and verb), and procedures, including methods and strategic approaches to quality assurance practices within the selected higher education institutions (Gordon, 2002). This variable was operationalised through measuring its indicators e.g. the extent to which:

- value is associated with quality of student learning
- values, beliefs and expectations of quality learning are shared across disciplines
- self-evaluation is valued by senior management and faculty member and feedback is used to improve quality of teaching and learning
- senior management, faculty and students are committed and engaged in quality assurance activities
- there is shared responsibility, ownership, cooperation and collaboration amongst various schools regarding quality assurance.

The assessment of this variable was based upon data collected from telephone interviews and online surveys e.g. online questionnaires disseminated to students (see Annex 4).

To summarise, this bank of independent variables, clustered under 'Type of Indian higher education institutions', has helped this research to identify and adopt research methods like documentary analyses, interviews and surveys. More details on these methods are included later in this chapter. The measurements of other independent variables associated with the 'Indian higher education institutions' environment' are discussed in the next sub-section.

Higher Education Institutions' Environment Factor in India

All organisations are influenced by the environment they operate in and according to institutional theory, higher education institutions are also perceived as organisations which too are affected by the environment in which they operate (Peters, 2000). The variables identified within the context of this research were the national and state legal framework, the regulating bodies and the socio-cultural elements. These are known to have an impact on quality assurance, specifically with respect to the key function of teaching and learning within Indian higher education institutions. How these variables were measured is discussed in the following sub-sections.

Indian National and State Legal Framework: This variable relates to the national and state level legislations of the Indian higher education sector which purport various policies e.g. National Policy on Education (NPE) 1986, based upon which quality assurance, and its application, are mandatory in all Indian higher education institutions. Quality assurance is one of the key challenges facing the Indian higher education sector (British Council, 2014) particularly because of the current and ongoing expansion of the sector. This challenge is escalated due to the fact that the higher education quality assurance system itself is under reform. This variable was measured by way of the documentary analysis of the latest relevant policy documents and reports published by MHRD and the NAAC.

Higher Education Institutions' Regulatory bodies in India: This variable deals with the organisations responsible for quality assurance in Indian higher education. Quality assurance [external] in India is mainly implemented by the National Assessment and Accreditation Council (NAAC). The operationalisation of this variable was through identifying how the NAAC has helped Indian higher education institutions to develop, implement and enhance an internal quality assurance system of their own. This was measured through interviews of key responsible staff e.g. quality assurance managers in each of the institutions and documentary analysis of NAAC guidelines, external and internal audit reports [access to which in some cases was not possible, as discussed later].

Indian Socio-Cultural Element: This variable deals with the social and cultural dimension of the society with respect to higher education. It was measured by way of measuring social factors that are known to influence the quality assurance of higher education. These included social values, attitudes, and beliefs of the members of stakeholders' groups in the context of the chosen institutions which was sampled. The sampling entailed the use of documentary analysis and questionnaires on the stability of the current quality assurance policies. It also included exploring how changes to the quality assurance policies were impacting the higher education sector within the context of this research.

Funding of Indian Higher Education Institutions: This variable deals with the source of financial inputs into the Indian higher education institutions. Two of the three types i.e. central and state higher education institutions were found to be financially supported through national and/or state funding systems (UGC, 2014; AICTE, 2016; UNESCO, 2002), whilst the third, being private, was found to receive only some funding and only in selected cases from

organisations like National Education Finance Corporation (NEFC). This variable was operationalised through documentary analysis of published national statistics and reports on higher education institutions' funding.

Dependent Variables

Both external and internal quality assurance of the selected Indian higher education institutions are the dependent variables (Creswell, 2013) of this empirical research and analysis. Quality assurance has been elaborately discussed in Chapter Two. As a reminder, the gist of quality assurance in Indian higher education may well be considered as the sum total of all activities in higher education institutions that can possibly ensure quality of education. Quality of education in the context of Indian higher education institutions was considered in three stages [input, process and output] of the transformation process. Both the quality assurance system and its practice in the selected higher education institutions was measured by way of its suitability and efficiency, each of which is discussed next.

Suitability: The suitability of quality assurance and its practice in the selected higher education institutions is related to its focus on quality of education. For the purposes of this research, quality of education was measured at three levels which are (i) input: suitability of staff and students' qualifications, and suitability of resources; (ii) process: suitability of curricula, methods of teaching and learning, assessments and resources, and; (iii) output: the quality of academic awards. All these indicators were measured through interviews and analysis of documents.

Effectiveness: This variable relates to how efficient the quality assurance systems and practices are. It has two main facets: first, the level to which the quality assurance system and practices support the key functions of higher education institutions, and second, to verify the level of success of the quality assurance practice in the selected higher education institutions. For the first facet, the measurement techniques focused on how well the quality assurance system and practices are able to provide for and enhance the key function of learning. For the second facet, the measurement techniques focused on comparison of adopted quality assurance practices by higher education institutions, as opposed to those that are suggested through various policies on quality assurance. The indicators to verify these facets included documentary analysis of the evaluation of staff and their development, student surveys results, and evaluation of teaching and assessment through staff interviews.

To summarise, table 3.1 has been developed below to provide a snap-shot view showing all variables and their indicators along with the method of data collection which was used to operationalise each variable.

Variables	Indicators	Data Collection Methods
Indian national and state legal framework	Higher education quality assurance system	Documentary analysis
Higher education institutions regulating bodies in India	Influence of NAAC on internal quality assurance	Interviews, documentary analysis
Indian socio-cultural element	Social factors: social values, attitudes, and beliefs	Questionnaires, documentary analysis
Funding of Indian higher education institutions	Source of financial inputs	Documentary analysis
Suitability	Input: suitability of staff and students' qualifications, and suitability of resources; Process: suitability of curricula, methods of teaching and learning, assessments and resources; Output: the quality of academic awards	Interviews, documentary analysis
Effectiveness	Quality assurance system and practices are able to provide for and enhance the key function of learning. Quality assurance practices by higher education institutions, as opposed to those that are suggested through various policies	**Documentary analysis, Surveys**

Table 3.1 Variables, indicators and data collection methods

Methodology – Paradigm and Design

From the preceding section, it can be inferred that this research demanded confirmation and exploration simultaneously (Creswell, et al., 2003). It also focused on the "practical consequences…[as] vital components of both meaning and truth" (Hevner, 2007, p.5) and, as such, this research is based on a pragmatic design. Furthermore, as the research used various methods that are classified under both qualitative and quantitative methods [and data thereafter], it was decided to use a mixed methods approach as is was best suited of all the other methods (Mertens, 2005). A further explanation of this stance is presented in the following paragraphs.

A mixed methods approach is useful to develop a better understanding of complex phenomena by triangulating or corroborating or complementing one set of results with another and thereby enhancing the validity of inferences (Teddlie and Tashakkori, 2009; Mertens, 2005, Green et.al, 1989). However, as the mixed methods concept is based on joining two divergent perspectives, it lends itself to be vigorously debated (Quinlin, 2010). The constructivists challenge the mixed methods concept for adopting paradigms and philosophical assumptions of divergent perspectives in the same research (Lincoln and Guba, 2005; Howe, 2004). Furthermore, the constructivists argue that compatibility between paradigms may not be forthcoming (Lincoln and Guba, 2005). Other arguments not in favour of the mixed methods concept are that it may never be possible to completely segregate the causes from their effects, and similarly that the researcher and the researched may never be completely set apart because the researcher is subjective and perhaps the only informant of reality (Guba, 1990).

Supporters of the mixed methods concept, on the other hand, argue that many paradigms of research are multifaceted i.e. they are mixtures of practices based on beliefs which could, in many cases, be divergent and contrary (Creswell, 2009; Johnson, 2008). Others argue that the mixed methods concept evolved from both qualitative (QUAL) and quantitative (QUAN) traditions (Patton, 1990 in Teddlie and Tashakkori, 2009, p.102; also see Greene et al.,1989) both of which have been given equal priority (Morse, 1991 in Teddlie and Tashakkori, 2009, p.103; also see Greene et al.,1989) and that the mixed methods concept can be associated with any research method (Teddlie and Tashakkori, 2009, p.103). This, in turn, facilitates complementing the weaknesses and strengths of methods used in research, raising the importance and use of the two paradigms simultaneously (Johnson and Onwuegbuzie, 2004).

Denscombe (2008) further argues that for purposeful answers in [complex] social science research, a number of different and divergent evaluations may be required and as such it is unavoidable to use mixed methods.

As this research is focused on a complex issue, that of quality and its assurance in the Indian higher education sector, it is assumed that the selected mixed methods concept and design have helped in yielding accurate, reliable and dependable data which may not have been possible with the use of a single method. Furthermore, as quality and quality assurance are considered to be multifaceted and complex, data was collected from various sources using various methods. The methods were different for different stakeholders and helped in the analysis process to produce valid and reliable results. Mixed methods concept and design was thus chosen for this research with an aim to comprehensively understand the issues this research intends to explore, through the use of both confirmatory and exploratory quantitative and qualitative methods in parallel.

Methodology – Methods

Mixed-Methods

The mixed methods design emerges from pragmatism and, as discussed, uses multiple methods from both paradigms which are post-positivist and constructivist (Mertens, 2005; Patton, 2002). Creswell, et al. (1996) argue that, under pragmatism, there are apparently no dissimilarities between quantitative and qualitative approaches. If anything, each approach has strengths which should be used, as it may well complement the weaknesses of the other approach. However, it was ensured that the methods which were selected offered the aforementioned advantages and that no two complementary methods had the same set of limitations.

Furthermore, both sets of methods i.e. qualitative and quantitative, are inseparably interwoven at various key stages offered by the methods which are design, data sets and analysis (Miles and Huberman, 1994). By including concrete research evidence, the effectiveness of methods that were used, helped the researcher to establish "John Dewey's warranted assertibility" (Johnson and Christensen, 2008, p.490). The overarching purpose and benefit of joining the two method types (quantitative and qualitative) to formulate a mixed methods approach was fivefold; triangulation, complementarity, initiation, development, and expansion (Greene et.

al., 1989 in Teddlie and Tashakkori, 2009; Johnson and Christensen, 2008) each of which is briefly explained next.

*Triangulation r*efers to corroboration or confirmation or validation of results from various methods (Greene et. al., 1989 in Teddlie and Tashakkori, 2009). *Complementarity* seeks to enhance and elaborate the results of one method by using other different methods in order to clarify the results (Greene et. al., 1989 in Teddlie and Tashakkori, 2009). *Initiation* prompts new interpretation and new lines of thinking, and areas that can be explored further (Greene et.al, 1989; Hesse-Biber and Johnson, 2015). *Development* enables the use of one method and its results to develop another method (Greene et.al, 1989; Hesse-Biber and Johnson, 2015). *Expansion* facilitates the implementation of different methods in order to stretch the dimensions of inquiry by using different methods (Greene et. al., 1989 in Teddlie and Tashakkori, 2009). Of these typologies, only the appropriate ones must be used for the research and, if need be, a new mixed methods design can be created e.g. to serve a specific research (Teddlie and Tashakkori, 2009; Johnson and Christensen, 2008).

The mixed methods design matrix contains nine combinations of mixed methods. These are presented in a matrix made up of four contiguous squares offering two dimensions: time order decision and paradigm emphasis decision (Johnson and Christensen, 2008). The time order decision relates to simultaneous versus sequential deployment of methods, while the paradigm emphasis decision refers to equal status versus dominant status of the methods being used. Mixed methods are not restricted to these nine combinations and offer a need-based flexibility to researchers (Johnson and Christensen, 2008). One combination of quantitative and qualitative data collection methods, however, has an outright advantage in that it has the potential to counterbalance the inherent weaknesses of one method with the strengths of the other, but only if the two are simultaneously deployed (Creswell, 2007).

Teddlie and Tashakkori, (2009) present a simplified version of Creswell and Plano Clark's model (2007) with four mixed methods designs which are triangulation, embedded, explanatory, and exploratory, and a total of ten variants. Each of the designs also has notations associated with it (Teddlie and Tashakkori, 2009). Another "model" proposed by Maxwell and Loomis (2003, p.246) offers continuous interaction with all its research design components which are purpose, conceptual model, research question, methods and validity. The diagram of this model indicates that all these components are interrelated to each other in a network

(Maxwell and Loomis, 2003). For the success of mixed methods design, it is vital that the quantitative and qualitative methods integrate at all levels. Such integration is also likely to result in a coherent conceptual framework. Furthermore, data collection and analysis using quantitative and qualitative methods assists in understanding the researched issues in a comprehensive manner.

This research used the mixed methods design to comprehensively understand the respective causes behind their effects within the context of the complexity surrounding the focus of this research which is quality and quality assurance. Quantitative and qualitative methods were applied to obtain empirical data. As argued by various authors above, it is assumed that quantitative data may well have limitations, in that it will not be able to provide a deeper insight into the research area. However, the data collected was found to have the capability of providing an indication of what is likely to be expected on deeper examination of the variables. Qualitative data captured and provided the needed in-depth view of the variable indicators. Simultaneous analysis of the two sets of data led to the identification of certain traits that were not expected.

Other advantages that this research benefited from with the application of mixed methods design were that of triangulation and complementarity. Triangulation was established through gathering data from different sources and methods, which in turn exhibited convergence of findings. This facilitated the exploration and confirmation of the details of effects behind their respective causes, enabling a comprehensive understanding of the complex researched area, that of quality assurance in the Indian higher education context. Furthermore, complementarity was established by way of one method complementing the other, not only to circumvent the inherent weaknesses as discussed earlier, but also to enhance the scope of the data collected by the other methods deployed for collecting data.

As such, both quantitative and qualitative methods were applied simultaneously for the purposes of this empirical research, which were conducted in three stages: the suitability and efficiency of quality assurance systems with respect to the Indian higher education; the factors influencing, or not, the implementation of quality assurance in the Indian higher education institutions; and the quality of higher education in India. These stages are described in the subsequent paragraphs.

Stage one

The first stage of the research explored documents relating to quality assurance for teaching and learning at undergraduate level in the Indian higher education to establish the espoused theory. The documents analysed were published by government agencies e.g. NPE 1986, publications of academic councils, quality assurance documents published by accreditation agencies, and publicly available reports of selected universities. Such analysis has facilitated data collection relevant to external quality assurance processes. Similarly, data for internal quality assurance processes was collected from publicly available university documents of quality assurance such as annual quality assurance reports where available. The focus in either case was the collection of data relevant only to teaching and learning in the selected institutions, with an aim to get a deeper insight into procedures and their application. The aim was also to serve stage three of this research which focuses on carrying out a cross analysis and comparison between government (macro) and institution (meso) level.

Stage two

The second stage of this research focused on how the practice of quality and quality assurance in relation to teaching and learning in the selected Indian higher education institutes is perceived. The data for this was collected from semi-structured staff interviews and anonymous online students survey from the participating higher education institutions for this research. The survey data collected was both qualitative and quantitative in nature and from two different sources, the questionnaires have been presented in Annexes 3 and 4. Qualitative data for this research comprises transcript of interviews with identified key personnel e.g. quality assurance managers, administrators, directors, senior lecturers and lecturers within the selected higher education institutions from the three identified types of universities - central, state and private. A total of 30 staff participated in this research i.e. 10 from each type of university, of which two staff members were from each category of staff described. As explained earlier, since all 10 staff members were not forthcoming from one private university, the research had to be expanded to two private universities to meet the requirements of ensuring 10 staff participate from the private university sector. This expansion facilitated the analysis of staff interview data in multiple ways and is presented in Chapter Six. Quantitative data comprises responses to completed online surveys by students on anonymous basis as well as data from documentary analysis. However, it would not be possible to identify data with actual participants, especially

as students have participated through anonymous online surveys. Anonymity of students was factored in to circumvent the suggested cultural reasons of respect and fear for speaking against lecturers and institutions; nevertheless, that could be perceived as a weakness in the data collection method as now, it would never be known who the actual respondents were. Irrespective, the online survey facilitated a response to this research from over 120 students which has enriched the data significantly. Sourcing of data from multiple resources further ensures the validity and reliability as well as contributes to credibility and transferability of this research.

Stage three

In the third stage of this research, cross comparison was carried out between the findings of stage-two with those from stage-one across the three levels identified in this research i.e. government (macro), university (meso) and, staff and students of participating higher education institutions (micro). Additionally, the comparison was also carried out within and across stakeholder groups as also the selected institutions. The relationships of findings were constantly compared with the concepts of quality identified in Chapter Two. This was done mainly to identify which concept/s of quality explored in Chapter Two relate/s most with the perception and application of quality assurance in the Indian higher education context. The analysis in stage three has also helped in identifying gaps between the espoused theory and perceived practice based on which recommendations have been proposed.

Data collected from all these stages has been presented in the subsequent chapter along with its analyses and findings. These findings were then assimilated before addressing the research aims.

Data Sample and Source

Sample data was collected from all selected Indian higher education institutions i.e. central, state and private. The selection of higher education institutions identified for data sample were based on this classification. At the initial stages, it was envisaged that one institute will be selected from each of the three identified types of institutions. However, for some reason the total number of respondents, as per research design, was not forthcoming from one private university, therefore, the number of private universities selected for this research was increased to two. This facilitated data collection from the total number of participants as designed

originally, as well as from all three distinct types of Indian higher education institutions. To further assist comprehension and dispel complexity surrounding the three types of institutions, each type of higher education institution was considered as a case study. As alluded to in earlier sections, the following sources were used to gather the data sample from within these selected institutions through a multi-stage sampling technique: relevant quality assurance documents; key personnel e.g. quality assurance managers, administrators, directors, senior lecturers and lecturers, with a formal advisory capacity within institutions and subject lecturers from any stream of education e.g. medicine, law and engineering; students from undergraduate courses only form any stream of education in order to get holistic data.

Data Collection Methods

As depicted in table 3.1, the main data collection methods used in this research were questionnaires to include online surveys, interviews and documentary analyses. Each of these methods is explained in the following sub-sections.

Questionnaire

Questionnaires are rooted in the survey methods and are used to meet the generic requirements of the surveys, i.e. to collect a wide range of data of a wide range of subjects related to the topic being explored, which in this case is quality and quality assurance in the context of Indian higher education. Questionnaires were used in all the three stages of inquiry of this research. The questionnaire was disseminated online via the internet to facilitate multiple access by participants, and also to collect desired data using a Likert scale with an even number of options. The intention behind using even number of options is that participants' responses should not be capable of being interpreted as an 'either / or' response. Furthermore, the purpose of the questionnaire in each stage was different e.g. to collect basic data of students or to collect relevant information from key members of higher education institutions' staff; both of which are significantly different. Irrespective of the differences, the research remained focused on teaching and learning, and associated quality assurance procedures and practices.

Interview

Interviews too are rooted in the survey methods and offer relevant information and data concerning the interviewees' own perspectives and opinions on the topics being explored e.g.

what is the current quality assurance practices in their respective higher education institutions. Interviews are of several types, but it was decided to use semi-structured interviews as this method of collecting data offered the researcher with opportunities to ask, if required, for further clarifications of any issues that were under consideration. All interviews were recorded using digital voice recorders, and notes were also taken simultaneously by the researcher to transcribe any unplanned incidents that also got recorded and were considered significant to the research. The data that has been collected in the form of voice has been stored in password protected audio files (Polkinghorne, 2005). The transcriptions too, in document form have been saved in password files and folders. This has enabled the following: first, the data has been used in triangulation with other sources of data (Sayer, 2011) e.g. with questionnaires, and second, it has been analysed using appropriate software tools e.g. Computer Assisted Qualitative Data AnalysiS (CAQDAS) or NVivo 11. The information and data collected in this manner is rich, deep and meaningful and has yielded qualitative information for this research.

Documentary Analysis

Documentary evidence is a name given to a method of collecting data from primary and secondary sources (Bell, 2014; Kumar, 2005) by reviewing existing documents which can be classified mainly into two categories; internal documents and external documents, and could be in the form of either hard (paper) or electronic (soft) copies (Yin, 2014; Bell, 2014). To ensure validity, reliability and trustworthiness of this research, the interviews were backed by appropriate evidence through investigation of documents. As such, relevant external and internal quality assurance documents to quality assurance were analysed and included national policy statements on quality assurance in Indian higher education, government guidelines, reports, historic records of quality assurance in Indian higher education and annual quality assurance report. The aim underpinning this method of data collection was twofold: one, to be able to develop a sound understanding of policies and practices that underpin quality assurance in Indian higher education system and, two, to develop an insight into factors that affect teaching and learning, and the relevant higher education quality assurance processes. As an aim plus, this method of data collection also helped in triangulating findings from other methods.

Data Analysis – Techniques

This research is focused on exploring the quality assurance mechanism in the Indian higher education system. Thus, the unit of analysis is institutional level quality assurance systems and practices (Yin, 2014). Onwuegbuzie and Teddlie (2003) have suggested seven stages of the mixed methods data analysis processes. These will be carefully examined before choosing the most suitable stages for the purposes of analysing data from this research.

The data collected using these methods was very large in volume and therefore a NVivo was considered as a suitable computer aided software that was used to help with the analyses of both the qualitative and quantitative data. The two analysed data sets were then verified against each other to ensure validity and reliability of this research.

Researcher Positionality, Validity and Reliability

An explicit description of the researcher's position further helps in establishing the trustworthiness of data collected through various methods which were used in this research (Ganga and Scott, 2006). The researcher hails from India and has had basic and professional education in India. The researcher also has over fifteen years of formal experience as a lecturer in higher education, part of which was in India. Additionally, in keeping with the norms of a previous profession, the researcher has informally trained Indian students within a professional industry, at higher education level, for over seventeen years. Despite a formal separation of well over a decade from the Indian higher education, it is felt that the said exposure has equipped the researcher with a diverse wealth of experience and knowhow of the Indian higher education sector. The researcher's position therefore, needs to be identified in keeping with the options purported by various authors which are either an insider or outsider (Breen, 2007; Adler & Adler, 1994) each of which has its own advantages and disadvantages (Hammersley, 1993). On the face of it, the researcher of this study can be considered an insider which in turn can influence [bias] the research process. Some authors, therefore, argue that to make a research more trustworthy the researcher should be an outsider (Breen, 2007; Adler & Adler, 1994), mainly to avoid biases. Given the continued formal separation from the Indian higher education system, the researcher's position is considered as that of a partial-insider for the purposes of this study.

Apart from being biased, Sikes and Potts (2008), and Smyth and Holian (2008) allude to several other drawbacks associated with an insider's position which can be extended to a partial-insider's position as well. How these drawbacks [especially those that are relevant to this research] were circumvented, are discussed here. Since the researcher has had a formal separation from the Indian higher education for over ten years, the likelihood of a bias does not exist; on the contrary, this separation timeframe facilitates a robust objective approach to the topics being researched. As the researcher is of Indian ethnic origin, it is likely that the research participants may have assumed that the researcher knows about any issues being discussed which, if identified, will be addressed through offering voluntary clarification of the researcher's position. Lastly, to avoid complacency and assuming the meaning of what the participants said, the recorded answers to interview questions were transcribed and sent back to the interviewees to seek clarification and their approval before including that data in the analysis process.

In contrast to the drawbacks, several advantages too are associated with the position of a partial-insider which are discussed here. Hailing from an Indian ethnic origin, the researcher has a sound background that has helped in understanding the interviewees' cultural viewpoint (Bonner and Tolhurst, 2002) through interpretation of e.g. what the participant responses actually mean, as opposed to what spoken words would otherwise indicate, as choice of participants' vocabulary would be an area of concern for the uninitiated. Furthermore, the use of intonations (Wells, 2006) and verbal expressions by participants in their response augmented the actual responses (Ganga and Scott, 2006) – typical is the use of tutting, regional dialects or the use of colloquial terms whilst talking. Additionally, due to India's colonial past, it is well known of Indians to communicate simultaneously in two languages where the opportunity exists i.e. native and English languages. The researcher's knowledge of the native language has facilitated data collection through in-depth understanding of what is being communicated without interrupting the interview process. Some of the interviews, on the interviewee's request were conducted entirely in India's national language Hindi, which also helped in developing a certain level of understanding and informality with the participants, which in turn helped in establishing the truth being researched (Bonner and Tolhurst, 2002). Additionally, the researcher's knowledge, from personal experience, of the Indian higher education sector, institute level political hierarchy, and how the system really works, has helped in the collection of valid data from the correct sources, further ensuring the credibility and trustworthiness of

this research (Smyth & Holian, 2008). This knowhow also helped in forming the anticipations associated with this research and thus, in retrospect, also in developing a robust questionnaire for both surveys and interviews.

Furthermore, the researcher's role as a partial-insider can be considered a well-balanced role of an insider and outsider. An insider's role has allowed access to internal thoughts, views, attitudes and beliefs of the participants, while the outsider's role helped in ensuring that the researcher maintained the required distance and objectivity. This stance, coupled with various measures to address drawbacks and take advantage of various aspects of the insider's position as discussed above, has helped in establishing neutrality of this research. The researcher has documented a record of the experience, reflections and decisions associated with this research as these unfolded, to further establish trustworthiness of this research.

Ethical considerations were given paramount importance. All participants, in accordance with the Ethics requirements of University of Southampton, were asked to give their consent (Annex 1, Consent form) prior to their participation in this research through interviews which were on a voluntary basis. No pressure was used by the researcher (Kumar, 2005) (Annex 2 - Participant Information Sheet) on participants and all participants were informed that this research may be made publicly available (Kumar, 2005) and as such all participants who took the offer to participate in this research were given the opportunity to stay anonymous (Bell, 2014) (Annex 1, Consent form).

The purpose of this research is the only honest reason for collecting data (Bell, 2014) through research questionnaires used in semi-structured interviews (Annex 3) and students on-line survey (Annex 4). All participants were given an opportunity to verify the interview data collected by the researcher before it was analysed (Bell, 1999; Kumar, 2005) and were reassured at three stages of the interview i.e. start, conclusion and revision stages, that the privacy of their participation and confidentiality of the data collected from them, will be ensured in its entirety by the researcher. All these factors together amounted to conducting this research with integrity and credibility, especially as this research used qualitative methods which are considered the main source for data collection, analyses and interpretation (Merriam, 1998). Integrity was further assured through inculcating reflexivity in the research process. This means that the researcher engaged in a constant process of introspection and reflection on any assumptions made before interviews, on the various perspectives during and after

interviews, and on un-biased decisions i.e. not only subjective but also falsification of data (Patton, 2002).

The data obtained from these methods was analysed for purposes of identifying answers to the research aims proposed in the preceding chapter. A constant comparison method was also deployed to segregate and code data in order to facilitate the generation of themes. Collectively these processes have contributed to the reliability, credibility and transferability of this research which means that the findings of this research will be applicable, for the purposes of further research, to similar settings within and outside the Indian higher education sector, participants from which were selected as discussed in the next section.

Selection of participants – Universities, Staff and Students

It was considered prudent to select universities in consonance with the variables of this research identified in Chapter Two i.e. age of the University, governance in the University, size of the University, the Universities' faculty and students, quality culture of the University, and Indian socio-cultural element of the specific area, and funding of the Universities.

Context

To set the context, Indian higher education sector is the third largest in the world and is rapidly expanding to respond to the changing demographics of significantly diverse cultures. In 2016 the total number of registered higher education institutions in India were 51,593 of which 799 are universities supported by a total of over 1.5 million staff (MHRD, 2016). Total number of students that enrolled in Indian higher education institutions were 34.6 million at a Gross Enrolment Ratio (GER) of 24.5%, calculated for an age group of 18 - 23 years (MHRD, 2016). For this research/, the participating universities, staff and students have been selected from this mix.

Selection process

The participant universities for this research were selected based on how each was being funded i.e. funded by Central government or State government or Private organisation. The socio-cultural element in India, as explained earlier, is very diverse and was addressed by restricting the selection of universities for this research from same the geographical area. Another reason

for selecting all universities in the same region was the scarcity of time that resulted from two private universities withdrawing after verbally agreeing to participate (explained later). As such, a strategic decision was taken to contact universities within the same geographical area, which were easily accessible from a given location. Collectively these criteria caused several constraints on other variables as well such as age and size. Nevertheless, this helped in circumventing the time lost and prevented further loss of traveling-time across long distances within India that would have been required for collecting data.

The age of the universities selected range from about a century old to just a few years old e.g. central and private universities respectively. It does appear that universities of similar ages would have facilitated a good comparison but having a good spectrum of University ages has provided an additional insight through comparison between traditional and contemporary university quality culture. Similarly, the size of universities and calibre of staff are also associated with the age of each university. Older Indian university is expected to have a larger its footprint with larger number of affiliated colleges to that university. Older universities also tend to have older staff as university jobs are permanent for staff. As such older university staff are more experienced as compared to the newer staff in younger universities. Collectively these facets provide a richer data related to quality and its assurance particularly related to age and experience of staff.

To collect data for this research with a specific focus on 'staff experience' and 'subjective nature of quality' (addressed in Chapter Two), it was considered prudent to select staff with distinct levels and types of experience within their specific university. As such the identified participants for this research are staff who are quality assurance personnel, administrators, heads of departments, senior lecturers and lecturers that are relatively new; and undergraduate 3rd year students. Table 3.1 provides an overview:

University Type	Quality Assurance Staff	Administrating Staff	Head of Departments	Senior Lecturer	Lecturer	Under-graduate 3rd year Student
Central	2	2	2	2	2	30
State	2	2	2	2	2	30
Private	2	2	2	2	2	30
Total	6	6	6	6	6	90

Table 3.2 Planned number of Research Participants

The first stage thus included approaching and discussing with the Vice Chancellor's office and senior administrators of universities, their acceptance to allow staff of the aforesaid categories and students from their universities to participate. The second stage included liaising with senior university officials for getting introduced to probable staff participants of this research and organising 30 undergraduate students to participate in a 100% anonymous online survey, which did prove difficult. It was envisaged that data collected from staff in the said positions and undergraduate students would offer a broad spectrum of data, which would simultaneously facilitate an in-depth analysis of attributes associated with quality assurance which is presented in Chapters Four, Five and Six. However, in achieving the planned number of participants, as shown in Table 3.1, certain challenges were experienced by the researcher.

Challenges

During this research, several problems were encountered especially with agreements to participate followed by subsequent withdrawals by universities and staff from participating. Two private universities agreed to participate in this research and then withdrew their interest without stating any reasons. Vice chancellor of one private university, in a telephonic conversation agreed to the research but had no authority to authorise it and advised the researcher to contact the owner's secretariat. The owner's private secretariat spent about three months to fix a phone appointment with University's owner which in the end did not manifest. It later transpired through the grape-vine that the management were not willing for their staff to sign any paperwork that could be linked back to their universities; particularly the consent form required as part of the ethics approval of University of Southampton. As such, another trip to India had to be made by the researcher to discuss this research with another private

university and get the management's approval to participate. Based on the researcher's experience with respect to private universities, a back-up plan was also put in place in that a total of two private universities were contacted during the second visit for a just-in-case scenario. This arrangement came in handy as only 5 of the agreed staff members came forth to participate in this research. The reason was again the hesitation by staff participants to sign the consent form.

Similarly, most staff, across central and private universities, hesitated with signing the consent form. The process of convincing potential staff participants of their anonymity, if they participated, took a lot of e-mails, telephone calls and time. In another private university only half the agreed number of staff i.e. only 5 as opposed to 10 staff, came forth to participate. Thus, the research had to be expanded to include yet another private university to meet the designed number of 10 staff participants from each 'type' of university. The management of the second private university too did not react initially, but later the research moved swiftly. As such the overall progress with research interviews was very slow.

Furthermore, staff of one private university too agreed to participate and then withdrew stating that their employment contracts prohibit them from participating in research relating to their university. Similarly, a state university staff discontinued the interview without stating any reasons. This set back the whole research process by 4 months as another set of universities had to be engaged with and agreements sought. It was a slow process and lots of time was lost as private universities, which appeared most enthusiastic at the outset, were least forthcoming.

Additionally, most Staff ignored the time difference between UK and India and suggested time for telephone interviews that related to very early hours in UK time. Despite e-mail confirmations, some staff did not keep their telephone appointments on several occasions and rescheduling appointments at mutually convenient times slowed the research process down further.

Impact on quality of data

The factors discussed in the preceding sections impacted upon this research in several ways. Selecting all participating universities from the same geographical area of India helped in collecting data from within a similar socio-cultural setting alongside significant dissimilarities

between the three types of universities. Interacting with several universities in the initial stages of this research added to the researcher's experience and knowledge of dealing with issues of reluctance by universities and staff to participate in research on quality assurance in higher education. Overall visiting a total of six universities informed the researcher's position more than it would have in the absence of the said difficulties.

Adding another private university to the pool of participating universities exposed the research to a total of four universities instead of the planned three. It also helped in expanding the private university participants' base to two universities instead of just one. The staff that thus participated also provided data from a wider and diverse range of experience and background enriching this research more than it would have in comparison to as planned initially.

The data collected from students of an additional private university has also enriched this research with respect to a wider perspective of students from significantly diverse backgrounds, in comparison to students from only one private university as originally planned. Overall the quality of data is considered much better than what it would have been in absence of the difficulties discussed earlier, in that the data was collected from a wider and significantly diverse base with respect to socio-economic and academic backgrounds of staff and students.

The final breakdown of research participants achieved was in consonance with that stated in table 3.2 i.e. 30 staff in all; 10 staff each from central, state and private universities. However, due the difficulties encountered with private university, 5 staff each from two different private universities made-up for the envisaged target of 10 staff from private university. Furthermore, the total number of student participants was 103 as opposed to the planned figure of 90. This was because 43 students from private universities responded i.e. exceeded the planned figure of 30, as the software setting for maximum number of participants was overlooked but fortunately the date-and-time limit settings helped in shutting the survey without much disruption. Furthermore, since the same internet-link was shared by both private university students for the 100% anonymous online survey, it was not possible to separate the student numbers in accordance with Private university 1 and 2. As such 103 students' responses were received, and all responses were considered for this research. The final number of participants separated by categories is shown in Table 3.3.

University Type	Quality Assurance Staff	Administrating Staff	Head of Departments	Senior Lecturer	Lecturer	Under-graduate 3rd year Student
Central	2	2	2	2	2	30
State	2	2	2	2	2	30
Private 1	1	1	1	1	1	43
Private 2	1	1	1	1	1	
Total	6	6	6	6	6	103

Table 3.3 Final number of Research Participants

Conclusions

This chapter has laid out how the enquiry framework for this research was set up, based on a pragmatic approach, to collect valid data in order to address the research aims set out in Chapter Two. This study has been approached through a theoretical framework along with the use of mixed methods which has facilitate the collection of data, detailed data analysis, cross analysis and deliberations that have led to the findings of this empirical research. Adequate measures were taken to enhance the trustworthiness of this study i.e. triangulation which was applied using multiple data collection methods from various sources. The development of a conceptual framework was based on the dimensions of quality proposed by Harvey and Green (1993), and on literature on quality assurance of the Indian higher education sector.

The next chapter presents the findings from the documentary analysis based on which the espoused theory of quality assurance for higher education in India, has been identified. This was used for a comparison of findings from empirical data analysis as the research progressed, which has helped in identifying gaps between the espoused theory of quality assurance and its perceived practice. The identification of gaps has facilitated a deeper insight into the causes behind current practices which in turn have informed the development of two further concepts of quality, applicable to the current teaching and learning scenario. This research concludes with proposing recommendations based on the gaps identified in this research, and a model, developed specifically for the current Indian higher education context, for the implementation of the proposed recommendations.

Chapter 4

Quality Assurance in Indian Universities - In theory

Introduction

As reported in the Overview chapter, the Indian Government embarked on an ambitious programme of change in higher education and the quality of its performance through its 12th Five Year Plan (Daugherty et al., 2013). For the aims of the Plan to be achieved, it would seem critical that higher education institutions are also aligned to deliver the output and improve the quality of their quality assurance processes. The data analysis (as detailed in this and subsequent chapters) for this research, intends to evidence the correlation between the central and state authorities and higher education institutions in achieving the Government's ambition, and to explore where the gaps are through documentary evidence, interviews and online surveys.

As referred to in the previous chapter, the documentary analysis in this chapter serves to validate the evidence provided by the interviews and student surveys. The documents explored provide an effective tool to allow a comprehensive comparison to take place in Chapter Seven, between the expectations at Government/authority level on quality assurance processes within Indian higher education, to how these expectations are perceived by practitioners and students to being met at institution level. Furthermore, by conducting an analysis of wide-ranging documents, the objective is to establish the espoused theory on current practised processes for quality assurance, which would address Aim 1 of this thesis, i.e. 'Analysing quality assurance documents published by higher education institutions and quality assurance organisations of India e.g. NAAC' (Stella, 2002).

A key observation of the documents examined is that whilst they have been sourced from several different organisations, a seemingly common feature is an omission of any attempt to define a coherent view of quality. So, whilst references to improving quality are liberally stated, precisely which definition is to be used for the assessment of quality is not clearly articulated. The 12th Five Year Plan (Volume 3, 2012), does however inform that "quality in education is inherently dependent on six aspects" (p.55), which include, as well as others, curriculum and learning objectives, teacher support and leadership. This is closely parallel to the key findings from this analysis which has identified a few themes (with sub-components), namely access,

curriculum reform, staff-student ratio, and staff training and development. The documentary analysis has therefore been undertaken to establish the practice in theory, and how it fits into the definition, or components, of quality as classified by Harvey and Green (1993), which has been outlined in the Literature Review chapter of this research. Harvey and Green's definitions of quality as fitness for purpose, value for money, transformation and excellence, have been tested against the emerging themes.

Although there is apparent overlap of the Harvey and Green (1993) definitions amongst the identified themes, the analysis serves to provide an overview of how the quality framework is being imbibed in Indian higher education, and the leverages being used to assure compliance between theory and practice. It will also determine whether the policies and practices on teaching and learning are focusing on a system that is fit for purpose. In other words, exploring whether processes encourage a basic standard of outcomes, or whether they are actually striving for excellence and continuous improvement to achieve quality as perfection. In the absence of an official ranking system for higher education institutions in India, the measure of success, in terms of quality, will therefore be analysed based on the identified themes.

To encompass a variety of relevant stakeholders in this thesis, the documentary analysis has been undertaken on evidence owned by government departments, quality assurance organisations and higher education institutions. As referred to in Chapter One under Corruption and Quality Assurance, a culture of corruption is reported to be widespread in India and therefore, whilst examining the documents, it is also prudent to report on any deterrent to corrupt practices as outlined by said organisations.

Analysis Process

Data from primary and secondary sources (Bell, 2014; Kumar, 2005) was collected by reviewing internal documents e.g. quality assurance documents published by participating universities; and, external documents e.g. published by nine different central and state government bodies (Yin, 2014; Bell, 2014). External quality assurance documents included national policy statements on quality assurance in Indian higher education, government guidelines, reports, historic records of quality assurance in Indian higher education and annual quality assurance reports published by quality assurance bodies, to name a few.

The first stage of documentary analysis was to sieve-out relevant contextual data based on the wholeness of meaning as opposed to solely on parts of information (Moustakas, 1994) in alignment with the first research aim. The second stage involved categorically fracturing (Mason, 2006) and collating the data based on similarities to various components of quality assurance in Indian higher education. The third stage included the presentation of perceptible themes (Boyatzis, 1998) which further facilitated in summarising the data (Teddlie and Tashakkori, 2009). In stage four, interpretation-based coding (Lewins, and Silver, 2009) was carried out.

The qualitative data analysis method thus decided for this chapter was a hybrid approach of thematic analysis (Fereday and Muir-Cochrane, 2006; Daly, Kellehear and Gliksman, 1997) to incorporate both the template (deductive) approach suggested by Crabtree and Miller (1999) and data based inductive approach (Teddlie and Tashakkori, 2009, Patton, 2002; Boyatzis, 1998). Themes were identified from recognition of patterns and categories within data collected from focused reading and re-reading of the identified documents (Teddlie and Tashakkori, 2009, Patton, 2002; Rice and Ezzy, 1999; Taylor and Bogdan, 1998). A comprehensive process of themes identification based on data analysis was thus undertaken and themes e.g. 'Access' and 'Curriculum reform' were identified. This approach complemented the first research aim by allowing the espoused theory of Indian quality assurance to be integral to the process of deductive thematic coding (Hemmi, Bayne and Land, 2009; Lewins, and Silver, 2009; Gibbs, 2007); and, inductive thematic coding (Hemmi, Bayne and Land, 2009; Lewins, and Silver, 2009; Gibbs, 2007) which simultaneously, allowed for sub-themes to surface from the data analysis process. To name a few these include the sub-themes of Expansion and Equality under the theme of Access and similarly, the sub-themes of Design, Currency and Relevance under the theme of Curriculum reform (see table 4.1)

During the analysis process, it was considered prudent to create a deductive-approach based template (Crabtree and Miller, 1999) in alignment with the first research aim and the theoretical framework. The template (see table 4.1) principally comprises themes which were also used as the titles of codes (Lewins, and Silver, 2009) chosen for the seamless use with computer software for further analysis of data. As the data set was large, a computer aided qualitative data analysis software developed by QSR International (2012), NVivo version 11 was used (Hemmi, Bayne and Land, 2009). Documentary data was then organised into the designed codes for subsequent in-depth analysis and interpretation by the researcher.

Although the foregoing description appears as a linear process, the research analysis, as is in most cases, was iterative (Teddlie and Tashakkori, 2009) with volumes of back and forth reading and rereading of data (Patton, 2002), constant comparison of data from different documents to identify similarities and dissimilarities; and, coining and re-coining of themes and sub-themes till the overarching goodness (Tobin and Begley, 2004) was achieved. Partially the iterations were due to the inseparable and continuous process of data segregation and analysis (Charmaz and Belgrave, 2007); addition of more documents, and constant comparison (Patton, 2002); all with an aim to establish a well-grounded template of themes as also to ensure validity, reliability and trustworthiness of this research, particularly for purposes of cross-analysis with staff interview and student survey data later in Chapter Seven. The next section presents an overview of the organisations responsible for the implementation of quality assurance in the Indian higher education sector.

Quality Assurance – Responsible Organisations

Indian higher education is currently on the Indian constitution's concurrent list, meaning that higher education is a shared responsibility of both central and state governments (Seventh schedule, n.d., p.276). The central government department responsible for Indian higher education is the Ministry of Human Resource Development (MHRD) which has been the title for the Ministry of Education since 1985 (MHRD, 2016). A state government on the other hand, typically discharges its responsibility for higher education through 'Department of Education' within its own state. To maintain the anonymity of participating universities, their names, or that of the state, are not mentioned in this analysis.

As a central government organisation, the MHRD is mainly responsible for policy relating to Indian higher education (AICTE, 2016). One of MHRD's key objectives is to develop and implement the National Policy on Education for higher education, which was first introduced in 1968, revised in May 1986 and further modified in 1992. The responsibility of implementing this policy across the entire higher education sector of India, as stated in the policy itself, rests with various organisations; the most critical of which are the University Grants Commission (UGC), All India Council for Technical Education (AICTE), the Indian Council of Agricultural Research (ICAR), the Indian Medical Council (IMC) and the National Council of Teacher Education (NCTE).

As outlined in the Literature Review, The University Grants Commission is predominantly responsible for funding of central universities, maintaining standards, and granting accreditation to universities. In conjunction with the Council of Scientific and Industrial Research (CSIR), it is also responsible for the appointment of teaching staff at universities (UGC, 2009). The All India Council for Technical Education (AICTE) has been a statutory body since 1988 and is responsible for the coordinated development, qualitative improvement, qualitative growth, regulating and maintaining standards of technical education throughout India (AICTE, 2016). The Indian Council of Agricultural Research (ICAR) comes under the remit of the Ministry of Agriculture and Farmers Welfare and is responsible for higher education in agricultural universities, promoting and coordinating education research and its application in agricultural and allied sciences (Reddy, 2009). The Medical Council of India (MCI) was established in 1956 with ongoing modifications, the latest of which is 2001. MCI is responsible for, among others, establishing and maintaining standards of medical education, recognition/de-recognition of medical qualifications from medical institutions, registration of doctors (MCI, 2016). Established in 1993, the National Council of Teacher Education (NCTE) mainly seeks to achieve planned development of the teacher education system, along with maintaining standards for the same (NCTE, 2016).

Collectively, these organisations are responsible for maintaining the quality and standards of higher education in India through quality assurance processes. Each organisation functions under its own Acts/ Memorandum of Understandings (MOU)/Memorandum of Association (MOA) which higher education institutions that fall under their remit are also expected to abide by.

Higher education institutions are further assessed and accredited by the National Assessment and Accreditation Council (NAAC) and the National Board of Accreditation (NBA). The NAAC was established relatively recently in 1992 to explicitly address the issue of quality as required by NPE (National Policy on Education) 1986 and the Programme Of Action (MHRD, 2016), and falls under the direct remit of the University Grants Commission. A parallel accreditation organisation is the National Board of Accreditation (NBA), which was originally established by the All India Council for Technical Education (AICTE) in 1994. Since January 2010, the NBA has been granted autonomous status and is responsible for accreditation of higher education institutions offering technical education. To simplify the forgoing, a block diagram depicting interrelationships amongst the aforementioned organisations is presented

below to consolidate the overview of organisations responsible for quality assurance in the Indian higher education sector.

National Policy on Education 1986

- Central Government
- Central Advisory Board of Education
- State Government
- MHRD
- Department of Education
- UGC (Non-Technical Education)
- AICTE (Technical Education)
- NAAC (Non-Technical Education)
- NBA (Technical Education)
- Central University
- Private University
- State University

National Policy on Education 1986
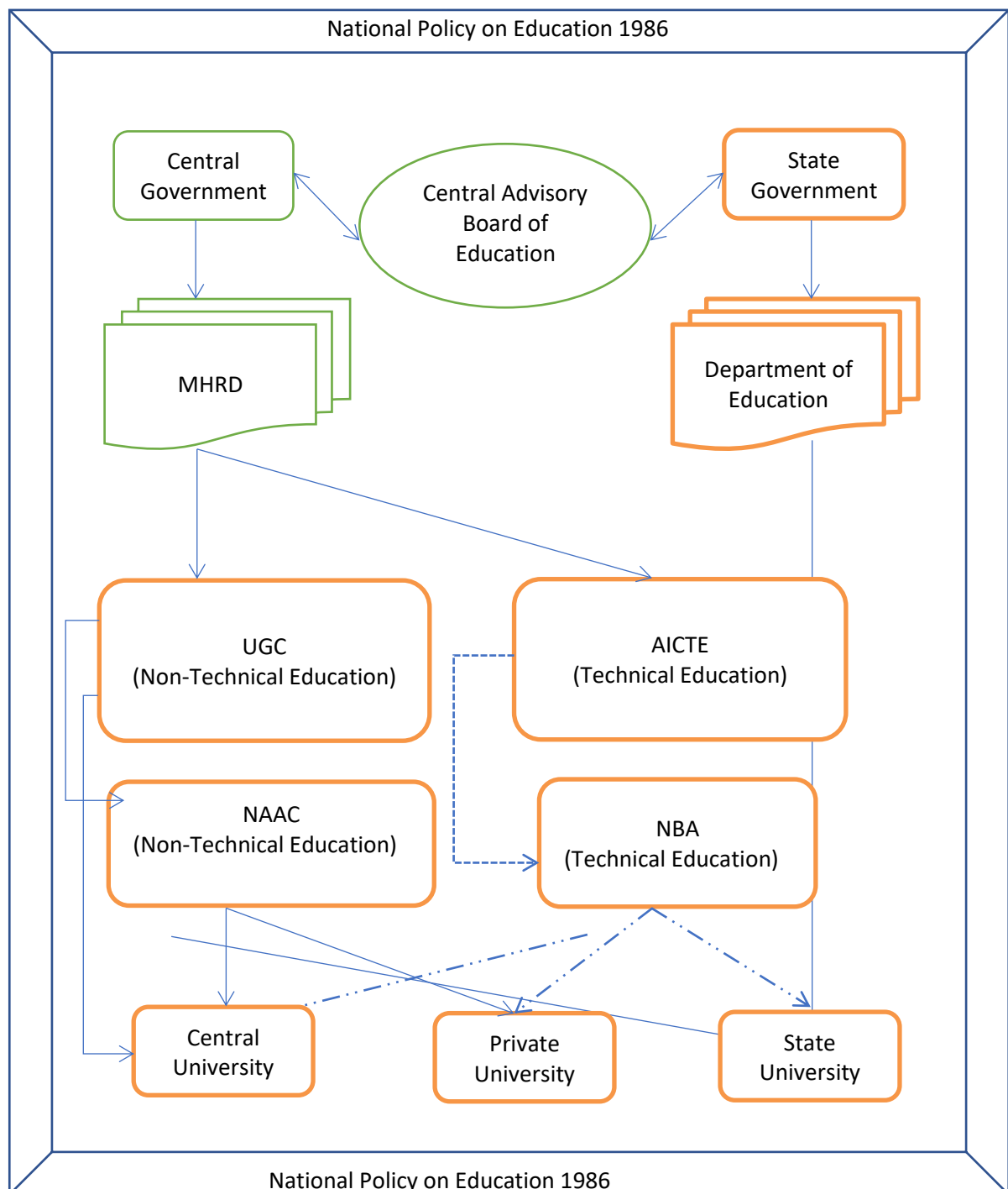
Diagram 4.1 Interrelationships amongst organisations responsible for quality assurance within National Policy on Education 1986

The forgoing diagram depicts an outline of the parallel structure of Indian higher education's quality assurance processes as carried out simultaneously, by both Central and State government organisations, within the framework provided by the National Policy on Education 1986 (modified in 1992), hereinafter referred to as NPE 1986. The diagram also illustrates quality assurance processes and procedures being implemented mainly by the NAAC and NBA. Each of the aforementioned organisations has its own set of regulations or guidelines, albeit in consonance with the NPE 1986, which are published and made available publicly on their respective websites. The next section explains the procedure that was undertaken during the process of documentary analysis pertaining to quality assurance of the Indian higher education sector.

Process for Documentary Analysis

The most effective approach in achieving the objective of this chapter was considered to be the identification of specific themes, which in turn would facilitate a template for comparison later in this research. As such, the NPE 1986 was explored to identify, both themes of the espoused theory of quality assurance, and the organisations responsible for implementation of the policy. The identified organisations are UGC, AICTE, ICAR and IMC. Along with documents published by these organisations, the documents published by the NAAC and NBA were also read to identify common themes. To verify and confirm rule positions, wider reading of several documents was also carried out such as the 'Seventh schedule' published under the Indian constitution, publications of the Central Advisory Board of Education (CABE), and the Council of Scientific and Industrial Research (CSIR). The themes and subthemes thus identified emerged as those which are common in the aforementioned selection of documents. Later in this chapter, these themes and subthemes are presented in a table format to depict their correlation followed by a write-up on the interrelationship between themes.

NAAC Guidelines Analysis

Although there are several regulatory bodies for ensuring quality assurance of higher education in India, for the purposes of this analysis, the researcher has explored the guidelines issued by the NAAC, which currently has responsibility for the accreditation process of central, state and private universities and their affiliated colleges. In 2012, the Mandatory Assessment and Accreditation of Higher Educational Institutions Regulations made accreditation mandatory for all higher education institutions, other than technical and medical institutions. This means

that no central or state university would be eligible for grants from the UGC without accreditation. The motivation for funding is therefore being used by the government as an incentive for higher education institutions to apply for accreditation, which does not apply to private universities.

In 2013, the NAAC issued revised guidelines for setting up Internal Quality Assurance Cells IQAC in accredited institutions and submission of Annual Quality Assurance Report (AQAR) by these Institutions. These Guidelines are only applicable to accredited universities, or rather, universities that have volunteered to be accredited. The aim of the guidelines is clearly to sustain post-accreditation quality standards and although higher education institutions are expected to voluntarily comply with the procedures recommended, the consistent message in the instructions is the potential for the IQAC to be used as a quality enhancement tool. The guidelines outline several the functions of the IQAC, one of which is to submit the AQAR to the NAAC (NAAC, 2016).

Other functions include: development of quality culture in the institution; development and application of quality benchmarks and parameters; arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes and facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning processes (NAAC, 2016). This is achieved by providing clear roles and responsibilities for each member of the IQAC. The NAAC guidelines allow for leadership in higher education institutions to have accountability and demonstrate proactive innovative strategies. Furthermore, whilst the guidelines do provide an operating framework and best practice strategies for IQACs, they (at least theoretically) pass on actual control and responsibility to the heads of higher education institutions, and thus subtly yet firmly make the institutions accountable for quality education. This is specifically evidenced in the guidelines by the suggested composition of the IQAC, which is recommended to be chaired by the Head of the institution.

The AQAR is a useful document which gives the overall self-reviewed picture of the institutional growth in all the aforementioned seven criteria identified by NAAC and needs to be submitted on an annual basis to NAAC. It also provides systematic data with respect to various improvements to be taken up by the institution (NAAC, 2014). The seven criteria are

exactly the same criteria used for the assessment and accreditation by NAAC, so the intention, as previously indicated, is that the standard of performance and quality in the seven areas is sustained, with the scope of enhancement, and is in itself a form of assurance of quality.

The NAAC (2016) has implemented a 2-tier process for assessment and accreditation which comprises: Stage 1, when the higher education institution is required to seek Institutional Eligibility for Quality Assessment (IEQA); and Stage 2, when the higher education institution is assessed and accredited under grades A, B, C for those awarded the accreditation, and D for those who are not perceived to meet the standard. The final decision of the NAAC is based on a self-study report and recommendations of the team of peers who visit higher education institutions. The Peer Team visit is an element of the accreditation process to verify the self-study report and seek additional information to produce a peer-team report as an outcome of the assessment. The process itself includes seven criteria with differential weighting applied to each to provide an overall assessment scoring. The Key Aspects and Weightings have been reproduced in Annex 1 from the NAAC Guidelines. As such, in the absence of clear definitions from the NAAC of quality or standards, the aforementioned criteria and weightings serve as indicators to meet its expectations.

The seven criteria that formed the foundation of the NAAC accreditation criteria bear a striking resemblance to the improvements suggested in the 12th Five Year Plan compelling one to believe a strong correlation between, if not dependence on, the latter. Whilst the key aspects of the specific criteria of teaching and learning include student enrolment and profile, catering to student diversity, teaching-learning process, teacher quality, evaluation process and reforms, and student performance and learning outcomes; other aspects included are curriculum design and development, IT infrastructure, institutional vision and leadership, faculty empowerment strategies, internal quality assurance system and innovations (NAAC, 2016). Whilst there is an element of overlap between the criteria, greater weighting has been awarded to teaching and learning.

Until recently, each criterion was graded as A (very good), B (good), C (satisfactory) or D (unsatisfactory), with a final assessment outcome being derived from each weighting as a peer team report for qualitative aspects of the assessment, and an institutional grading for the quantitative part. Since July 2016, however, the letter grade-to-descriptor relationship has been replaced with letter-grades that additionally have A++, A+, B++ and B+ options, which in turn

are linked to 'Cumulative Grade Point Average (CGPA), while the actual accreditation mechanism remains the same (NAAC, 2016). The process itself is undertaken with a partnership approach between the NAAC and the higher education institution, for what can be perceived to encourage a culture of transparency through the consultative stages of the process, with the purpose of reducing disputes over the outcome.

Considering the corruption culture prevalent in the Indian higher education sector (Agarwal, 2009; Altbach, 2009; Kapur and Mehta, 2004), a Code of Conduct and Ethical Standards is a welcome inclusion in the NAAC Guidelines to Institutions, and has been effective since April 2007 (NAAC, 2016). The Code and Standards offer provisions to encourage practices that support integrity and transparency of the process, illustrating, at least on the part of the regulatory body, the intention of propriety, which is necessary both for the process, as well as in the capacity of the regulation of quality assurance. In a similar vein, the NAAC Guidelines to the Peer Team (2016) provide instruction to "strictly avoid accepting gifts in any form from the Head of institution or the Management of the institution" (p.14).

Furthermore, to maintain transparency and integrity of the assessment and accreditation process, the peer team is asked to sign a template to certify adherence to the "Code of Conduct and maintenance of ethical standards" (p.14). The inclusion of such clauses in the NAAC guidelines demonstrates the intention to combat any form of dishonesty or malpractices by regulatory authorities. The accreditation is valid for five years, but higher education institutions can apply for a re-assessment within a specific time limit (NAAC, 2016). It can be noted that a provision of disapproval is subtly informed via this statement, and when read in conjunction with code of conduct and maintenance of ethical standards, it implies that accreditation can be withdrawn when required.

Themes, Subthemes and Interrelationship

An overview of the themes and subthemes is presented in table 4.1. The table also tries to capture how these themes are implemented in higher education institutions by organisations responsible for quality assurance, and the rewards and sanctions that are used to facilitate such implementation to achieve the intended outcomes. The themes are discussed in detail, following the tables.

Table 4.1 Correlation between identified themes and sub themes

Theme	Subthemes	Lever/mechanism	Rewards and sanctions	Intended outcomes
Access	Expansion Equality Equity	Efforts should be made to equalise educational opportunity (NPE 1986). Admission shall be made... considering the reservation order issued by the government from time to time (UGC 1985). Students' admission - Minority, equity access. (AICTE 2016). Provide the reservation in admission of students belonging to the Scheduled Castes, the Scheduled Tribes and Other Backward Classes of Citizens. (CEIA 2006). Questionnaire for completion by institutions specifically asks whether the university has "conducted any study on … growth of students from disadvantaged sections of society (MHRD 2016)	Funding; Accreditation; Withdrawal of funding; Withdrawal of Accreditation; Policing of practice on the ground through institution assessment;	Fosters equanimity in students' admission; Nurture expansion and massification; Raise universal participation; Social equanimity for students; addresses social parity; Tap-on denied human resource;

Theme	Subthemes	Lever/mechanism	Rewards and Sanctions	Intended outcomes
Curriculum reform	Diversity Design Currency Relevance Employability Excellence Use of ICT	Updating curriculum, renewal should systematically phase out obsolescence and introduce new technologies of supplements" (NPE 1986). Act revised in 2001 to address the challenges posed by increasing number of medical colleges and the progressive and dynamic state of medical education. MCI (2001). Vision statements published for 2020, 2030 and 2050 (ICAR 2010) Curriculum should be balanced, broad, industry-relevant with elective options (AICTE, 1987) Curriculum has a decisive role in steering other elements of quality (NAAC 2016).	Course approval; Approval of institution; Institutes' reputation amongst students, and employers; Specific SSR question in relation to how ICT has been integrated into the curriculum; What are the technologies and facilities available and used by the faculty for effective teaching;	Addressing curriculum obsolescence; Uniformity of education; Proactively develop capability of dealing with envisaged challenges; Offer choices to students to make it interesting. Address industry requirements and students' employability. Wider impact on quality of education. Address ICT skills; Facilitate innovation/invention.

Theme	Subthemes	Lever/mechanism	Rewards and Sanctions	Intended outcomes
Staff-Student ratio	Rapid expansion Pay scales Student calibre Reservations	The group for tutorials shall not normally be more than 15 or 20 students; A teacher shall not be expected to supervise more than 20-25 students in a laboratory class (UGC 1985). Recommended ratio by the UGC is 1:13.5 (UGC 1985) Tutorial classes to address personal level doubts; remedial classes and additional make-up tests to help academically weaker students; mentoring system to help at individual levels (AICTE 1987). Deficiency of teaching faculty and/or Residents is more than 10% and/or bed occupancy is < 80 %, such an institute will not be considered for processing applications (MCI 2016) For excess admissions would result in "appropriate penal action" …leading to "withdrawal of approval for course" or "withdrawal of approval of the institution", as well as other consequences (AICTE, 2016)	Course approval; Disapproval of courses; Withdrawal of institutes licence; Withdrawal of courses for up to 2 years; Appropriate penal action; As well as other consequences;	Quality education for students; Learner-centric environment; Participatory teaching and learning processes; Enhanced staff-students' engagement;

Theme	Subthemes	Lever/mechanism	Rewards and Sanctions	Intended outcomes
Staff training and development	Employability Teacher Quality Employability Reservations	Faculty maturation to adopt the required knowledge and technology (NAAC 2016). No teacher shall be appointed who does not fulfil the minimum qualification prescribed …as per …. Section 26(i) (e) (UGC, 1956). (NET) for recruitment of university and college lecturers and selection of Junior Research Fellows;" (MHRD 1992). Provide details on staff development programmes during the last four years, elaborating on the strategies adopted by the institution in enhancing the teacher quality" (NAAC 2016).	Course approval; Disapproval of courses; Withdrawal of courses for up to 2 years; Appropriate penal action; Withholding of grants by the UGC; As well as other consequences;	Improving quality of the teaching and learning experience; Providing support for teacher development to both institution teachers;

The identified themes above are not isolated or detached as may appear due to the tabulation, but instead these themes are interrelated e.g. the theme 'Access' also relates to expansion of the Indian higher education system. Expansion of the higher education sector is indicative of making provisions of higher education in rural areas to meet the educational requirement of growing masses of under 25's (OECD, 2012), leading to a need to address another theme i.e. 'staff-student ratio'. The themes of 'maintenance of academic standards' as well as 'consistency of the established standards' are also interrelated in that once academic standards have been developed in a certain part of the country, both themes need to be addressed in tandem and conjunction with one another to ensure that standards are maintained across the entire higher education sector.

Likewise, the themes of 'staff training and development', 'curriculum reform' and 'maintaining of high academic standards' are also interrelated as staff training and staff development will acutely relate to the upkeep of curriculum design, the diversity of curriculum, its currency and relevance to the industry requirements and excellence in terms of academic rigour. Staff training and staff development will also closely impact upon the theme of 'high academic standards'; in scientific terms, these would be proportional to each other.

Collectively, these themes surfaced as the influencing factors related to quality assurance within the identified document published by the aforementioned organisations. The next section focuses on the analysis of those documents in relation to these themes.

Access

The Government's acknowledgment and intention to transform the higher education sector to meet the requirements of its changing demographics and economy, has been best illustrated in the implementation of the 12th Five Year Plan (2012-2017). In summary, the objective of the Plan for higher education was to build on the foundations already laid in the 11th Five Year Plan, through continued emphasis on the three "E's", namely Expansion, Equity and Excellence (p.90), allowing access to higher education for the wider population. In simple terms, the Plan provides a holistic approach to the themes of expansion, equity and excellence, putting quality at the core of its objectives, and making it clear that the answer to a rapidly increasing student population is not as straightforward as expanding the number of higher education institutions. Expansion, equity and excellence seem to be being addressed individually, and indeed are listed as separate entities in the 12th Five Year Plan, even though it refers to a holistic approach. It

would seem however, that the 3 E's (p.90), as they have been collectively referred to in the Plan, are not mutually exclusive from each other, and should not be treated in isolation from one another.

The AICTE Approval Process Handbook, 2013-14, also states its intention that "…. "Access to Quality" and "Education to All" will be the slogans for the year 2013-14 to give more impetus to quality in technical education and to be the best in the world." (AICTE, 2016, p.2), thereby following through and supporting the government's ambition through the regulatory process and aligning itself to the government's vision.

The theory of access, in terms of expansion and equality, is by no means a contemporary notion for education in India. As far back as the NPE 1968, reference was made to the fact that "strenuous efforts should be made to equalise educational opportunity" (p.4). Part IV of NPE 1986, has been dedicated to "Education for Equality" (p. 7) suggesting reservations to ensure provision of access to the marginalised sections of the Indian society. Likewise, UGC (2016) states that "The admission [of students] shall be made... after taking into account the reservation order issued by the government from time to time" (p. 47) indicating a possible change of the reservation policy and thus putting in place provisions for any such changes that may be promulgated in the future by MHRD. Similarly, the AICTE (2016) adds in Appendix "8.2 Students admission - Minority, equity access" (p. 38) which depicts a more specific incorporation of NPE 1986 reservation policy in technical education across the country, alongside highlighting access to higher education of minority communities.

The 12th Five Year Plan states in its strategic aims that "an overriding emphasis will be given to quality, as further expansion without quality improvement would be counterproductive for the future of India, given the serious quality issues noted in the sector" (p.90). Whilst equality and accessibility to education is not a new concept, and has been referenced in the NPE 1986, which mandates for the "removal of disparities and to equalise educational opportunity by attending to the specific needs of those who have been denied equality so far" (p.7); what is welcome is the emphasis on quality, which can be measured by, in this instance, how accessible higher education is made to those considered to be from disadvantaged backgrounds through increased enrolment of students from this section of society. This is achieved through a "targeted approach with focus on Scheduled Caste and Scheduled Tribes dominated regions, and convergence of various equity schemes" (12th Five Year Plan, 2012, p.105). Furthermore,

it is acknowledged that "disparities across various social groups and gender gaps in educational attainments continue to be high" (12th Five Year Plan, p.103).

Access to higher education is often measured by GER (Gross Enrolment Ratio), which is the total enrolment as a percentage of the population in the eligible age ranging from 18 to 23. The 12th Five Year Plan reports that "increased enrolments in the Eleventh Plan enabled Indian Higher Education to cross the threshold of 15% GER, moving the country from an elite to a mass higher education system" (p. 93).

Whilst policy rhetoric as far back as 1968 has been around accessibility for disadvantaged sections of society to higher education, a process to regulate or monitor the implementation of such strategy was not in place as such until the introduction of the Central Educational Institutions (Reservation in Admission) Act in 2006. The purpose of this legislation in the Act is "to provide the reservation in admission of students belonging to the Scheduled Castes, the Scheduled Tribes and Other Backward Classes of Citizens, to certain Central Educational Institutions established, maintained or aided by the Central Government" (n.p.n). It established strict quotas and mandated that of the places being offered by Central and State universities, 15% were to be reserved for Scheduled Caste; 7.5% for Scheduled Tribes and 27% for Other Backward Classes (n.p.n). Such a controversial move could have proved to have contentious implications for higher education. However, by applying it to government funded institutions only, the government has ensured compliance by linking it to funding.

This approach may be perceived to be discriminatory against the so-called higher castes, or indeed, against equality based on merit, but there is also an argument for the positive discrimination and rigorously prescriptive tactic that has been adopted to bring about change through compliance. Specific questions around the breakdown of categories of disadvantaged groups, and student profiles, including compliance with the quotas, must be addressed by institutions as an element of the NAAC assessment process, and therefore clearly contribute to the accreditation award.

In the MHRD Guidelines for Assessment and Accreditation, a manual specifically for universities, the Government has articulated in the section on "Student Mentoring and Support" the mechanisms that should be in place to support students, and is emphatic about "specially designed inputs…to needy students with learning difficulties" (p.16). After laying down such expectations to monitor compliance, the assessment questionnaire for completion by

institutions specifically asks whether the university has "conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc" (p. 44). As such, the inclusive nature of access and its quality could be defined as transformation; fostering the transformation of society through inclusion of underrepresented sections of society into higher education communities, albeit slowly. From a university's perspective, there is also a link with quality as value for money as meeting the reservation quota requirements leads to grants and funding from the UGC.

Therefore, the seriousness with which the agenda on access and equity is addressed by the Government is unquestionable, and the direction and support being provided by the manual on how to meet the expectation, followed by the policing of practice on the ground through assessment, is evidence of implementation of good practice as well as strategy. At the same time, by presenting the expectations as *guidelines* rather than policy, the Government can strategically test the accountability demonstrated by universities in adopting initiatives and best practice to meet the requirements of the assessment process, and in doing so, enhance the quality of the service provided through catering for a wider reach of the student population. Furthermore, whilst compliance to the guidelines may not be rewarded by tangible means other than funding, the incentive of accreditation should in theory provide the motivation to do so.

Curriculum Reform

The message being directed to both accreditation bodies and higher education institutions is the requirement for the provision of diverse choices of curricula for subjects, levels and higher education institutions, whilst at the same time ensuring standards of quality. Paragraph 6.11 of NPE 1986, for instance, states that "in order to meet the continuing needs of updating curriculum, renewal should systematically phase out obsolescence and introduce new technologies of supplements" (p. 22). This further signifies the importance of currency of curriculum, its relevance leading to employability at the end of an academic course.

In consonance with the foregoing, the MCI (2016) has revised its Act in 1964, 1993, and, more recently, in 2001 to address the challenges posed by an increasing number of medical colleges and the progressive and dynamic state of medical education. Likewise, the ICAR (2010) has published its vision for the years 2020, 2030 and 2050, which include the possible challenges for higher education in that sector. Alongside appearing highly ambitious, these examples also indicate the progressive and committed attitudes of respective councils towards curriculum

reform, not only to deal with the current development and progress of knowledge, but also to proactively develop provisions capable of dealing with envisaged challenges in the years ahead.

The AICTE performance standards (1987) state at 8.3 "Curriculum, [should be] Well balanced…,[have] breadth, Relevance to Industries, Sufficient Options ...[of] elective subjects…" (p. 39). Additionally, it also states "8.3.4 Additional contents and flexibility to bridge curriculum gaps: i. Programme specific contents which are added to bridge curriculum gaps…" (p.39). These statements reveal a positive attitude of the AICTE to a curriculum that has good depth and breadth, with significant importance placed on both the industry requirements and students' academic welfare.

However, another significant theme highlighted in the 12th Five Year Plan is enhancing Employability (p.90). It is acknowledged that "integrated curriculum with greater flexibility in choice of subjects and innovative pedagogic practices are needed to improve the quality, and hence employability" (p.106). The Plan therefore acknowledges the need for diversity and flexibility in curriculum design, and the need to steer away from the traditional curricula which have been very much theory based, to perhaps a more relevant vocational education, with emphasis on skills development to fill gaps in the labour market. The measurement of quality of higher education in terms of curriculum design can suitably be categorised as fitness for purpose, as defined by Harvey and Green (1993), if it meets the requirements of industry and therefore leads to employability of students, which could also then be linked in with value for money. Furthermore, curriculum design lends itself to fulfilling the institution's mission, if indeed students are securing employment as an outcome of their learning process.

The NAAC, in the foreword of its Best Practice Series 6: Curricular Aspects (2008) put curriculum design and development at the heart of quality by stating that the aspects "play a very significant dimension of the quality of higher education, since the curriculum has a decisive role in steering other elements of quality". It acknowledged that "it is not uncommon to find universities practising and teaching still on the curriculum as old as a few years or even more than a decade" (p. i). Through the issuing of regular Best Practice Guidance, the regulator is, in a sophisticated manner, attempting to encourage curriculum reform and promulgate and encourage innovation in design; thereby providing support without undermining the authority or accountability of institutions.

In the Introduction of the same document, NAAC advises that further to analysis of its assessment reports, it has concluded that curricular development is an area of focus for reforming higher education and goes on to outline the specific areas of focus, of which "additional emphasis on ICT component in upgrading content and transaction of curriculum at different levels" is also mentioned. ICT (Information and Communications Technology) generally refers to technological resource for communication. The use of ICT has the potential for colossal value in the teaching and learning experience. Apart from benefits in improving accessibility via online learning and promoting better collaboration between teaching staff and students, the use of ICT allows for a change in practices such as facility for online examination, payment of fees, development of course material and keeping it relevant and current, as well as other benefits. The NAAC monitors the use of ICT by asking a specific question in the SSR Report in relation to how ICT has been integrated into the curriculum (NAAC, 2016), and also "What are the technologies and facilities available and used by the faculty for effective teaching?" (NAAC, 2016). Furthermore, the penalty for institutions not maintaining specific ICT in technical establishments as laid down by the AICTE can be "withdrawal of approval of the respective course", or even, "withdrawal of approval of the institution" (AICTE, 2016, p.30).

Taking into consideration the potential for development of student learning, widening access, and improvements on the teaching-learning experience in its entirety, quality as transformation would be an applicable definition for the increased use of ICT, and the wider curriculum reform agenda in higher education institutions.

Staff-Student Ratio

The UGC Act 1956 (modified 1985) [see UGC, 1985] states that, "The group for tutorials shall not normally be more than 15 or 20 students…. (p.6) A teacher shall not be expected to supervise more than 20-25 students in a laboratory class." (p.50). These statements indicate quantitative stipulations and it should be noted that due consideration right down to classroom level has been exercised to ensure a healthy staff-student ratio.

AICTE performance standards (1987), on the other hand, state at 8.4.2 that, "tutorial classes/...remedial classes/... mentoring…i) Tutorial classes to address personal level doubts, size of tutorial classes; ii) Remedial classes and additional make-up tests to help academically weaker students; iii) Mentoring system to help at individual levels…" (p.39). The AICTE

performance standards herein appear more qualitative as opposed to quantitative, especially in comparison with the UGC. Whilst the stress in these performance standards is on provision of individual support, especially to weaker students, the stipulations may be exposed to subjective interpretations. For this reason, the standardisation of staff-student ratio may not be uniform across the country in technical education institutions, although the recommended ratio by the UGC is 1:13.5 (UGC, 1985).

However, non-compliance with such regulations can leave higher education institutions exposed to specific sanctions. For example, MCI regulations 1999 (amended up to March 2016) hereinafter referred to as MCI 2016, states;

> "(b)… deficiency of teaching faculty and/or Residents is more than 20% and/or bed occupancy is < 70 %, such an institute will not be considered for renewal of permission in that Academic Year. (MCI, 2016)

This highlights that renewal of permission to run respective academic institutions is at stake if the regulation is not adhered to and furthermore if…

> (c)… deficiency of teaching faculty and/or Residents is more than 10% and/or bed occupancy is 80 %, such an institute will not be considered for processing applications for postgraduate courses in that Academic Year and will be issued show cause notices as to why the recommendation for withdrawal of recognition of the courses run by that institute should not be made for Undergraduate and Postgraduate courses which are recognized…." (MCI, 2016)

The AICTE Approval Process Handbook, 2013-14 makes it clear that the sanction for excess admissions would result in "appropriate penal action" (p.29), which could lead to "withdrawal of approval for course" or "withdrawal of approval of the institution", as well as other consequences.

These examples indicate that sanctions can be imposed on higher education institutions to withdraw both permission to run as an institution and course approval at undergraduate level. At the same time, it is also implied that there is a clear direction for institutions to maintain the prescribed staff-student ratio which institutions may have circumvented in the past. In order to prevent such practices, the current regulations now stipulate;

> "(d) Colleges which are found to have employed teachers with faked / forged documents:

If it is observed that any institute is found to have employed a teacher with faked / forged documents and have submitted the Declaration Form of such a teacher, such an institute will not be considered for renewal of permission / recognition for award of M.B.B.S. degree / processing the applications for postgraduate courses for two Academic Years – i.e. that Academic Year and the next Academic Year also." (MCI, 2016)

This clearly indicates a provision for tougher sanctions if any malpractices on the part of higher education institutions are identified by the Medical Council of India, not forgetting that sanctions ultimately are in the best interest of ensuring compliance and creating good quality teaching and learning environment for the society from the available resource pool.

A smaller teacher-student ratio allows for an enhanced engagement between teaching staff and students; increased capacity to raise and address any issues by both sides; and greater opportunity to test understanding of the class students. Therefore, the initiative could be interpreted to lend itself to enhancing the quality of the teaching and learning experience. A strong commitment is demonstrated, as far as the espoused theory is concerned, for improving the teacher-student ratio to facilitate an enhancement of quality education, although a more strategic direction of how this can be achieved at institutional level may be advisable.

Staff Training and Development

The National Policy on Education 1986 acknowledges that "the present system does not accord teachers a proper economic and social status… career development... initiative for innovation..." (p. 46). It further proposes a programme of development which includes "teaching methodologies, pedagogy, educational psychology for all new entrants at the level of lecturers", and "refresher courses for serving teachers at least once in five years" (p.46). The rhetoric of this policy as drafted appears to be accepting a weakness in the existing arrangements for the training and development of teachers, and whilst it does "propose" a programme of development, it does not seem to go far enough to stipulate mandatory action, which may be the requirement to address the issue of effective staff training and development.

The UGC Act 1956 (modified 1985) [see UGC, 1985] states that,

"No teacher shall be appointed who does not fulfil the minimum qualification prescribed for recruitment as per University Grants Commission ….Section 26(i) (e) of the University Grants Commission Act, 1956"(p.49).

Schedule 1 of the Act provides minimum qualifications for the posts of professors, readers and lecturers in subjects other than fine arts, management, engineering and technology. Additionally, academic staff colleges have been set up for providing staff training, particularly for new staff as evidenced in the Programme of action 1992:

> "3 (iii) Establishment of 48 Academic Staff Colleges by UGC in different universities in the Seventh Five Year Plan for organising orientation programmes for newly appointed teachers; identification of 200 University Departments for conducting refresher programmes far in-service teachers;" (MHRD, 1992).

But before staff can be appointed in higher education institutions, they must have passed the National Eligibility Test (NET) as stipulated in the Programme of Action 1992; a programme conducted by the MHRD within the provisions of National Policy on education 1986:

> "Introduction of National Eligibility Test (NET) for recruitment of university and college lecturers and selection of Junior Research Fellows;" (MHRD, 1992).

The legislation is explicit in the consequences of contravention of this requirement by institutions, which is withholding of grants by the UGC, thereby defining quality as fitness for purpose as opposed to excellence as, whilst minimum qualifications have been stipulated, they are, as suggested, only "minimum", allowing scope for exceeding. The mandate provides recognition for the role of teachers in improving quality of the teaching and learning experience, and therefore decrees an overhaul of the Academic Staff Colleges which provide training for staff, and encourages initiatives to improve the quality and availability of teachers. The Self-Study Report (SSR) submitted to the NAAC requires the institution to "provide details on staff development programmes during the last four years, elaborating on the strategies adopted by the institution in enhancing the teacher quality" (NAAC, 2016).

The SSR submitted by institutions to the NAAC, specifically includes a breakdown of qualifications of staff, which is further confirmed, as an element of the assessment process by the NAAC, through a Statement of Compliance which must be submitted by the Vice Chancellor of an institution, declaring that provisions of specific regulations have been complied with. The first of these regulations is on minimum qualifications for the appointment of teachers and other academic staff in universities and colleges (NAAC, 2016).

Since the regulations stipulate that staff must have a minimum set of qualifications, and as teacher training and development is expected to adhere to academic standards, the quality for

this theme would be appropriately measured against fitness for purpose. However, the development element of the staff training theme relates more with quality as excellence, but only if development is relevant and continuous.

Accountability and Transparency

The AICTE Approval Process Handbook, 2013-14, describes an element of its mission as "transparent governance and accountability in approach towards society" (p. 6), and states that "the role of AICTE as a regulator will be further geared up to weed out the institutions not fulfilling the norms and standards" (p. 2).

As described earlier in the chapter, the UGC, in the 11th Plan Guidelines for Establishment and Monitoring of the Internal Quality Assurance Cells (IQACs) in higher education institutions - 2007-2012, had made it imperative that higher education institutions are motivated to establish their own internal mechanisms for sustenance, assurance and enhancement of the quality culture of education imparted by them. The purpose of this, in accordance with the guidelines, would be to create an internal quality assurance mechanism for guiding and monitoring quality assurance within higher education institutions. The document recommended the establishment of IQACs, and their respective committees comprising the head of the higher education institution and several senior teachers and members, each of whom have stipulated roles and responsibilities.

The Guidelines also refer to the involvement of industry representation in the IQAC as well as external experts from industry or quality management or the local community as members. It appears to be an attempt by the state to ensure greater alignment between the requirements of the outside world and the curriculum followed in higher education institutions, as well as to sustain standards. These members are expected to take accountability and demonstrate proactive innovative strategies. Furthermore, whilst the Guidelines do provide an operating framework and best practice strategies for IQACs, they also allow the actual control and responsibility to rest with the heads of higher education institutions who are reminded that sanctions may be imposed if regulations are not adhered to, for example:

> (d)(4) Failure to seek timely renewal of recognition as required in sub-clause (a) supra shall invariably result in stoppage of admissions to the concerned Undergraduate Course of MBBS at the said institute." (MCI 2016)

14. If any University … fails within a reasonable time to comply with any recommendation made by the Commission under section 12 or section 13, … the Commission, after taking into consideration the cause, if any, shown by the University …for Such failure or contraventions may withhold from the University the grants proposed to be made out of the Fund of the Commission. (UGC 1985, p.15)

Such sanctions, and the specification for the head of the higher education institution to chair such a forum, are demonstrative of the importance placed on quality assurance in education which, along with the involvement of senior teaching staff and stakeholders, is also indicative of the need for leadership of quality assurance to be driven from the top so that accountability rests at that level. It also demonstrates a subtle paradigm shift from the National Policy on Education 1992, which only suggests "the creation of autonomous departments within universities on a selective basis" (p.18). This is indicative of a more progressive approach which, in theory, allows increased accountability and control at a higher education institutional level as opposed to state level control. In line with this approach, the SSR report asks for "details of the academic leadership provided to the faculty by the top management" (NAAC 2016). The responsibility of preparing the self-study report (SSR) lies with institutions, so it is the responsibility of the heads of universities to justify, in a transparent and open manner, the suitability of their institutions for accreditation, thereby assuming accountability for what has/has not been achieved.

The aim of the IQAC Guidelines is clearly to sustain post-accreditation quality standards. Although higher education institutions are expected to voluntarily comply with the procedures recommended, the consistent message in the instructions is the potential for the IQAC to be used as a quality enhancement tool, and for accountability for establishing and maintaining standards to be held by the leadership teams of institutions.

By delegating accountability to institutions and recommending the involvement of industry and community representatives in the composition of the IQAC, leaders of institutions are being encouraged to deliver innovation through such contacts and input, by adapting curricula to the requirement of industry. By making the curriculum more relevant, and consequently improving the employability potential of students, quality can be perceived to be value for money, particularly as stakeholder would rightly be expecting a return on investment; at the same time, the institution would also be expecting to be awarded grants through any innovative approaches. Innovation also leads to excellence and therefore quality as perfection, and

although it may not be seen to sit comfortably with accountability, it may also provide an appropriate definition.

Therefore, whilst encouraging leadership in delivery by higher education institutions, regulatory processes are perceived to be the toolkit through which the government aims to assure delivery of its objectives for higher education's quality assurance. Consequently, it is paramount that there is alignment between the ambitions of the State and the outcomes of the regulatory processes, as well as the components of higher education institution provisions.

Conclusion

Indian higher education has clearly embarked on a reform agenda of a mammoth scale, with the improvement of quality being at the crux of its aspiration. Whilst the transformation programme is ambitious amidst challenges, it is complicated further by the absence of an agreed definition of quality for the organisations entrusted with assuring quality of Indian higher education. Furthermore, the foregoing analysis revealed a clear tension between the proposed definitions of quality i.e. quality as fit for purpose, quality as transformation and quality as excellence, each of which were related to the identified themes.

The themes contributed to the analysis of the espoused theory as proposed by the Government and provided a deeper insight into the Government's intended outcomes. However, when viewed collectively, the themes appeared to have a rather large footprint. With the themes and subthemes put together, too much appears to be going on simultaneously and that too with conflicting objectives. This could prove difficult to manage, especially the implementation of the espoused theory amidst current challenges within higher education institutions in teaching and learning.

The analysis of the espoused theory has provided an essence of the unequivocally determined approach on the part of the Government to imbibe a culture of quality of higher education that can compete on a global platform; and for the regulatory bodies to turn that vision into reality. The dominance of historical corruption cannot be ignored in the backdrop of such ambition, nor can the fact that, regardless of the debate around the issue, the absence of Indian higher education institutions in the international rankings which remains an ongoing issue.

After decades of authors writing on the quality of higher education, and the recent policy consultation by the MHRD on higher education in advance of legislating for a new National Education Policy, it is evident that the current policies and practices are not without weaknesses, and therefore my not be delivering the desired outcomes. Likewise, the Planning Commission of India has also suggested in its 12[th]Five Year Plan a considerable number of flaws and failings with respect to quality assurance in the Indian higher education sector. As such, it provides an urgent need for a more comprehensive and wider analysis that provides an insight into how the espoused theory is being put to practice at meso and micro-level. This is explored in the subsequent chapters, with an aim to identify any gaps between the espoused theory and theory in practice.

Chapter 5

Quality as Perceived by Indian University Staff and Students

Introduction

The documentary analysis in the preceding chapter indicated that government agencies appear to be motivated to set standards and benchmarks in order to achieve a desired level of quality, which implies that at the macro-level, quality and standard are perhaps considered interrelated and used interchangeably. This acknowledgement of the importance of quality education is reassuring for the higher education sector particularly as it is aligned with the government's vision and policy as stated in the National Assessment and Accreditation Council NAAC Guidelines (2016).

This chapter now focuses on how quality, with respect to teaching and learning, is perceived by staff and students of selected Indian higher education institutions. Responses to how staff and student perceived quality were collected through semi-structured interviews and anonymous on-line surveys respectively and segregated in accordance with various concepts of quality suggested by Harvey and Green (1993), discussed earlier in Chapter Two. A detailed analysis of this data is presented in qualitative and quantitative terms with an aim to set the context for Chapter Six, i.e. 'Quality Assurance in Practice', and to verify which of Harvey and Green's (1993) concepts of quality Indian stakeholders most relate to.

The responses appear cohesive in three distinct ways albeit related to Harvey and Green's (1993) concepts of quality and have therefore been categorised in accordance with those concepts of quality i.e. quality as fitness for purpose, quality as transformation, and quality as value for money. Four universities participated in this research, one funded by Central government, one funded by State government, and two funded privately. Due to India's vast cultural diversity, the selection of these universities was based on their geographical location to neutralise the effects of any cultural variation as discussed in Chapter Three. Data analysis is therefore separated by the type of university for each concept of quality. Although the names of participants have been concealed to assure participants' anonymity, their roles have been stated to help comprehend how stakeholders at various levels perceive quality.

Analysis Process

As discussed in Chapter Three, transcripts Data of 30 staff telephone-interview and online survey data of 103 students (Sherry, Thomas and Chui, 2010) was analysed to generate qualitative data (Kvale and Brinkmann, 2009; Patton, 2002; Wengraf, 2001) on how staff and students perceived quality per-se.

As the data set was large (133 responses in all), a computer aided qualitative data analysis software developed by QSR International (2012), NVivo version 11 was used (Hemmi, Bayne and Land, 2009). Qualitative data from interview transcripts and surveys was then organised into the designed codes for subsequent in-depth analysis and interpretation by the researcher. The three concepts of quality were used as the titles of codes (Lewins, and Silver, 2009) designed for the seamless use with computer software.

The first stage of analysis was to segregate responses from the contextual data in transcribed interview and online response (Moustakas, 1994) that related specifically to the participants' perception of quality. The second stage involved categorising (Mason, 2006) and collating the data based mainly on similarities to three concepts of quality proposed by Harvey and Green (1993) namely quality as 'fitness for purpose', 'value for money', and 'transformation'. The third stage included the interpretation of collated responses, to identify which of Harvey and Green's (1993) concepts the respondents' perceptions most aligned with (Boyatzis, 1998). In stage four, interpretation-based coding was carried out to further analyse and identify gaps in the alignment between Harvey and Green's (1993) concepts and the participants' perceptions (Teddlie and Tashakkori, 2009) and work out the possibility of identifying new concepts.

The data analysis method thus decided for this chapter was mixed method. The qualitative data analysis method was also a hybrid approach of thematic analysis (Fereday and Muir-Cochrane, 2006; Daly, Kellehear and Gliksman, 1997) where concepts of quality proposed by Harvey and Green (1993) were the themes. This was based mainly on the inductive approach (Teddlie and Tashakkori, 2009, Patton, 2002; Boyatzis, 1998) e.g. where participants' perception was analysed by researcher to relate to a concept of quality; and some deductive approach (Patton, 2002) e.g. where participant stated their perception of quality as fitness for purpose; the concept itself.

The responses were aligned with the concepts proposed by Harvey and Green (1993) by recognition of patterns and categories within data at various stages of the analyses process particularly in relation to staff interview transcripts and students' subjective responses. First signs of alignment appeared whilst listening to staff participants or whilst downloading students' responses from the internet-based software used for collecting responses. Second stage of alignments to concepts was identified whilst transcribing the interviews and tabulating students' responses (Teddlie and Tashakkori, 2009, Patton, 2002; Rice and Ezzy, 1999; Taylor and Bogdan, 1998). A comprehensive process of themes/ quality-concept identification based on such data analysis was thus undertaken and themes (interchangeably used here with concepts of quality) emerged as a common denominator e.g. 'Fitness for purpose' and 'Value for money'. This approach complemented the second aim of this research by allowing the staffs' and students' perceptions of quality in the context of quality assurance in Indian higher education to be integral to the process of thematic coding (Hemmi, Bayne and Land, 2009; Lewins, and Silver, 2009; Gibbs, 2007).

Simultaneously, quantitative data analysis was carried out using a descriptive statistical analysis of data (Teddlie and Tashakkori, 2009) recorded via Survey Monkey (2016). Descriptive analysis included the identification of trends amongst students' perceptions of quality from the participating universities using "measures of relative standing" (Teddlie and Tashakkori, 2009: p.259) e.g. fifty six percent central university students, as opposed to sixty four percent private university students, perceived quality to be good.

The foregoing description also, like in Chapter Four, appears as a linear process, however the research analysis was iterative (Teddlie and Tashakkori, 2009) with volumes of back and forth reading and rereading of data (Patton, 2002), constant comparison (Patton, 2002) of staff versus staff responses from different universities, students versus students responses from different universities and, generic staff versus student responses to identify similarities and dissimilarities till the overarching goodness (Tobin and Begley, 2004) was achieved. Partially the iterations were due to the inseparable and continuous process of data segregation and analysis (Charmaz and Belgrave, 2007); and continuous comparison (Patton, 2002); all with an aim to establish a well-grounded understanding of how quality is perceived by staff and students of three differently funded Indian universities as also to underpin the second and third research aims of this study undertaken in Chapters Six and Seven.

Having identified the government's perspective on quality, perceptions of Indian higher education staff and students are presented in the section after next, wherein an overview of quality in the context of teaching and learning in the selected universities is presented. A summary of findings is presented at the end of the chapter.

Perceptions of Quality

Overview

Quality has proven to be elusive, as was identified in the Literature Review (Chapter Two) with different stakeholders having their own unique perspective of it. Whilst the debate on the definition of quality has been ongoing, and a consensus has yet to be reached by academics or authors in the field, the same ambiguity seems to have been the case in practice, perhaps based on the appointments and experience of lecturers and students of the universities that participated in this research, reinforcing the multifaceted dimensions of quality.

Private University – Perception of Quality

Private university staff related quality to student achievements in terms of learning and generating employability as opposed to employment, but some participants questioned whether qualifications were true markers of employability. Private university staffs' perception of quality thus appears to be aligned with the notions of *transformation* and *value for money*; as staff alluded to students' *learning* and *employability* in their responses which relate to the aforementioned concepts respectively.

At the university level, strong variation was evidenced in the modus operandi of the two participating private universities in that one university was focused on offering higher education to deserving candidates on a scholarship basis that varied in consonance with candidates' academic capabilities (Staff 1, QA, private university-1, 2016) whilst the other private university appeared to focus on providing higher education only to those who had the financial capability to pay a comparatively high fee (Director 1, private university-2, 2016). This presents a stark difference between how the two private universities perceive quality; with reference to the notions of quality, university-1 appears to imbibe *quality as fitness for purpose* where *purpose* implies offering places to academically deserving students, whereas university-2 operates in consonance with *quality as value for money*, where *value* implies financial profits for university-2.

Regardless of how quality is interpreted, of the numbers surveyed, 64% of private university students rated quality of teaching as good, stating that teachers are extremely helpful, and put in a lot of effort into making students understand the subject easily. At the same time 29% students rated quality of teaching as moderate and commented more about the quality of syllabus rather than the teachers with some stating that practical skills were not taught. 10% students rated the quality of teaching as poor stating that teaching was examination-oriented, and teachers failed to complete the syllabi; and 2% students stated the quality of teaching is unsatisfactory without stating any reasons.

It can be inferred that whilst a larger proportion of students appear impressed with teaching, a minority of students perceive it to be moderate or even inferior quality. However, a common theme identified amongst responses of all students, was that of transformation. Students perceive quality in terms of understanding a subject and its practical application; even those who commented negatively suggested the lack of provisions for transformation. One comprehensive argument where the respondent has stated the quality of teaching to be moderate is:

> "its good... but the students can be given more practical knowledge…along with the theoretical knowledge…which will help the students in solving practical based problem...which will help us a lot" (Respondent 7, private university, 2016).

Such, as well as other statements support the finding that private university students relate quality to transformation. From the foregoing collective responses, it transpires that the universities, staff and students perceive quality in different ways. One of the universities concepts of quality related to transformation in terms of its strategy, whilst the other seemed to be focusing on value for money. The majority of staffs' perception related to value for money; and, lastly, students' perspective mainly related to the concept of transformation, albeit restricted to academic and employment terms. This analysis further implies that there are variations within the same concept of quality based on the perspective of the stakeholder which has been evidenced in the foregoing section.

Student responses on teaching quality were: good 64%, moderate 30%, poor 10% and unsatisfactory 2%. The reasons given by students who selected *good* as an option were: fully satisfied with faculty, share notes, provide information, outstanding, simply good. Those that selected the *moderate* option stated: teacher is okay, teachers run out of syllabus, students can

be given more practical knowledge which will help students with practical based problems, good faculty that teach well, fairly good teachers but essence of teaching is missing, faculty is okay not as perfect as I expected before taking admission, practical assignment. Those that selected *poor* option stated: unsatisfactory, a lot of homework written assignments, they use same module every year, they do not update the syllabus. Those that selected the *unsatisfactory* option did not give any reasons. A larger percentage of private university students appear satisfied as compared to central university students, however more than 40% students were dissatisfied and suggested there was a lack of practical assignments, lecturers not meeting expectations, and the sense of teaching is missing which perhaps indicates concerns with teaching quality. Even though it is a lesser percentage of responses, it raises concerns as to why such issues are prevalent in institutions which employ mostly foreign trained staff and comparatively hefty fees charged to students.

Central University – Perception of Quality

The general perception of quality of education amongst central university staff was good in that education offered by the central university enjoys a good reputation; it is at par with the best in the world (Staff 1, QA, central university, 2016) and as such is considered one of the best universities in India (Lecturer 1, central university, 2016); a perception based on funding from central government and feedback received on recent graduates from post graduate institutions (Lecturer 3, central university, 2016). Participants related quality mainly to effective dissemination of knowledge in an easily understandable manner (Administrator 2, central university, 2016); and the ability to generate curiosity amongst students (Director 1, central university, 2016). Quality was also perceived in terms of staff's publications and in terms of the kind of students that they produce as graduates (Staff 1, central university, 2016). However, some staff felt that as pressures related to quality enhancement have increased, quality per se has gone down (Senior Lecturer 1, central university, 2016). Similarly, another staff suggested that the achievement of identified landmarks was debatable. (Staff 1, QA, central university, 2016).

Overall, the participants' perceptions of quality with respect to teaching and learning varied, highlighting the multifaceted nature of quality and the difficulty associated with addressing issues related to the subjective nature of quality. However, the foregoing abstracts from responses indicate that quality is perceived by practitioners in terms of excellence (as central

universities are considered the best in the country), fitness for purpose (as the university delivers high-calibre postgraduates to industry), and transformation (as staff associated quality with generating curiosity, publications, and the calibre of students that pass out from the university). Each of these is discussed in more detail under said notions of quality.

The overall response of central university students was mixed in that 56% students suggested that the quality of teaching was good, 28% rated it as moderate, 13% considered it poor and 2% rated it as unsatisfactory. In their subjective remarks, students stated the reason behind their choice as *good* to be: good faculty, improve practical skills, good discussion in class. The ones that chose *moderate* suggested that lecturers read from notes, teaching is nothing special, lack of interpreting inquisitive skills on students, wrong teacher for wrong course. The students that selected the *poor* option stated; more droning than teaching, can never understand what is being taught, teachers do not know their subjects in-depth, less interaction with students. One student that selected *unsatisfactory* did so citing a lack of time, a rat race, and teachers with God complexes. The sum total of percentages suggests that students are almost equally divided with nearly 50% who do not consider teaching to be good. This finding indicates concerns of nearly half of the students with the quality of teaching in central university as well.

State University – Perception of Quality

Likewise, State University staff participants perceived quality of education in three distinct ways; 4 out of 10 participants related quality to fitness for purpose, and 5 out of 10 participants related quality of education to transforming students into graduates and good human beings, capable of handling real-life situations, and discharging their professional responsibilities effectively. An overwhelming 8 out of 10 respondents related quality of education to making students capable of earning their daily bread which relates to quality as value for money from the students' perspective. To summarise, state university staff perceived quality in terms of three dimensions proposed by Harvey and Green (1993).

The students' survey unfortunately did not yield a meaningful result as all participants stated the same words in their responses, which were not considered for the purposes of this discussion. This finding has been elaborated in the subsequent chapters. The analysis which focuses purely on the relationship of staff responses to the previously mentioned of quality is presented in the next sections.

Notions of Quality

Quality as Fitness for Purpose

Many staff responses from all four participating universities related to this concept of quality, the analysis of which is presented in the subsections below.

Private University - Quality as Fitness for Purpose

In consonance with this notion of quality, private universities appear to tick all boxes. The universities have excellent infrastructure with state-of-the-art facilities, perhaps at par with the world's best universities, are capable of fostering high quality teaching and learning environments. The quality of education is perceived in terms of teachers and students achieving the desired learning outcomes (Staff 1, QA, private university-1, 2016). This suggests a strategic standpoint that focuses on the 'fitness for purpose' concept and appears to be in line with the espoused theory of quality assurance discussed in the previous chapter. Like quality, 'fitness for purpose' too can be perceived differently on a spectrum with a vast range. The participating private universities expect themselves to be at the higher end of the spectrum.

The experience of education offered, however, appears different as per the administrator of the same university who stated that students are not being facilitated with an opportunity to become self-learners; rather, the focus on surface learning is rife (Administrator 1, private university-1, 2016). This suggests that the notion of 'fitness' of current education appears to be constrained and limited to the remit of courses which give only a few transferable skills. The lack of provision for developing application skills and solving problems based on critical reasoning within the curricula and in real-life situations is also highlighted in the same comment. The administrator questioned the calibre of students who graduate with such credentials (Administrator 1, private university-1, 2016). Another member of staff from the quality assurance department further added that the 'fitness' of education is linked to graduates' employability which relates to the concept of value for money. However, on exploring standards, it emerged that standards are set by various regulatory agencies depending upon academic disciplines as evidenced below:

> "[…] regulatory agencies in most cases... define the minimum benchmark." (Staff 1, QA, private university 1, 2016)

This evidences university's compliance with directives from regulatory bodies but does also pose a few questions about the level of detail contained in the mandated standard, and the autonomy offered to universities for enhancing those standards.

Fitness of staff skills was another concern raised by administrators who stated that despite recruiting staff with higher than stipulated qualifications, certain skills set amongst staff remain lacking as evidenced below:

> "compared to students we are old-fashioned, …, we look obsolete and that affects their attitude towards us and to the education we provide." (Administrator 1, private university-1, 2016).

The intonation in the above comment suggests that administrators desire to employ qualified and skilled lecturers for teaching, which is nested in the fitness of purpose notion of quality, especially with respect to teaching. This also implies that the actual teaching practices do not appear satisfactory, even though a fit-for-purpose recruitment processes and stipulations are in place.

'Staff-student ratio' is another criterion that institutions need to satisfy to function as universities. Private universities appear to meet the requirement as is evident from the following: "Overall in the University it is very decent… 10:1." (Administrator 1, private university-1, 2016). However, staff-shortages in certain departments have directly impacted the quality of teaching and learning in those departments (Lecturer 2, private university-2, 2016) and staff shortages do not relate to the concept of fitness for purpose. The foregoing thus highlights that staff mainly perceive quality in terms of the 'fit for purpose' concept of quality.

Furthermore, to ensure quality of education within universities, all institutions are mandated to have an Internal Quality Assurance Cell (IQAC) which is responsible for maintaining standards and ensuring fitness for purpose of teaching and learning. Such measures inspire further confidence amongst employers who employ most graduates from in-campus placements as evidenced below:

> "Last two or three years we have had very good placements…above 95%." (Staff 1, QA, private university-1, 2016).

The high percentage of placement implies an apparent satisfaction of employers with graduates. Verification of the 'fitness' of education and its quality is further evidenced in collected employer-feedback on the performance of alumni by university staff, who aim to enhance the current undergraduate education (Senior Lecturer 1, private university-1, 2016). Whilst this appears as a good practice, it also raises questions like what could be the reason for universities to collect feedback on their employed graduates? Does such feedback stem from something more deep-rooted? An unprovoked statement of one lecturer of the second private university provides a clue in the statement below:

> "…the passing criteria on the basis of which you make graduates- that has been lowered as well. If I compare it with the last decade, at present quality is declining mainly because of the intake process and because of the passing criteria of undergraduate level." (Lecturer 2, private university-2, 2016)

Lowering the grades required to pass graduation courses may well be a measure to deal with challenges surrounding student intake which, as stated earlier, may not be of the desired calibre. These factors collectively further challenge the notion of 'fitness' of students enrolled on undergraduate courses and the undergraduate certification. Further ramification of these factors is inferior performance of employed graduates. This could be a plausible reason for universities emphasis on collecting feedback from employers on recent graduates.

It is thus fair to conclude that whilst excellent infrastructure is made available by private universities to facilitate a high-quality environment, in conjunction with adequate procedures to ensure quality of teaching and learning, selection criteria of staff and students, assessment standards and employability do not align with the fitness for purpose concept of quality. A higher focus on quantity (overall staff numbers, number of qualifications, student numbers, percentage of students employed, establishing IQA cells) rather than quality (staff-student ratio, meaningful qualifications, staff experience, students suitability for higher education, suitability of graduates for employment, quality culture amongst staff) was also evidenced, albeit with some evidence of a drive to enhance quality (employing staff with highest qualifications, employer-feedback) as fitness for purpose per-se.

Central University - Quality as Fitness for Purpose

Only a few participants referred to this dimension of quality, with one administrator stating

that "quality defined as 'fitness for purpose" (Administrator 1, central university, 2016) in what came across as a pre-prepared response. Most lecturers suggested that the quality of their graduates was best suited for further research and employment. However, a senior lecturer, referring to industry feedback on graduates, stated that 80% of students do not appear to meet the current industry requirements with employers suggesting that the employed undergraduates are not suitable for the jobs (senior lecturer 1, central University, 2016). This suggests that, for a significant percentage of students, the current undergraduate education appears to be lacking in delivering employable skills. Such statistics for central university students appear far removed from the reputation of central university education which is considered to be the highest in India. If, however this is the case, then it reveals that there is a serious gap between the current under-graduate education and the requirements of employers. On a holistic scale for central university, it can be concluded from this finding that quality of teaching and learning is not fit for purpose and that the required transformation of students also is not taking place to the desired level.

State University - Quality as Fitness for Purpose

The notion of quality as fitness for purpose was the least popular amongst state university staff, with only 4 out of 10 staff alluding to this notion in their comments. Most staff stated that graduates possess a lack of skills after completing their graduation due to inconsistencies between the current curricula and industry requirements, discussed later under the section on 'curricula reform'. One senior lecturer stated that most students with undergraduate qualifications from state university did not have the knowledge to work effectively in the related area of industry (senior lecturer 1, state university, 2016). These findings suggest that current qualifications offered by state university do not necessarily assure employers of graduates having the necessary skills and knowledge. This finding is also related to the lack of fitness for purpose with respect to teaching and learning.

Furthermore, the use of facilities and infrastructure like the auditorium, was not encouraged unless express permission was granted from the Vice Chancellor's office (Senior lecturer 2, state university, 2016). Staff responsible for quality assurance added that rather unfortunately these university resources are being used by staff for personal gains (Staff 2, QA, state university, 2016). This indicates an elevated level of bureaucracy which is being perceived as an impediment to teaching and learning practices. Provision of infrastructure and facilities

alone therefore does not guarantee fitness for purpose, unless the freedom to use these facilities is also equally well established.

The foregoing suggests that the current graduates lack skills that are required for employment. Furthermore, whilst resources are provided through state funding for purposes of education to satisfy the notion of fitness for purpose, the same are not freely made available to staff and students for teaching and learning purposes, which undermines the said notion of quality. The use of university facilities for personal gains further undermines the notion of fitness of purpose of use of facilities. Such findings indicate, inter-alia a concerning level of unsuitability of qualifications, exploitation and misuse of funds and resources, and therefore do not align with the fit for purpose concept of quality.

Quality as Transformation

Private University - Quality as Transformation

Many participants' responses suggested that they wanted to see students transforming from school leavers to professionals which aligns with the notion of quality as transformation. Staff expect students to become independent thinkers, capable of applying knowledge effectively, developing their own skills, and providing solutions to complex everyday problems within and outside the industry (Senior Lecturer 1, private university-1, 2016). This implies that staffs' perception of quality is also in terms of transforming students into self-reliant professionals. However, one administrator's response suggested that the desired level of transformation is not being achieved:

> "… academic ethics, the whole thing has taken a big beating… unfortunately something starts in school at least in this country where students … in the name of projects … download things from the Internet but one of the side-effects is that … they think that is what studying is, … downloading and presenting … text and pictures from the internet and this persists into the University and [when] many of us … ask a question … student doesn't even stop to think about it, smart phone comes out under the table and they google your question and somewhere or the other answers are there … and then they speak that." (Administrator 1, private university 2016)

From the foregoing, it could be inferred that there is a lack of awareness on plagiarism, which apparently is not addressed in schools, and as such is a significant barrier to engage students to

think critically, develop a sense of reasoning and to apply themselves effectively to academic challenges placed before them. However, it appears that the higher education sector is not addressing the issue as suggested by a lecturer from the second private university:

> "…the passing criteria on the basis of which you make graduates - that has been lowered as well. If I compare it with the last decade, at present quality is declining mainly because of the intake process and because of the passing criteria of undergraduate level." (Lecturer 2, private university 2, 2016).

Lowering the passing criteria further suggests that currently students are perceived to have low academic calibre which adds to the challenges for staff, who apparently are unable to devote enough time to transform these students into graduates of a desired calibre. Graduation in India is a three-year process and transformation through education includes many factors which are holistically summed up in another lecturer's comment below:

> "[…] what kind of changes has he [student] gone through in terms of not just the knowledge […]; I am very sceptical about the use of that theoretical knowledge that we give them. In terms of outlook, […] any changes in their perspective, […] skill development, […] that will help them […] So there are a number of things, are we contributing in any way to any of those things? If we are able to do that, then we had good quality education." (Lecturer 1, private university 2, 2016).

This all-encompassing response is based on the level of transformation of students' ability, skill and knowledge at the time of graduation. Whilst it can be argued that levels of transformation would be unique for each student, it can also be argued that there should be a collective-mean which either meets the average expectation of various stakeholders or it does not. Another and perhaps more concerning remark of 'scepticism surrounding theoretical knowledge' introduces questions about the paradigm of transformation itself. Transformation appears to closely relate to the quality of curricula and is discussed in more detail under 'curricula relevance'.

Central University - Quality as Transformation

Many participants' responses suggested that the notion of quality as transformation applies to current undergraduate education. One administrator stated that universities are multi-output

processing units, where inputs are transformed into outputs (administrator 1, central university, 2016). Here, 'inputs' refers to school leavers who enter higher education and 'outputs' refers to graduates from the university. Quality was also perceived as transforming students into:

> "[…] good human being […]. Make them confident, make them realistic [**…**] to the society and being sensitive of its needs and finding solutions…" (Staff 1, QA, central university, 2016).

However, one senior lecturer suggested that "such quality is quite non-existent" (Senior lecturer 1, central University, 2016). Another lecturer added that there were no formal measures to identify the current state of students' quality with respect to their ability to identify and solve problems (Lecturer 2, central university, 2016), suggesting that perhaps the assessment process is not robust enough to assess the level of students' transformation.

The foregoing, suggestions made by participants in relation to quality as transformation refer to the staffs' desire to holistically develop students into graduates for them to be meaningful, efficient, effective and suitable human resource for society and industry. However, it transpires that adequate measures have not yet been formalised to assess the current state of graduates' quality and as such, assessment of quality as transformation is proving challenging. This in turn indicates an element of weakness in assuring the overall quality of education to stakeholders.

State University - Quality as Transformation

Perception of quality as transformation amongst staff appeared only as wishful thinking on what they perceived quality of education to be. Half the staff responses to the question on quality of education suggested that 'quality should be…'. As such those responses were deemed irrelevant as the responses did not address what staff perceived quality was at the time, but instead explained what quality should be. However, if extrapolation is permitted, then the said responses do suggest that many quality-assuring elements that can ensure quality are absent.

One Director stated that "Mere academic excellence does not mean much unless it makes […a student] a better human being, empathetic, sympathetic and […addresses] the weakness in society" (Director 2, state university, 2016). This was echoed by a senior lecturer who stated that education should make students better citizens (senior lecturer 3, state university, 2016).

The foregoing suggests that staff wish to transform students through holistic development and skill-building to handle social and workplace challenges which does not seem to manifest itself in practice. Another senior lecturer added that giving good knowledge will help generate employment (Senior lecturer 2, state university, 2016), suggesting that good education can transform school leavers into entrepreneurs who, as responsible citizens, can then contribute to the society e.g. by creating jobs. This currently appears high on society's agenda and is discussed under quality as value-for-money, but that too appears elusive. Additionally, another Director added that quality relates to research, only if it adds to existing knowledge and is useful (Director 3, state university, 2016) implying that quality to transformation relates to generation of new knowledge, albeit with a focus on its utility.

Overall, the foregoing findings suggest that staff desire for their students to holistically transform into skilled human resource. However, they perceive the notion of transformation i.e. academic development, does not apply to students based on the education offered by state university.

Quality as Value for Money

Private University - Quality as Value for Money

As discussed in Chapter Two, the perception of value for money extends beyond value as verb to value as a noun. Universities advertise a large number of courses on offer for students and the values students take away from graduation courses play a significant role in students' perception of quality of education. To ensure the manifestation of a positive perception of quality amongst students and other stakeholders, private universities organise various seminars to enhance the value of the courses offered (Lecturer 2, private university-2, 2016)

Additionally, organising such programs help universities to have an ongoing association with industry, form a network with employers, and have a mutually rewarding relationship with the employment sector that extends and helps students achieve campus-placements. As stated earlier, students are bound to perceive higher numbers of campus-placements in universities as excellent value for their money which they invested in education. At the same time universities enhance their status in society for affording education to students, employment to graduates and employees to industry. This implies that value for money has significantly different meaning for different stakeholders.

Value for money in the monetary sense is also important for private universities since these do not receive any funding from the government. In fact, these universities finance themselves through students' fees and use marketing tactics to effect high admissions, albeit with blurring of certain ethical margins e.g. students' capacity to pay for a graduation course outweighs students' calibre to attend that course. Currently, private higher education institutions are mushrooming all over India to meet the increasing demand of higher education in the country. As such, the calibre of students enrolled in private universities is on the decline mainly due to universities making a beeline for the largest market share, as is honestly stated by administrator of the second private university:

> "I told you very bluntly that university was more concerned about the financial aspects; they said we are not in a position to lose the student, take the student anyhow." (Administrator 1, private university-2, 2016).

This further suggests that private universities are operating under commercial pressure to enrol students irrespective of their calibre. There thus appears to be an undercurrent for maximising profits which is aligned with the value for money in the monetary sense from the university's perspective as well. At a broader level, this suggests that private universities are being run as businesses rather than not-for-profit education institutions. As such the focus is on quantity (of students) which equates to income and thus relates to profits, as opposed to quality (of education) which equates to expenditure on resources and thus relates to lesser or no profits. However, a disproportionate increase of student numbers appears to be a serious cause of concern for staff as suggested by a senior administrator:

> "I … told them [Board of Governors]… let us do … research analysis and told them, see the numbers are going on the higher side but your quality is decreasing simultaneously. In the long run it will not take time to collapse." (Administrator 1, private university 2, 2016).

For staff to carry out such research of their own volition further suggests a cause of concern. The administrator's analysis shows that the current modus-operandi of student intake is not sustainable or fit for purpose, particularly for quality assurance. The cause for this could be accepting more students than permitted for the available resources, which if true, also implies a possible regulation-violation on the part of the university. This reveals a tension between

perceptions of value for money from a university's perspective and that of the students, in that they are placed diametrically opposite to universities driving for higher student numbers for the same set of resources to maximise profits, whilst students, under those conditions, are more likely to experience an inferior quality of education in a setting with larger student numbers and insufficient resources.

Central University - Quality as Value for Money

This notion of quality was perceived differently by staff in accordance with their positions in the university. A member of staff, responsible for quality assurance, defined value comprehensively stating value as money in terms of university's reputation and value as money in terms of students' capability to earn through employment and to carry themselves confidently. At the same time one lecturer perceived value for money as funding received from central government to maintain university standards; whilst a senior lecturer on the other hand perceived value for money in terms of resources available for the purposes of education suggesting a considerable lack of facilities and funds; and stated with complete dejection that it was futile to discuss quality per se.

It became apparent that participants understood value for money based on different meanings attributed to value as a verb and value as a noun. It also became evident that participants, based on their appointments in the university, perceived quality as value for money in accordance with their individual responsibilities in the university. For example, staff responsible for quality assurance related value for money in terms of universities' reputation, which is closely associated with the job-role of quality assurance staff. On the other hand, lecturing staff related value for money to funding for the resources required for educational purposes. It could also be fair to infer that perceptions of quality as value for money are influenced, inter alia by an individual's responsibility within the higher education sector.

State University - Quality as Value for Money

The notion of quality as value for money emerged as a strong theme amongst state university participants' responses with 8 out of 10 staff referring to this notion of quality in several ways but mainly relating quality of education to its capacity to enable employment for their graduates. The most apparent reason for this could be the current state of the Indian economy,

which is perceived as an emerging market. Education therefore, is related more with employment than anything else.

As such participants overwhelmingly stated that quality of education is perceived in terms of employment which graduates can get on successful completion of their academic course, the genesis of which is captured in the following comment:

> "If you go to rural areas they will talk about only how much your fee is and whether you are able to provide a placement to our ward or not. That matters… so then affiliation does not matter at all and they don't want to know even what affiliation is." (Staff 1, state university, 2016).

Perhaps consequentially higher education institutions are currently seen to offer stakeholders with education that makes students capable and self-dependent as reflected in the following comment of a staff responsible for quality assurance:

> "They are supposed to develop skills of the students so that [they can earn their daily wages and they can be self-dependent] … [currently] They are imparting knowledge just to get salaries, this is the bitter truth; unfortunate but this is reality." (QA, Staff 2, state university, 2016).

The forgoing statement implies that stakeholders, especially students are not getting their money's worth even though the directive to staff appears to be clear with respect to students' development. The response also suggests lack of staff's motivation to teach effectively. This example thus brings all the three concepts of quality under consideration, together i.e. students and university not getting value for money, students not getting transformed, thus the lack of fitness for purpose. This further highlights the fact that the dimensions of quality are interrelated and interdependent as well.

Another significant finding was how staff perceived the impact of employment related education. A senior lecturer stated that an employment related approach to education was leading some subjects to near extinction: "…that is why history political, sciences have died because we related those [other courses] to jobs." (Senior lecturer 2, state university, 2016).

With an overwhelming response of state university staff perceiving quality as value for money, it becomes more than apparent that quality of education is perceived in terms of affording

graduates the capability to compete and secure employment. This also indicates that apparently, there is a lesser focus on education per se, which can be attributed to the demands of the Indian society which perceives education as a means of income for the individual and for their families. Most jobs in the employment sector in India are linked to a degree qualification and, as such, students are keen and focused on achieving certificates as opposed to learning or gaining knowledge. Additionally, the concept of quality of education may have shifted from its previous stance, where there was more focus on education itself.

However, it transpires that due to economic and social factors the focus has shifted to seek qualifications purely for the purposes of employability and earning potential. It is perhaps for this reason that the majority of institutions have engaged in educating students to satisfy such demands. This can also be evidenced by the fact that most students do not pursue higher education beyond graduation but instead choose to get into employment which further suggests that the quality of education is perceived as value for money.

Proposal of New Concepts of Quality

The foregoing findings suggest that quality of teaching in private universities relates to surface learning with perhaps few transferable skills rooted in the lack of provision for developing students' problem-solving skills and applications skills. As perceived by staff, when these findings are coupled with students of disputed calibre, the effect could be highly unsuitable, especially with respect to students' learning. To circumvent such issues, staff suggested that the pass criteria for the final exams at undergraduate level had been lowered by the administration, suggesting that students with lesser academic capabilities and/or application skills can now obtain the same undergraduate certificate. This raises questions on the quality and sustainability of such undergraduate qualifications. The findings also suggest that staff are perceived to be old-fashion and some accepted that in comparison with students, their technical skills are obsolete. At the same time administrators and directors' responses suggested that their desire is to have qualified, capable and skilful members of lecturing staff capable of meeting students' expectations and delivering courses effectively. This was further evidenced with nearly 40% of the private university students expressing their dissatisfaction with teaching and learning. Staff alluded to the fact that their desire of students' transformation is not being achieved and that there is a constant decline of the calibre of students that are passing out of the universities.

Similarly, despite enjoying a good reputation by central university, the transformation of students was also questioned by the central university staff suggesting that most of the students were not capable of handling their individual employments after graduating. It was also stated that, based on industry feedback to the university staff, a significant percentage of central university graduates were considered under-prepared to meet the industry requirements and that education appears ineffective in delivering suitable graduates to industry and society. Likewise, state university administrators suggested that over half the lecturing staff are demotivated and do not teach effectively, causing impediments in overall teaching and learning practices. State university staff too suggested that graduates lack skills after completing the undergraduate course and did not have the knowledge to work effectively in industry. These findings are indicative of inferior quality teaching and learning which results in the lack of transformation of students into suitable human resource for society and industry. Transformation of students in state universities as perceived by staff remains a desire waiting to be fulfilled mainly due to the findings stated above.

One theme that runs across all the aforementioned issues and suggestions by staff participants, is the lack of staffs' interacting skills rooted in phrases such as; inferior quality of teaching, surface learning, lowering of passing criteria, students not ready for industry, desire by administration to have skilled lecturers, lack of lecturing staff's motivation. The commonality in all these factors is the lack of teaching skills. This issue is further evidenced in students' subjective responses to online survey.

Collectively these findings challenge the notion of fitness for purpose of teaching capability of lecturers and the notion of transformation related to students' learning in Indian universities. The foregoing part of this section thus establishes that two crucial elements related, one each to teaching and learning, appear to be missing from the mix of activities in all universities, especially state university. The elements thus identified are, effective and efficient teaching by lecturers, and deep learning by students.

The significance of this finding is heightened when the share-percentage of state universities within the Indian higher education sector is considered. A quick glance at the statistics for years 2015-16 reveals that state universities comprise 41% of the total number of Indian universities (UGC, 2016). This implies that, of the three types of universities, state universities have the largest footprint of transforming students into capable human resource in the country. At the

same time, the findings suggest that state universities have the largest number of challenges in the area of teaching and learning.

The foregoing challenges thus offer an opportunity to further the concepts of quality specific to the Indian higher education context. Based on the summary of findings, it is proposed that in order to affect students' transformation into efficient and skilled human resource, quality of teaching should be perceived through the lens of communication i.e. quality as effective communication. In a similar vein to enhance the quality of transformation of students into skilled human resource, quality of learning should be perceived through the lens of critical thinking i.e. quality as learning through critical thinking. These concepts reinforce the subjective nature of quality, which is further complicated by the diversity of students, their academic backgrounds, staff attitudes and, culture and languages, all of which coexist simultaneously under any university's roof.

Conclusion

The overall perception of quality was found to align with dimensions suggested by Harvey and Green (1993). However, two finer-grain concepts of quality have also been proposed i.e. 'quality as effective communication' and 'quality as learning through critical thinking' to address current state of teaching and learning in Indian higher education institutions. It could be argued that the proposed concepts could fit under the dimensions of 'fitness for purpose' and 'quality is transformation'. Nevertheless, it could also be counter-argued that these two notions of quality could go a long way in addressing two key sector-specific issues identified within the context of Indian higher education, that of teaching and learning.

Overall it could be fair to state that policies and statutes have been instated by various government agencies to ensure fitness of purpose for higher education in terms of staff qualifications, staff student ratio, infrastructure and other facilities and resources before certifying an academic institution as a university. However, the analysis of staff responses revealed that physical provision of resources was not sufficient to satisfy quality as fitness for purpose. There are several other elements which were felt needed by participants for the execution of quality as fitness for purpose e.g. availability of resources as opposed to their physical presence, and raised staffs' calibre to teach, in addition to credible staff qualifications.

With respect to the dimension of quality as transformation, participants working in senior roles across the three universities expressed a desire for students to transform from school leavers to graduates capable of applying knowledge effectively, developing their own skills, and providing solutions to complex problems within and outside industry. However, it became apparent that perceptions of quality as transformation varied in that the standards of the current education system were perceived to be lowered by administration and thus were not meeting the requirements of the industry and society. As such, the current state of quality of higher education was perceived by lecturers to be on the decline. This also exposed a tension and disconnect between perceptions of administrators and teaching staff with respect to quality as transformation.

In the case of the dimension of quality as value for money, it became clear that the term value had a unique meaning to participants, with some interpreting value as a verb and others as a noun. A tripartite tension also appeared between how the universities, staff and students perceived quality as value for money in that it was, for profits, resources and employment respectively. These findings further evidence, through this empirical research in the Indian higher education context, the multifaceted, diverse and subjective nature of quality. Quality was perceived differently separated by universities and stakeholder groups. Additional segregations of perceptions were identified within stakeholder groups based on levels of stakeholders' responsibility/role and their experience. Further complexity associated with how quality is perceived, was evidenced due to the interrelationship of different dimensions of quality proposed by Harvey and Green (1993) which are nested in the diversity of students and their academic backgrounds, staff, culture and languages, all of which coexist simultaneously under a one roof. This chapter thus concludes with having understood how quality is perceived by different stakeholders in different higher education settings and sets the context for addressing the second research aim in the next chapter.

Chapter 6

Quality Assurance in Indian Universities

Perceptions of Practice

Introduction

The analysis in the preceding chapter was included in this research as it was considered an important pre-cursor to this chapter. The in-depth analysis of empirical data in Chapter Five provides a backdrop of how quality per-se is perceived by staff and students in comparison to the concepts of quality proposed by Harvey and Green (1993) which were explored extensively in Chapter Two. The inclusion is further substantiated by the fact that this, and the subsequent chapter, deal with the analysis of empirical research data on quality assurance and its comparison with the attributes of quality assurance developed in Chapter Four.

This chapter focuses on how the espoused theory of quality assurance and its attributes, developed through an iterative process and discussed extensively in Chapter Four, is perceived to be practiced by the selected four universities i.e. one central, one state, and two private universities. This chapter also addresses the second aim of this research i.e. Explore how quality assurance processes are being practised in higher education institutions to meet the expectations of government agencies.

Data was collected from semi-structured interviews of staff and anonymous responses to online survey by students. Whilst carrying out the data analysis using qualitative techniques, it was seen that the data aligned with the themes identified in Chapter Four and have thus been arranged in this chapter in the same order for ease of cross-referencing. Curricular reform was a clear-cut theme in the higher education policy; however, there appears to be a significant gap between current curriculum content and industry requirements, even though universities' leadership teams appear committed to developing a curriculum at par with the best in the sector. Likewise, despite the stipulation of specific staff-student ratios and continuous staff training and development requirements for universities in the policy document, the current state of quality of learning at undergraduate level appeared to be compromised due to rapidly increasing student numbers and a scarcity of academic staff across the Indian higher education

sector. These constraints exist, despite what appears to be a highly supportive framework of government regulations and agencies. Such, and other, findings indicate several gaps between the espoused theory and its practice and call for proposed suggestions on how these gaps can be addressed; the proposals are presented in Chapter Eight.

Analysis Process

The use of mixed methods is pursued further for the analysis of data in this chapter as well. Transcripts Data of 30 staff telephone-interview and online survey data of 103 students (Sherry, Thomas and Chui, 2010) was analysed to generate qualitative data (Kvale and Brinkmann, 2009; Patton, 2002; Wengraf, 2001) in alignment with the themes generated in Chapter Four and against a backdrop of quality concepts identified in Chapters Two and Five. The breakdown of research participants was the same as explained in Chapter Five and a total of 133 responses, measuring over 1,54, 000 words of transcript data and over 450 pages of student survey data was analysed to answer the second aim of this research. As the data set was large, a computer aided qualitative data analysis software developed by QSR International (2012), NVivo version 11 was used (Hemmi, Bayne and Land, 2009). Qualitative data from interview transcripts and surveys was then organised into the designed codes for subsequent in-depth analysis and interpretation by the researcher.

The data analysis method thus used for this part of the research was mixed methods. The qualitative data analysis method was again a hybrid approach of thematic analysis (Fereday and Muir-Cochrane, 2006; Daly, Kellehear and Gliksman, 1997) where the themes were those identified in Chapter Four. This was based mainly on the inductive approach (Teddlie and Tashakkori, 2009, Patton, 2002; Boyatzis, 1998) e.g. where participants' perception was analysed by researcher and those related to the identified themes; and some deductive approach (Patton, 2002) e.g. where participants stated their perception on quality of teaching, learning and quality assurance.

The first stage of analysis was to segregate responses from the contextual data in transcribed interviews and online responses (Moustakas, 1994), that related to the themes in the template (Crabtree and Miller, 1999) developed in Chapter Four (see Table 4.1) e.g. the significantly divergent staffs' and students' views of curricula were considered under the theme of Curricula design. The second stage involved categorising (Mason, 2006) and collating the data based specifically on similarities to each of the themes within the template, and on a backdrop of

concepts of quality proposed by Harvey and Green (1993) namely quality as 'exceptional', 'perfection', 'fitness for purpose', 'value for money', and 'transformation'. The third stage included the interpretation of collated responses, to identify which of Harvey and Green's (1993) concepts the respondents' perceptions most aligned with (Boyatzis, 1998). In stage four, interpretation-based in-depth analysis was carried out and sub-themes were developed e.g. Relevance and Employability under the theme of Curriculum reform. This approach complemented the second aim of this research by allowing the staffs' and students' perceptions of quality in the context of Indian quality assurance to be integral to the process of thematic coding (Hemmi, Bayne and Land, 2009; Lewins, and Silver, 2009; Gibbs, 2007).

The alignment process was carried out by recognition of patterns and categories within data at various stages of the analyses process particularly in relation to staff interview transcripts and students' subjective responses. First signs of alignment appeared when the researcher was exposed to voice data during staff interviews and also whilst downloading students' responses from the internet-based software Survey Monkey (2016) used for collecting responses. Second stage of alignment was identified whilst transcribing the interviews and tabulating students' responses (Teddlie and Tashakkori, 2009, Patton, 2002; Rice and Ezzy, 1999; Taylor and Bogdan, 1998). A comprehensive process of themes identification and the linkages to quality-concept was a simultaneous and continuous process, separated further by perspectives based on type of university, staff responses and student responses e.g. under the theme of Curricula design, curricula in private universities is perceived in alignment with 'Excellence' concept of quality by staff as opposed to those from state universities who consider their curricula not even to be 'fit for purpose'. Similarly, students of private university too have a significant divergent opinion about their curricula in comparison to that of private universities' staff.

Simultaneously, quantitative data analysis was carried out using a descriptive statistical analysis of data (Teddlie and Tashakkori, 2009) recorded via Survey Monkey (2016). Descriptive analysis included the identification of trends amongst students' perceptions of quality from the participating universities using "measures of relative standing" (Teddlie and Tashakkori, 2009: p.259) e.g. fifty six percent central university students, as opposed to sixty four percent private university students, perceived quality to be good.

The foregoing description, like in Chapter Four, was not a linear process as research analysis was iterative (Teddlie and Tashakkori, 2009) with volumes of back and forth reading and re-reading of data (Patton, 2002), constant comparison (Patton, 2002) of staff versus staff

responses from different universities, students versus students responses from different universities and, generic staff versus student responses to identify similarities and dissimilarities till the overarching goodness (Tobin and Begley, 2004) was achieved. Partially the iterations were due to the inseparable and continuous process of data segregation and analysis by the researcher (Charmaz and Belgrave, 2007) and continuous comparison (Patton, 2002); all with an aim to establish a well-grounded understanding of how staff and students perceive, in alignment with previously identified themes and concepts of quality, the quality assurance of teaching and learning quality Indian universities. The rigour displayed in data analysis also ensures validity, reliability and trustworthiness of this research, particularly for purposes of cross-analysis with interview data later in Chapter Seven.

The analysis of staff interview and student survey data is presented in five sections, in accordance with said themes. These themes have been presented in the following subsections, starting with *access*.

Access

Access is a term used in policy documents and refers to provisions for mobilising the government's affirmative action through widening participation of socially and economically disadvantaged sections of society. To verify the current arrangements of access in practice, participants were asked how their universities implemented affirmative action and what, if any, was its impact on quality assurance. The affirmative action, also referred to as 'reservation policy', mandates that universities accept 50% students from socially disadvantaged classes, and is collectively referred to as 'reserved category'. The remaining 50% seats in universities are offered to the 'general category' mainstream students, who are offered places in university based on marks achieved at 10+2 level. It is common for universities to cut off admissions of general category students at high percentages, but the remaining 50% students from reserved categories are offered places at comparatively lower percentages.

This reservation policy is only applicable to government funded universities and not to privately funded universities, as stated by 4 out of 10 private university staff participants. The remaining 6 participants were not asked this question. General points that emerged from the interviews around equality of access indicated a variance in approach, with one administrator from private university stating that they offer scholarships to deserving students, as evidenced in this statement "100% fee waiver for students who have scored above 96% marks" in

secondary education (Administrator 1, private university-1, 2016). In direct contrast, the Administrator of the other private university stated that "…It's simple; you pay, you come, you have a qualification..." (Administrator 1, private university-2, 2016). The provision of access for students in the first private university seems to be serving the fitness-of-purpose concept of quality, with the meaning of purpose being places offered to deserving students. In contrast, the approach being adopted by the second institution strongly leans towards a more transactional arrangement, aligned with the concept of value for money from the students' and university's perspective. This presents a variation of applicable concepts of quality within the same stakeholder group, which are the universities in this case.

In contrast, 7 out of 10 staff participants from central and state funded-universities indicated that the reservation policy was being complied which mainly indicates a perceived alignment with MHRD's policy on affirmative action. This is also demonstrative of the provisions of policy implementation to address the problem of inequality in higher education, by offering access to those students who otherwise would remain disadvantaged. Whilst such flexibility has implied benefits for the government and society, in terms of quality in alignment with fitness-for-purpose concept of quality, 9 of the 20 government university staff interviewed (i.e. 4 from central and 5 from state university) stated that the admissions process, in supporting reservation policy, has had an adverse impact on quality of teaching and learning due to students of reserved categories. This is because staff perceive the students as being of an academic calibre inferior to those from the mainstream group. As a senior lecturer of state university outlined, "On one hand … [general category] students [who have] got more than 90% score, at the same time … [reserved category] students who are having just … 50%, … score. So, this reservation policy certainly adds to this problem." (Senior Lecturer-2, state university, 2016). This view appeared to be held unanimously, as staff from both central and state universities attributed a decline in quality of education to the current admissions process of reservation-quota for students from disadvantaged sections of society. The primary reason for this is that students from the general category are perceived to be deprived of places, while those in the reserved category are given priority. For universities, the implication is that the calibre of students is compromised, resulting in additional challenges for teaching staff. Furthermore, 3 out of 10 state university staff stated that the current reservation quota was increased to 60% in the university, despite the Supreme Court (apex court) of India's ruling which limits such reservations to 50%.

Staff of government-funded universities thus believe that compliance with the policy on reservation is related to the 'declining quality of education', as stated above. The reservation policy, which is in place to encourage students from disadvantaged sections of society, is perceived as having a detrimental impact on the delivery of quality of teaching and learning; something that is discussed further later in this chapter. This policy is seen as potentially conflicting with fitness-for-purpose as a definition of quality in teaching and learning.

Curricula Design and Reform

This section contains the analysis of another theme, that of curricular design and reform, that emerged from staff interviews and student surveys. The analysis is separated into private and government universities, the latter of which includes both central and state universities.

Private university staff stated that their institutions are engaged in revising the curriculum to: meet current requirements; offer students latest there is in education; remain abreast with the best universities of the world; tailor courses and modules to meet students' diversity, including practical and interactive sessions; and solicit feedback from students and employers on the quality of their curricula. Private university staff stated that their institutions had an ethos which directs staff to ensure ongoing curriculum development, supported by a bureaucracy-free system for curricular amendments and modifications, with which staff feel motivated to reform the curriculum, as per what the staff perceive the needs of students and industry to be. This emphasis on curriculum design is further evidenced in a response by a lecturer from private university-1; "we had people from MIT [USA],… Carnegie Mellon [USA],… and IIT's[India] to suggest … what we should do to the curriculum and we came up with a very innovative way" (Lecturer 1, private university-1, 2016). Whilst this indicates a proactive strategy for curricular reform, 4 out of 10 participants felt that the quality of curricular design was found lacking. Furthermore, an area for improvement in curriculum design was highlighted by one administrator of private university-1 who asked "… are they [students] having to deal with unexpected and then if they are asked to do unexpected, do they step up and deal with it or do they then retreat?" (Administrator 1, private university-1, 2016); indicating that the subject matter fails to provide challenges for the students and fails to make them think independently and/or critically.

Another factor that contributed to this theme was students' calibre. To cater to the needs of

students from different educational backgrounds, one administrator of private university-1 added that "we have diversified our courses, we have a greater variety now in first year classes, we do more filtering as to where a student should go... Now we have three different versions of first-semester calculus course that students of diverse backgrounds can go to." (Administrator 1, private university-1, 2016). Although this indicates that curricular reform is moving in alignment with fitness-for-purpose for students being enrolled into university, it also suggests that students from diverse academic backgrounds, some of who may never have studied the subject at secondary education level, are being accepted on higher education courses. The latter presents a contrast to the elitist paradigm, which is supported by most lecturing staff who do not consider such admissions to be in alignment with the fitness-for-purpose concept. Staff believe there is a dichotomy between the provision of admitting students with such backgrounds under the pretext of offering equal-opportunity to all applicants of private universities, and at the same time taking steps to enhance the quality of curricula: one being considered an obstacle to the other. Whilst flexibility of curricula may go partway to the solution of this paradox, it does not in itself simultaneously realise the ambitions of financial gains and quality improvement.

Another element of this theme was that staff believed the lack of bureaucracy in private universities encouraged continuous development of the curricula, and inclusion of the latest research and practices in their respective syllabi. Of the 10 private university participants, 5 alluded to curricular modification to include the latest and relevant topics within their respective syllabi. This should in theory benefit students for subsequent employment and higher studies, and is thus in alignment with the concepts of fitness-for-purpose and transformation. One senior lecturer of private university-1 stated that the latest move is for emerging topics such as "big data" and "Internet-based things" to be included at BTEC level (baccalaureate level of education) (Senior lecturer, private university-1, 2016). Furthermore, 7 of the 10 private university staff referred to practices such as guest lectures, seminars, and workshops (organized by universities in conjunction with stakeholders from industry) as ways of introducing the latest industrial developments and practices to students. In contrast, 4 out of 10 staff of private university stated that the curricula were outdated, lacked purpose, didn't align with the current requirements of industry, and did not incorporate the use of modern technology to augment students' learning and practice. These diametrically opposed views of nearly equivalent staff percentages present a dichotomy over the suitability of the current

curricula and its alignment with the concepts of fitness-for-purpose and transformation.

Furthermore, students' responses to anonymous online questions on quality of curricula yielded contrasting responses as well. Due to the 100% anonymous nature of questions, it is not known how many of the 51 student participants were from which private university. Nevertheless 90% of students answered the question on quality of curriculum and how it could be improved, a summary of which is presented in tables 6.1 and 6.2.

Question: What is quality of your curriculum (syllabus)?	Private university students' answers			
OPTIONS	**Good**	**Moderate**	**Poor**	**Unsatisfactory**
Student % n = 46	65%	25%	10%	6%

Table 6.1 Summary of Objective response by private universities students to question on quality of syllabus

Question: How can the syllabus be improved on your course?	Private university students' subjective response.			
Variances in students' response	**Syllabus needs practical work**	**Syllabus requires updating**	**Program was fine**	**No response**
Student % n = 46	68%	21%	7%	4%

Table 6.2 Summary of subjective response by private universities students to question on quality of syllabus

On comparing these quantitative data sets synthesised with subject responses, students' responses for objective and subjective questions were significantly different. Table 6.1 shows nearly two-thirds of student-respondents stating that quality of curriculum was "good", whilst table 6.2 shows near-reversal, in that only 7% considered the syllabus satisfactory and nearly 90% suggested a need for improvement of the syllabus. This indicates that students are not satisfied with the current syllabus and 68% seek improvement by having a *practical element related to theory* taught on courses, whilst 25% find the syllabus *outdated*. Whilst these findings are in alignment with the belief of some private university staff with respect to curricular design and reform, this also presents a stark contrast to the claims made by those private university lecturers who stated that their syllabus is state of the art and at par with the world's leading universities. There could be several reasons for the mismatch of perceptions between staff and students; for example, staff and students may not have been from the same academic discipline or from the same university, for that matter (as data was collected from two different universities). Furthermore, staff and students may disagree on what is fit-for-purpose and state-of-the-art, as quality is subjective.

It seems therefore that the purpose of, and motivation for, curricular reform in private universities may not be universally understood to be the same amongst their stakeholders. Whilst it may be believed that progressive work is taking place in reforming curricula, these findings present a lack of consistency in practice. The curricular reform seems to be dependent on how reform is perceived and cultivated by lecturers in private universities through the autonomy offered to them.

In comparison, central university staff appeared confused with what constituted curricular reform due to the extensive changes made to the delivery of undergraduate courses. A senior lecturer of central university stated that "…in [last] 12 years, there have been three major sweeping changes [to syllabus delivery] without … concomitant amount of background work needed to go with it." (2016). These changes refer to delivery of the undergraduate curricula from an annual system in 2004 to a semester system in 2009; from a 3-year programme to a 4-year programme in 2012, which was converted back into 3-year-plan a year later (Senior Lecturer 1, central university, 2016). As such many, respondents considered the changes to delivery of syllabi to be curricular revision. These changes appear to be effected by bureaucrats and university's senior management. without an offer of consultation to lecturing staff (Senior

Lecturer 1, central university, 2016). Most central university staff respondents expressed their dissatisfaction with these changes and the lack of inclusivity of lecturing staff in the process. The staff is sceptical of the current undergraduate programmes' sustainability. This example suggests that the overarching process of curricular design leaves much to be desired by lecturers and does not appear to be fit for purpose as the foregoing suggests that lecturing staff consultations were not made at the time of making changes to the delivery of curricula.

However, on further questioning about curricular reform per se, participants' responses were mixed. Staff stated that the curricula had a good reputation and included the latest information for students, including practical work (although staff had to work to tight deadlines). The curriculum design supports online course-material for students, including practical lessons through simulation and virtual labs (Senior Lecturer 2, central university, 2016). However, whilst this offers students flexibility to learn at their own pace, it also begs questions about the overall quality of curriculum design; it may merely transfer some sections of the curriculum to self-study and does not mitigate the students' workload within term times. This example suggests that the curricular design appears to be aligned with the concepts of fitness-for-purpose and transformation.

Furthermore, staff suggested that curriculum reform included the latest topics in undergraduate curricula and kept abreast with the best universities in the world. One lecturer remarked that "our syllabi have been comparable to anywhere else in the world. …. students are introduced to newer topics, more modern technologies …including practical" (Lecturer 2, central university, 2016). This, too, suggests the curricular design's alignment with fitness-for-purpose and transformation. However, whilst such positivity could be construed as a marketing ploy, it does demonstrate a recognition of the need to develop the syllabi to global expectations, make the curriculum current, use technology in teaching, and include practical experience into the curriculum.

Another element of curriculum design is the introduction of job-oriented courses and, more recently, "skill development papers in most of the courses", with an aim for students to succeed in campus placements immediately after graduation (Senior Lecturer 2, central university, 2016). Through skills development, curriculum design is focused on including contemporary topics including "practical aspects of the job … [through]… some internship" which was also confirmed by a Senior lecturer 3 (central university, 2016). Staff also related curriculum reform to weekly activities which e.g. "add that additional value to the education" (Staff 1, QA, central

university, 2016) through seminars and visits of professionals and industry-experts to help students learn about the latest trends in industry. Another respondent added that some assessments are now "kind of… an open net [Internet] ... examination and practical [online simulation]." (Lecturer 3, central university, 2016), which implies that students are being assessed using the latest technology. These examples provide further evidence of addressing the lack of practical aspects associated with the theories taught on courses and aligning the curricula with current requirements which support students' transformation.

However, and in contrast to the foregoing, the other set of staff said that the syllabus was prescriptive, curricula had not been revised for over a decade, and that system did not allow for its meaningful revision at the pace required, mainly due to bureaucracy. Furthermore, a Director of central university stated that time allocated for course delivery was restricted for the content which was prescribed and staff also do not have the freedom to undertake delivery of more topics than stipulated (Director-1, central university, 2016), indicating the belief that curriculum design is highly prescriptive, and is focused on quantity rather than the quality of the program. Linked to lack of time, there is also a lack of provision for encouraging students to prepare presentations, seminars, and assignments (Director 1, central university, 2016), which reflects the quality of curricular design misaligned with the concepts of fitness-for-purpose and transformation. This finding also indicates that the innovation in curriculum reform is being restricted by design, as even senior level staff are seemingly not allowed the accountability for the content of their syllabi.

Furthermore, some respondents also stated that the quality of curriculum reform was marred by lecturing staff using the same assessments for over a decade. As one director put it, "last ten years' question papers… [to prepare students for assessments as] the kind of issues and style of questions asked, would be almost similar" (Director-1, central university, 2016). Additionally, a senior lecturer stated in a frustrated tone that there is "Absolutely no change in level [referring to secondary education level]. It's almost a 100% repetition." (Senior Lecturer-1, central university, 2016).

Moreover, according to lecturer-2 of central university, the students still lack capability in the application of knowledge to solve day-to-day problems, due to the emphasis on surface learning and preparing for assessments based on a limited number of questions (Lecturer-2, central university, 2016) evidencing a curricular lack of provision for the practice of applying knowledge, a skill highly desired by graduates' prospective employers. Similarly, a Director

and a Lecturer of central university stated that, although the current syllabus covers theory to a great depth, the courses are not oriented to practical application and perhaps not suitable for current industry requirements (Director-1, Central university, 2016& Lecturer-2, central university, 2016).

The foregoing responses by central university staff suggest a contrast of views, in that some institutions are considered well-placed regarding curriculum reform, while others are not, which leaves the analysis in a nebulous state. As such, it is considered prudent to consider data from students' survey to verify the dichotomy presented through staff interview data. To further verify these staff responses, 40 central university students were asked questions on the quality of curricula which yielded contrasting responses to those made by staff; a summary is presented in tables 6.3 and 6.4.

Question: What is quality of your curriculum (syllabus)?	Central university students' answers			
OPTIONS	Good	Moderate	Poor	Unsatisfactory
Student % n = 40	50%	42%	5%	3%

Table 6.3 Summary of objective response by central university students to question on quality of syllabus

Question: How can the syllabus be improved on your course?	Private university students' subjective response.			
Variances in students' response	**Syllabus needs practical work**	**Syllabus requires updating**	**Program was fine**	**No response**
Student % n = 40	10%	25%	6%	3%

Table 6.4 Summary of subjective response by central university students to question on quality of syllabus

A comparison of the data in tables 6.3. and 6.4, suggests that students have expressed their perceptions in a significantly different style for the same questions when worded differently. Table 6.3 shows half of student-respondents stating that quality of curriculum was "good" whilst, in table 6.4, only 10% considered the syllabus *interesting* and nearly 34% suggested that the syllabus was anything other than good. The subjective responses also indicate that students are not satisfied with the current syllabus. This attribute provides evidence of a culture that is prohibitive of expressing thoughts which can be perceived as being against the education system. However, 25% of students stating that the syllabus is outdated and poorly organized goes against the claims made by lecturers who stated that their syllabus is state-of-the-art and at par with the world's leading universities.

These diametrically opposed views on central universities suggest that systems, processes, and procedures to address quality of curricula in central university are not yet uniform, albeit some of the foregoing findings suggest improvement in certain subject areas. This has the capability to undermine the overall perception of central university's quality as fitness-for-purpose and transformation, especially in relation with undergraduate curricula, as evidenced above.

In a similar vein, most state university staff respondents considered curriculum to have a significant influence on how the quality of teaching and learning was perceived. Curriculum was mentioned in most responses to questions related to the current quality of education and learning, and how these could be improved. This indicates that respondents were concerned about the current curriculum and considered it an important aspect of quality of undergraduate education and that their perceptions of quality of teaching and learning were nested in the quality of the curriculum. Overall, 8 out of 10 state university staff expressed their

dissatisfaction with the current quality of curriculum and the system in place for its revision, attributing it mainly to lack of lecturing staffs' motivation and political interference in state universities' activities.

The maintenance of the quality of curricula within state universities is the responsibility of a department called the 'Board of Studies' which comprises heads of departments, senior lecturers and subject experts from other universities (Senior Lecturer 1, state university, 2016), but there appears to be no provision to include members from industry for curriculum revision (Staff 1, state university, 2016). The quality of the curriculum rests with this department, and it oversees curriculum changes and its currency (Senior Lecturer 1, state university, 2016), assuring stakeholders of a robust system for maintaining the quality of the curriculum. College lecturers, too, are invited as part of the curriculum revision process (Senior Lecturer 2, state university, 2016), indicating inclusivity and involvement of staff in the process of curriculum change.

For state university, curriculum design, content, and delivery appear to be prescribed by the higher education authorities, and staff feel compelled to comply, suggesting levels of frustration which could be one of the causes of the perceived staff disengagement (Staff 1, state university, 2016). This is evidenced by the response of a state university director who suggested that many staff are "*highly dissatisfied*" (Director 2, state university, 2016). The dissatisfaction with the curriculum design amongst lecturers is further evidenced by the following:

> "We have brought the semester system from the westernized culture, but the semester system has no utility." (Senior Lecturer 2, state university, 2016).

Most state university staff felt that changing over from the once annual system to the current semester system was influenced by the Western education system. In the semester system, the course is delivered on a half yearly basis. This change has manifested in doubling the assessments in comparison with the annual system, and most staff stated that the resources, in terms of staff numbers and facilities, have remained the same in the face of an ever-increasing student population. As such, most state university staff perceived the semester system to have failed to serve the purpose of higher education (Senior Lecturer 2, state university, 2016). It does not offer the time required for students to learn what has been taught in a term (Director 2, state university, 2016), and overall it had "*failed miserably*" (Staff-1, QA, state university, 2016). While lecturing staff acknowledged that different learning methods such as case studies

and projects have been included in curriculum design, most staff felt that it was a mere exercise to put students through these methods without meaning to meet the purpose of learning, a perception based mainly on a dated curriculum.

Half of state university staff stated that curriculum reform left much to be desired. Staff agreed that whilst effective provisions for revising curricula exist, in that there is an 'academic board' and university staff are asked to participate in the revision process, state university staff do not seem motivated and do not participate or promote the revision of their respective syllabi. Lecturing staff do not attend meetings or cooperate in the revision by ignoring requests to advice on revision (Senior Lecturer 2, state university, 2016). These findings present a tension between what is espoused by state university staff and how, in practice, the lecturers are perceived as unsupportive and unmotivated to achieve the curricular reform that they wish for. The reason for the lack of engagement by lecturers might be the resentment that staff harbour towards the changeover from an annual system to semester system, a change which most say was implemented without the lecturing staffs' involvement.

Furthermore, 4 out of the 10-staff interviewed allude to the fact that the current syllabus is obsolete (Director 2, state university, 2016), with one response elaborating on the syllabus revision practice: ["In the name of revision, one can expect to find resetting of the [same] syllabus. … a portion of … paper [subject] is allocated for another class [year] or half paper [subject] is kept in one class [year] and half of another subject is mixed with it; those things you will find here but for the level of demands of the society or field [industry] or knowledge, we need to work in that direction".] (Director-1, state university, 2016). This comment is evidence of a paper exercise carried out by state university staff, to meet the requirements of quality assurance processes, without actually effecting any real changes for a meaningful result.

Additionally, attempts by members of the 'Board of Studies' to revise the syllabus are met with opposition by lecturing staff (Senior Lecturer 2, state university, 2016) as well as by the examination department, because its staff state that it is difficult to cope with frequent changes to the curricula (Senior Lecturer 2, state university, 2016). This suggests a perceived lack of motivation and enthusiasm amongst lecturing staff which is discussed in more detail under 'quality of teaching'. There also appear to be no measures to address staff's underperformance and inactivity on curricular and syllabus revision. These findings help with identifying the discrepancy between current practices and the fact that the syllabus has not been revised for

nearly a decade (Staff 1, state university, 2016). In many cases, obsolete topics have not been omitted from the syllabus, as evidenced by the following comment:

> "…instruments are completely outdated, they are no more in use but still we are studying this topic on those instruments in too much detail. They are having practicals on that instrument but it is not going to be used in the industry." (Staff 1, state university, 2016)

Additionally, staff believe that the "…pressure of covering the syllabus, […] is too great. The semester [system] does not allow you much time;" (Senior Lecturer 1, state university, 2016). The suggested time restrictions to complete a highly prescriptive and vast syllabus are almost prohibitive to engaging students in critical thinking (Staff 1, state university, 2016). Students' diversity is another challenge that is hard to satisfy through curriculum design. Some staff felt that the curriculum cannot suit all students who come from diverse educational, regional and rural backgrounds (Senior Lecturer 3, state university, 2016).

One respondent stated that students are compelled by lecturing staff to engage in surface learning and regurgitate answers in assessments with specific set of questions, a stumbling block for lecturers who wish to educate students using deep learning techniques (Senior Lecturer 1, state university, 2016). The stagnant state of the curriculum and repetitive assessments enables the publishing of 'solution books' that provide students with solutions to regularly asked questions in undergraduate assessments; lecturing staff feel that undergraduate courses should be protected from such standardisation (Senior Lecturer 2, state university, 2016).

These findings indicate a tension between participants' views on staff motivation and maintaining the currency of curriculum; both of which can have a considerable influence on how the quality of education fitness-for-purpose is perceived by stakeholders, especially the fitness-of-purpose concept. Further evidence of the curriculum's idle state can be inferred from the proliferation of the parallel book-publishing industry which provides solutions to university assessments with frequently used questions, raising questions about the concept of quality as transformation. This in turn raises further questions concerning not only the curriculum, but also the evaluation process which many staff are dissatisfied with (Senior Lecturer 2, state university, 2016).

To get a student's perspective, the analysis of completed student surveys was considered. It transpires that students prefer to rely on such published material for passing their exams, whilst staff seem to struggle with getting students to move away from surface learning and towards applying theory to practice to promote deep learning, as discussed above. On giving their perspective on curricular quality, 27 out of 30 state university students gave responses which were opposite to staffs' perceptions, discussed in the earlier part of this section. A summary of state university students is presented in tables 6.5 and 6.6.

Question: What is quality of your curriculum (syllabus)?	State university Students' Answers			
Options	Good	Moderate	Poor	Unsatisfactory
Student % n = 27 (out of 30)	100%	0%	0%	0%

Table 6.5 Summary of objective response by state university students to question on quality of syllabus

Reason for choice of objective answer (as above).	State university Students' Answers			
Options	Good	Moderate	Poor	Unsatisfactory
Student % n = 27 (out of 30)	"good" (All 27 respondents stated the same word)	0%	0%	0%

Table 6.6 Summary of subjective response by state university students to question on quality of syllabus

These responses have been included in this chapter to highlight the suggestive of a strong prohibitive culture against stating anything negative about educators or educational institutions, especially in rural areas. Amongst other reasons that can be inferred and attributed to the summary presented in table 6.6 are: lack of command over English language in rural areas, and an orchestration of students' responses by those who may have been delegated to inform students of the online survey, as evidenced by the fact that 100% of respondents used the same words in their subjective responses. Which of these really applies is difficult to identify, as the survey was completely anonymous, but it does raise questions about the current state of ethical values of supporting research amongst students from rural areas.

However, if the responses of another question i.e. 'how quality of curriculum can be improved?' are considered, then it reveals that the majority (27 out of 28 students i.e. 96%) who answered that question suggested an update of the curricula. This data represents an insight into what students perceive the current quality of curriculum to be, i.e. there is a presence of outdated and irrelevant topics in the current curricula. These figures are quite the opposite to the data in table 6.5, where 100% students stated that the quality of curriculum is "good". Furthermore, this finding corroborates staffs' perception of curricula quality, as most staff have alluded to outdated and irrelevant topics in the syllabus; all of this suggests that the fitness-for-purpose of the current curricula appears to be inadequate.

Thus, based on the undergraduate students' responses from all three universities, the quality of curricula is not fit for purpose. This perception is rooted in the lack of current topics and related practical work, alongside a reassessment of the allocation of time frame for the curricular content and is also shared by most lecturers of state university and some lecturers of central and private universities. This perceived inefficiency has resulted in the manifestation of surface learning among students, and the current curricula therefore do not support the engagement of students in critical thinking and deep learning. Curricular design and procedures of its reform cannot therefore be considered fit for purpose supportive of students' transformation.

Staff Training and Development

The qualifications of academic staff, their training and development and teaching quality, was another significant theme that became apparent during the data analysis.

Staff Qualifications

In accordance with the National policy on education (1986), lecturing staff from all universities need to be qualified in accordance with the relevant statutory body stipulations (e.g. University Grants Commission (UGC) and All India Council for Technical Education (AICTE)) which verify staff qualifications prior to granting university status to higher education institutions (Administrator-1, private university-1, 2016; Lecturer2, central university, 2016; Director2, state University, 2016). The stipulated qualification for university lecturers by UGC is post-graduation with 55% marks and National eligibility test (NET) (UGC, 2016), which the UGC conducts itself (Lecturer2, Private university-2, 2016; Lecturer 2, central university, 2016; QA Staff2, state university, 2016). Most applicants possess qualifications which far exceed this (Lecturer2, private university-2, 2016). It is common for academic staff to have higher qualifications than those stipulated by UGC e.g. PhD (Staff1, QA, private university-1, 2016; Lecturer 1, central university, 2016; Director 2, state university, 2016).

However, respondents stated that, in comparison to their qualifications, the credentials of lecturing staff appear "old-fashioned [..and..] look obsolete" which impacts upon the students' attitude towards learning (Administrator1, private university-1, 2016). A lecturer of a private university further added that academic qualifications "can only take you so far" (Lecturer1, private university-2, 2016) suggesting that specific skills sets are lacking. On further

questioning, it transpired that many staff did not find the NET robust enough to identify an applicant's capability to deliver courses effectively, due to the fact that only a small percentage of questions in the NET assessment are targeted at teaching calibre; one staff member summarised as follows: "It is a pathetic test, even students can take that test and clear it. It has nothing to do with being a teacher at all... Less than 2 to 5% of the exam focuses on that and they are no-brainer questions, … I don't think the test can capture what a person would be like as a teacher." (Lecturer1, private university-2, 2016).

Central university staff, too, appeared disappointed with the current NET assessments and a senior lecturer stated that "...it has got reduced to a farcical exercise." (Senior lecturer 1, central university, 2016). Likewise, perceptions of most state university participants of NET were anything but positive, with suggestions that the applicants were being awarded degrees through unethical means (Director2, state university, 2016) but managing to pass NET and secure employment as assistant professors in state university (Staff2, QA, state university, 2016).

The foregoing suggests that, even though staff qualifications are far higher than those mandated by national agencies, there appears to be a lack of emphasis on staffs' teaching qualifications and capabilities in all universities. Whilst current staff recruitment in state university is based on academic and NET qualifications, alleged undesirable practices for obtaining academic degrees are perceived to be rife. However, neither academic qualification nor NET clearance guarantees a potential staff member's competence as a lecturer, which affects teaching quality and its assurance. It thus appears that, the concept of teaching qualifications per se seems absent. This also suggests that, with respect to staff appointments, the concept of fitness-for-purpose remains desirable.

Staff Training and Development

On issues related to staff training and development, 8 out of the 10 private university staff participants suggested the requirement for staff training to meet expectations of industry and society. Half of the participants stated that private universities have established professional development centres which are responsible for continuous development of academic staff by organising internal and external workshops, staff training sessions and faculty development seminars, conducted by professionals from external organisations (Staff 1, QA, Private university-1, 2016). These programmes are mandatory for new staff and open for all others to attend (Lecturer 1, private university-1, 2016). Staff are given an opportunity to identify areas that can be improved, and to suggest ideas for inclusion into such programmes through a

feedback mechanism (Staff 2, QA, private university-1, 2016). However, a participant from one of the private universities stated that, there was "a huge mismatch and a lack of thought [… with …] lot of scope for improvement" (Lecturer 1, private university-2, 2016) with respect to staff motivation, suggesting that staff perhaps are not inspired enough to deliver their respective subjects, and to engage and assess the needs of the students.

Some central university staff stated that there are provisions for staff to improve their skills by attending workshops, along with orientation and refresher courses (Lecturer 1, central university, 2016) which, in turn, can facilitate periodical improvement of faculty members (Lecturer 3, central university, 2016). It transpired that staff development is much needed for purposes of meeting the bare necessities i.e. to address issues, as perceived by staff, of low quality teaching. Several state university staff indicated that there are concerns about staffs' motivation, knowledge, familiarity with technology, and in-house training facilities. Participants stated that about 50% of lecturing staff in the state university lack motivation and that staff are not keeping abreast with the latest knowledge (Director 3, state university, 2016), suggesting that staffs' knowledge is perhaps outdated. One senior lecturer expressed dissatisfaction with not having in-house training for staff development, and with the fact that staff instead have to visit other institutions for over 75 hrs of mandatory training especially new staff (Senior Lecturer 1, state university, 2016), after which staff are expected to transform into efficient lecturers (Senior Lecturer 3, state university, 2016). Another member of staff felt that, perhaps for these reasons, the current state university environment is not attractive enough; as such, the number of regularly appointed staff is diminishing (Senior Lecturer 1, state university, 2016).

The foregoing findings suggest that staff training, and development are needed for state university staffs, particularly with respect to staying inspired; learning and using technology for purposes of lecturing; and, above all, facilitating students' learning. Collectively, these factors have influenced university staffs' perceptions of the quality of education provided by their respective universities. It has also transpired from the foregoing discussions that the current state of lecturers' teaching calibre and motivation does not appear to be fit for purpose, or to foster quality transformation of students.

Staff Calibre and Teaching Quality

Another significant attribute that related to the theme of staff training and development was staff calibre and teaching quality, which 7 out of 10 private university staff commented on.

One participant stated that teaching quality depends on several factors including subject requirements, students' calibre, and staff teaching preferences when it comes to using PowerPoint presentations or chalk-and-talk. (Lecturer 2, private university-2, 2016). Staff calibre and teaching quality are currently assessed through a student feedback mechanism which is online for some subjects (Senior Lecturer 1, private university-1, 2016). It is compulsory for students to submit feedback every semester (Lecturer 1, private university-1, 2016). The method of collecting students' feedback varies and is different for all subject streams. The feedback is in an objective format for some subject disciplines (Senior Lecturer 1, private university-1, 2016), whilst it is subjective for others (Lecturer 1, private university-2, 2016). Senior lecturer 1 stated that the feedback in private university-1 is compulsory, to the extent that on failing to submit their feedback, students' results are withheld (Senior Lecturer 1, private university-1, 2016). Currently, such feedback is primarily a means for staffs' own evaluation; however, one administrator of private university-2 suggested that students' quantitative feedback is also linked to staffs' annual appraisal (Administrator 1, private university-1, 2016). This indicates that, in the absence of other measures, there is a heavy reliance on student feedback to assess and judge the quality and calibre of teaching in classrooms which does not appear to be verified by any other means. Nevertheless, one lecturer at the same university confirmed that student feedback had no bearing on staffs' appraisal, nor had there been an introduction of corrective measures based on students' feedback (Senior Lecturer 3, private university-2, 2016). This gives rise to a tension between the purpose and provision of feedback mechanism, and how it is implemented within private universities. This also highlights the concern associated with quality assurance of teaching, which apparently is being met through having a feedback provision in place. Practitioners, however, perceive it to be ineffective for meeting requirements of accrediting agencies.

Questions on staff calibre received a mixed response from participants. Some respondents stated that the quality of faculty was good, while others said it is "not that great ... because … of political things ... come into play" (Lecturer 1, private university-1, 2016_); "below average" (Lecturer 1, private university-2, 2016); "lack of good teachers, good academicians in higher education" (Senior Lecturer 1, private university-1, 2016). These findings further suggest that staff do not perceive quality of teaching as fit for purpose and highlight a need for improvement in teaching and the teaching environment with reference to political meddling in private universities.

To ascertain how the teaching calibre of staff was judged by their superiors, staff were questioned if they were observed during lectures. At least two participants of one private university stated firmly that staff are offended by the idea of being observed during their lectures (Lecturer 1, private university-1, 2016). In contrast, and to circumvent such issues related to staff observation, the second private university had initiated lecture-capture, which was also strongly opposed by staff (Administrator 1, private university-2, 2016). However, participants of the second private university suggested the practice of observing lecturing staff during lectures was prevalent, and that it was compulsory for the head of the department to observe at least two lectures per semester, followed by feedback for the observed staff (Administrator 2, private university-2, 2016).

This indicates a stark variation in perceived ethos and practices of the two participating private universities regarding staff observation for purposes of assessing the quality of teaching. It also leaves the first university vulnerable on assessing its staffs' teaching calibre and quality, as it is based purely on student feedback. Thus, from a quality assurance perspective on teaching quality, the foregoing contributes to the identification of good practices and those that need addressing. This also makes the comparison of staff calibre across the private university sector untenable due to the stark variations in the process of assessing staff calibre.

In comparison, some central university staff stated that the current overall calibre of lecturing staff is good, although it is declining (Senior lecturer 1, central university, 2016). On questioning if interviews at the time of staff recruitment aid the assessment of staff calibre, participants stated that with the high-volume of applicants and narrow time windows for interviews, it becomes cumbersome to test an applicant's calibre (Senior lecturer 1, central university, 2016). Another participant stated that to enhance the quality of education, the central university has adopted UGC's prescribed procedure to monitor staffs' academic performance referred to as Academic Performance Indicator (API), within which staff must earn a mandated number of points. The number of points varies with lecturing staff's position which, inter alia, are awarded for development courses attended or research conducted by staff. However, state university staff suggested that these outcomes are achieved through unscrupulous methods by most staff and gave examples of common practices of having fake or paid research published by unethical publishing houses (Senior Lecturer 1, state university, 2016) which completely undermines the provision of constructive arrangements put in place by the government for staff development.

Furthermore, to monitor staff's teaching performance, the new API guidelines suggest that only those students who score above 75% can evaluate their lecturers (Administrator 1, central university, 2016). According to a senior administrator, the feedback system in central universities was declared formal about "3-4 years back" (Administrator-2, central university, 2016). However, most respondents stated that there is no provision for a formal feedback on teaching and learning in most central universities (Lecturer 2, central university, 2016), indicating that yet another procedure put in place by government agencies is unused in practice, perpetuating the rareness of undergoing the process of assessing, recording and enhancing the teaching calibre of staff.

Despite staff being highly qualified in academics, many respondents felt that the quality of teaching was not as should be expected. One director of central university, although unprovoked, rated teaching quality "on a scale of 0 - 10 to be 6 …" and suggested that lecturing staff are "…not able to put their thoughts across to the students… for lack of communication skills" (Director 1, central university, 2016,). In a similar vein, a senior administrator of central university stated that "… 50% of the teachers would be under par, because you have to take them, not on the basis of merit, but based on their affiliation to certain sectors of the society… if you hire a bad teacher, the impact is going to persist for another 20-30 years." (Administrator 2, central university, 2016). The senior administrator here is making reference to the government's reservation policy which is applicable for appointing lecturing staff as well. Collectively, these frustrations highlight that the teaching calibre of academic staff leaves much to be desired and, at present, does not comes across as fit for purpose, especially if the purpose is transformation of students. This finding also indicates the current undermining of teaching quality in the short, middle and long term.

Similarly, state university participants suggested that staff recruitment is politically motivated in their university and affiliated colleges (Senior Lecturer 2, state university, 2016) and biased on the basis of community and political party affiliation; connections with influential politicians (Senior Lecturer 1, state university, 2016); belonging to certain caste, creed, "who is your godfather" (Staff 2, QA, state university, 2016). As such, staff are not perfect and there is a large scope for improvement (Staff 1, state university, 2016). These findings on staff appointments raise concerns on staffs' calibre to teach, especially those only appointed on such basis. Furthermore, with such appointments, it may also be fair to question not only the capability of staff, but also their motivation and drive to excel in their posts.

Another element within this theme is how staff perceive their colleagues and subordinates. One director stated that lecturers of state university can be "considered outdated in technical terms" (Director 3, state university, 2016). The director further suggested that rather than self-development, university staff appear to be more focused on making money through extra work, such as marking answer scripts for other universities, which is also considered to be done in an unethical and questionable manner, as staff are known to mark over 100 scripts per day (Staff 1, state university, 2016). This suggests a complete breakdown of the system with respect to monitoring staff calibre, right from the point of recruitment to everyday practices culminating in the unethical marking of assessments. Collectively, these attributes appear detrimental to the quality of staff development, teaching and learning.

To ensure teaching quality, it is important to be honest to the teaching profession (Staff 1, state university, 2016) and "the number of honest staff is very small, I would say, miniscule. 1% or 2% of teachers really care for their students, and they do their best in their classroom…" (Director 2, state university, 2016) whilst the rest of lecturing staff teach book knowledge in a conventional way (Senior Lecturer 2, state university, 2016). Another respondent stated that the atmosphere is generally disappointing and "there is hardly anything worth commenting on…" (Director 2, state university, 2016), suggesting a significant level of frustration with the quality of teaching. The students, too, are an influencing factor affecting the quality of teaching: students come across as unmotivated and hostile, a contributor to the fact that teaching performance is reported to degenerate every year (Senior Lecturer 1, state university, 2016). It is difficult to conclusively identify whether it is the perceived inadequacy of teaching staff that is having a demotivating impact on students, or whether it is the perceived incompetency of students that is demoralising lecturers; however, neither appears fit for purpose, and both these issues need to be addressed.

General consensus from the research is that teaching in the state university leaves much to be desired. The current state is such that lecturers are perceived to be "not bothered about the future of state education, and staff are not teaching as required" (Director 2, state university, 2016). Moreover, there are some who teach a fixed syllabus on a repetitive basis for a fixed set of questions year on year, with no initiative taken to improve teaching and/or curricula (Director 3, state university, 2016), indicating that lecturing staff are simply not motivated (Senior Lecturer 1, state university, 2016) and that the lecturers are imparting knowledge just to get salaries (QA Staff 2, state university, 2016). Quality of teaching is further assessed based

on students' success rate in exams, which is heavily distorted by cheating during assessments (Senior Lecturer 1, state university, 2016). The following findings suggests that staff are not motivated to teach effectively; as such, lack of staff motivation is yet another attribute that suggests teaching quality is not fit for purpose.

Empirical data analysis in this section has presented findings which have highlighted certain good practices in private and central universities, along with areas of concern within the wider sector when it comes to staff training and development. Even though there is provision for staff to have minimum qualifications as set by regulators, it has not helped, especially in the absence of a teaching qualification. The NET assessment, too, appears to be considered of minimal value to practitioners and does not address the issues surrounding teaching skills. Furthermore, the sector-wide practice of educating students to pass exams, rather than infusing the concept of deep learning to develop self-learners, can to be attributed to a lack of staff motivation and of training received by academic staff. Staff calibre and the quality of teaching thus appear marred with a whole host of unethical and questionable practices, as suggested by participants. There also appears to be a huge scope of improvement at most levels, from policy revision with respect to teaching qualification, to operations at the local level within institutions with respect to the use of pedagogical skills nested within staff training. Furthermore, such practices have a high potential to undermine the quality assurance of teaching and learning.

Staff-Student Ratio, Student Calibre and Learning

Another theme that emerged from qualitative data analysis was staff-student ratio and the concern about student-numbers increasing faster than the recruitment of required teaching staff. Some private university staff suggested that the staff-student ratio in one private university was probably amongst the best in the country:

> "... currently our ratio is around 10:1. …this is one of the best in the country..." (Staff 1, QA, private university-1, 2016)

First impressions of the foregoing suggest an excellent staff-student ratio. However, further questioning revealed acute staff shortages in particular departments within the same university, a situation that was causing concern (Administrator 1, private university-1, 2016). Similarly, a lecturer stated that the other private university also had staff shortages; "...student-teacher ratio; right now it … maybe 1: 60 on an average" (Lecturer 1, private university-2, 2016).

Similarly, 6 out of 10 private university participants alluded to staff shortages. Another staff from the quality assurance department added that staff-student ratio is poor across the Indian higher education sector, with an average faculty shortage of around 40% in state universities and 35% in central universities. (Staff 1, QA private university-1, 2016). Similarly, 4 out of the 10 central university staff interviewees stated that student intakes were three times the usual numbers and the infrastructure was not coping, effectively "hurting the quality" (Administrator 2, central university, 2016). However, it was observed that student numbers ranged between 32 on some courses (Lecturer 1, central university, 2016) to 200 per cohort (Administrator 2, central university, 2016). A senior lecturer added that staff have been mandated to absorb additional workload with the same set of resources, which raises concerns about lack of human resources including time for marking assessments and offering one-to-one feedback to students with overall "quality [of education] taking a beating" (Senior lecturer 1, central university, 2016). These findings of staff shortages and imbalanced resources for an increasing number of students highlight that the resources for teaching and learning are perceived to be short of the mark by practitioners and are thus not fit for purpose.

Likewise, 7 of the 10 state university staff respondents alluded to staff shortage and associated issues: staff-student ratio of 1:25, in contrast with the UGC standard of 1:15 (Staff 1, state university, 2016); unfilled vacancies, or the filling of vacancies with contractual staff (Director 2, state university, 2016); student numbers ranging from 160 (Senior Lecturer 3, state university, 2016) to 200 (Senior Lecturer 1, state university, 2016) per cohort; permission granted for enrolling 2000 students with an infrastructure for only for 600 students (Staff 2, QA, state university, 2016); marking load of "50,000 answer sheets … with minimum staff, we have to complete the job in 30 days" (Staff 1, state university, 2016).

The foregoing comments suggest that whilst the overall staff student ratio may appear excellent in one private university, there are pockets within both the private universities and both government funded universities where the said ratio is not adequate. These findings of resource shortages have revealed staffs concerns in relation to teaching and learning. Imbalanced staff student ratio, as suggested above, is more than likely to have an impact on the staff and student morale, and quality of teaching, learning and assessments. Such experiences would potentially affect staff and students alike with ramification upon their individual perception of quality of education which in this section has not come across as fit for purpose.

Student Calibre and Learning

Most staff participants from all universities alluded to judging students' calibre based on their school-leaving marks. Indian secondary (school) education has over 50 different examination boards, each with their own assessment criteria (Administrator 1, private university-1, 2016). Participants suggested that students' calibre can vary significantly but is still considered a significant indicator of and contributor to quality of learning, student retention, graduation success rate, alumni employment and the university's reputation.

Staff from one private university stated that their university has a stringent screening process for selecting students from a merit list based on students' school-leaving percentage (equivalent at least to 80% of Central Board of Secondary Education (CBSE) standards), an in-house university-based entrance test conducted by an external agency, an academic aptitude test, and an interview (Senior Lecturer 1, private university-1, 2016). Responses from staff from the other private university stated that students are admitted based on a similar pattern, but with much lower school-leaving percentages of up to 50%; more importantly, it also factors in their capacity to pay university fees (Lecturer 2, private university-2, 2016). This presents a wide spectrum of student calibre within the private universities sector which varies from academic calibre to fee-paying capability, implying academic capability and affordability on part of students. The admissions criteria in relation to the concepts of quality therefore relates to fitness-for-purpose and value for money.

In comparison, centrally funded universities select students based on merit of test results conducted by university departments, or school-leaving percentage with cut-offs as high as 98%, or both; alternatively, national level tests are used. This leads to huge numbers of applications from students: for instance, 10,000 students competed from across India for 40 seats in 2016 (Lecturer 3, central university, 2016). Similarly, most state university admissions are based on school-leaving percentage with cut-offs as high as 90% for general category students and as low as 50 % for the reserved category students (Senior Lecturer 2, state university, 2016). Staff of a college affiliated to a state university stated that reserved category students can be admitted into the university with as low as a 'pass' school leaving certificate, i.e. 33% (Staff 1, state university, 2016), in comparison with 90% for the general category. However, some academic departments have entrance tests as well, albeit the objective type (Senior Lecturer 1, state university, 2016). All central and state university admissions are also based on general or reserved categories criteria (as discussed under Access earlier).

This presents a stark contrast between the calibre of students as perceived by respondents in the three universities. As evidenced, the relatively bright students aspire for places in central and some private universities, whilst the rest have to settle with seeking admissions to state universities, which have a rather diverse mix of students mainly from rural areas or other private universities which have lower enrolment criteria. Thus, the central universities cater for self-motivated and bright students, whereas state and many private universities cater for students of lower academic calibre. These attributes are intrinsically linked to the quality of learning in different universities. In terms of concepts of quality, central university students are perceived to be suited for higher education and thus fit for purpose, whereas staff of the university and the second private university alluded to struggles of getting students to learn even the basics all over again, and to engage them in deep learning.

Despite the stringent admissions process in place, 7 out of the 20 participants from both private universities expressed their dissatisfaction, stating that students had poor attendance rates (Senior Lecturer 1, private university-1, 2016), and did not engage in the process of learning and relied more on ready solutions from the internet (Administrator 1, private university-1, 2016). Up to 70% students per batch displayed weakness in basic knowledge (Administrator 1, private university-2, 2016); lacked academic capability and placed heavy reliance on "…Google to cut-and-paste and do the assignment" (Lecturer1, private university-2, 2016); and there was a general decline of interest to learn, due to distractions offered by online media (Lecturer 2, private university-2, 2016). This indicates a lack of motivation amongst students to learn. The same participant added that this lack of interest is perhaps since students are "from business families, industrialist families and they are rich" and are keen only to obtain their undergraduate degree (Lecturer2, private university-2, 2016). Collectively, these findings highlight that student calibre in the majority is not fit for purpose due to a lack of motivation, which perhaps is rooted in curriculum design and syllabi which, as stated earlier, are dated in many cases and are irrelevant to the current requirements of the employment sector.

In comparison, central university staff stated that their students were keen learners (Director 1, central university, 2016). However, one respondent stated that students were habituated to being "spoon-fed" and staff felt trapped with such demands due to a compelling regime that demanded staff to complete the syllabi under time pressure (Lecturer 3, central university, 2016). This indicates a diversity of students' calibre within central university, where some students are driven to learn, and others are looking for easy solutions.

Similarly, at least 6 out of the 10 state university staff interviewed expressed their dissatisfaction with the quality of students, with 5 of the 10 participants stating that students are only interested in obtaining a degree from the university so that they can secure employment. Participants suggested that undergraduate students in general are not keen on learning and are uninterested in attending college. One frustrated respondent stated that "Even if teachers want to teach such students, they cannot. There must be 50%-60% students like this" (Director 2, state university, 2016). These findings also indicate a diversity of students' calibre in state university, with students being more focused on securing employment with their university degrees, rather than on learning. Nevertheless, delving deeper into the cause of such disenchantment on the part of students reveals several possibilities, a couple of which are: curricula that are dated and not relevant to current industry requirements which does not foster students interest in learning; and the availability of published answers to plausible questions that are repetitively asked in undergraduate assessments. Due to the lack of fitness-for-purpose of curricula and assessments, the quality of learning also is not fit for purpose and does not foster transformation of students through deep learning.

Quality Assurance and Accreditation

Questions on quality assurance and accreditation were addressed to all participants of all universities; however, it transpired that only staff associated with each university's quality assurance cell and administration appeared knowledgeable and answered the questions effectively. Most teaching staff of all universities either answered the questions ineffectively or admitted to having no knowledge of quality assurance and accreditation. Most staff stated basic facts of the quality assurance process in a regurgitated fashion, and it came across as if they had trained themselves to answer a set number of words for questions on quality assurance. Some even appeared to struggle to verbalise the answers which they had perhaps memorised. Therefore, even on from the onset, there was a clear lack of awareness about the relatively new mandate of quality assurance.

Of those from private universities who answered effectively, one administrator stated that the university has passed the inspection of UGC for quality assurance (Administrator 1, private university-1, 2016) which would allow them to have a good grade from NAAC for accreditation. Another staff from quality assurance department believed that the university has enough tools and techniques to integrate the concept of learning and teaching to provide high

quality education, including a substantial number of foreign trained faculty members which allows the institute to learn from their experiences and expertise (Staff 1, QA, private university-1, 2016). The use and adaptation of pedagogical techniques and methods from staffs' overseas experience allows foreign trained faculty members to be efficient in delivering effective learning experiences to the students. As discussed under quality of learning, many staff have felt encouraged to introduce the concept of research at undergraduate level which further promotes quality assurance in one private university.

Most staff responsible for quality assurance and administration agreed that accreditation is extremely important, but there is no proper compliance with this factor to enhance quality, and a strong protocol is needed for the assessment of universities before awarding them accreditation grades. This indicates a perceived weakness in the current accreditation system, although to comply with UGC's mandate, all universities place extreme importance on establishing and maintaining an Internal Quality Assurance Cell (IQAC) which helps the ongoing process of collecting information from various departments and improving the quality of teaching and learning.

However, it transpired that there is "no exchange of information" (Administrator 1, private university-2, 2016) with external agencies during the 5 years' validity period of accreditation, as opposed to heightened quality assurance and accreditation-related activities i.e. generating evidence of compliance with policies, and collecting and presenting data to achieve maximum success every five years (Staff 1, QA, Private University-1, 2016). These practices indicate a lack of continuous monitoring by accreditation agencies ramifications of which could lead to fostering divergent practices from those required to maintain a desired standard of education; they are therefore not considered fit for quality assurance purposes in the middle to long term.

A lecturer of the second private university suggested that perhaps if an honest and unbiased attempt to assess teaching and learning is undertaken, then the purpose of quality assurance may be achieved (Lecturer 1, private university-2, 2016). In a similar vein, quality assurance staff of the first private university stated that peer assessment procedure appears "domineering" and more like "policing", whereas a "friendlier and less competitive" process could inculcate healthy communication and exchange of information with authorities (QA Staff 1, private university-1, 2016). Similarly, staff respondents mentioned a lack of timely information and feedback sharing by quality control and accreditation agencies with universities (QA Staff 1,

private university-1, 2016). These findings indicate an unpleasant relationship between two stakeholder groups i.e. university staff and quality assurance agencies.

The foregoing indicates a weakness in both internal and external quality assurance measures. It also suggests the existence of unfair practices associated with the internal quality assurance procedures, and the perceived overbearing and officious demeanour of accreditation agencies. It also indicates that with the current quality assurance and accreditation processes and procedures, the purpose is perhaps not being achieved, which could possibly be the influencing factor of the current image of quality assurance and accreditation amongst Indian higher education stakeholders and others.

In comparison, most central university staff believed that national agencies responsible for accreditation have not been fair in the accreditation process, in that certain higher education institutions were awarded an 'A+' ranking purely based on their infrastructure, instead of focusing on the level of education offered by those institutions. Hence, there was a boycott by central university, although it did have to accept the accreditation process once it was linked to university funding by the UGC (Administrator 2, central university, 2016).

The provision of funding from the UGC is a welcome aid for the university seeking to provide quality education to students (Lecturer 2, central university, 2016); as such, staff perceive that immense importance is given to university's internal quality assurance cell to ensure that level and quality of education (Lecturer 1, central university, 2016). In a subtle way, this indicates that perhaps there is a lack of recognition given to internal quality assurance mechanisms. This was evident from the perception of some participants who believed that whilst their university needs to consistently maintain high quality, efforts are applied only when visits from the NAAC take place, even though best practices haven't been employed in the previous five years (Staff 1, QA, central university, 2016). According to most central university participants, it is believed that the university already has a good reputation in society and hence quality assurance and accreditation is a mere formality (Lecturer 3, central university, 2016). However, 35 out of 38 central university students agreed that 'quality assurance will help improve the education in their university', indicating a desire by the students to have a quality assurance system in place. Quality assurance staff participants, too, felt that, regardless of a national drive to sustain quality assurance and accreditation, the efforts had not manifested at a local level in institutions in that "…it's still superficial, it's not an inculcated value which comes automatically, it doesn't. These things find shortcuts." (Staff 1, QA, central university, 2016).

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This highlights that, despite the government's efforts in putting a robust quality assurance mechanism in place, the current practices have, according to staff, not quite engaged the process of quality assurance possibly for the reasons of lack of staff motivation and complacency. Thus, the practices at university level appear distanced from that envisaged by the government, presenting a tension between the government's expectations and the practice which currently does not appear fit for assuring the quality of education. The foregoing also indicates that, despite every effort on Government's part to infuse quality assurance and accreditation as part of central university culture, the awareness of quality assurance procedures and practices amongst university staff was evidenced to be rather low. The fitness-for-purpose notion of quality appears to remain at large, which further adds to the reason of quality assurance and accreditation's poor perception (as discussed in Chapter Two).

Similarly, most state university respondents advised that many changes are needed in the higher education system to ensure that the quality and level of education improves in the country (Director 2, state university, 2016). Most participants indicated that accreditation agency and its staff are dominated by influential political parties of the government, leading to a biased attitude towards universities. Furthermore, the accreditation agencies are aware of corrupt practices on the part of peer teams, e.g. "accepted gifts" for purposes of awarding undeserving accreditation (Director 2, state university, 2016) which indicates that unfair practices are perceived to be rife within the accreditation and quality assurance system.

Participants stated that the quality assurance cell of the university is not able to positively contribute towards the betterment of educational system and that it was just collecting information without implementing policy changes or brining any improvements to teaching and learning. It was also reported that the majority of data used for accreditation purposes is fake, fabricated and misused (Director 2, state university, 2016).

Although all state university students agreed that their 'feedback is taken seriously, and issues are resolved quickly', 29 out of 30 indicated that quality assurance will help improve the education in their university. This indicates that students are not satisfied with the level and quality of education they receive, and whilst they do share their feedback and views regarding the level of education, their inputs are not considered important by the university staff. It is evident that the university needs to have a properly working quality control department, so that any deficiencies can be highlighted and corrected but "sadly this department does not appear to be performing in the way it should" (Senior lecturer 1, state university, 2016). "The

department only exists physically but its contribution is non-existent with regards to improving the quality of education" (Staff1, state university, 2016), which indicates that it is an exercise only to secure government funding for the university.

The foregoing further highlights issues associated with quality assurance and accreditation in state university as well. The overall picture appears far worse than it is in the other two universities, and it could be fair to say that state universities are currently not perceived to be meaningfully benefiting from the national accreditation and quality assurance mechanism, which further raises questions on its fitness-for-purpose.

Quality assurance and accreditation mechanisms, procedures and practices in all three universities seem to fail to meet their purpose. A common theme that emerged was the lack of importance given to the internal quality assurance department in all three universities, and a lack of monitoring by national agencies external to universities. Furthermore, securing accreditation for private universities seemed to be an exercise to enhance their market reputation; whereas for central and state funded universities, it was more for the purposes of being awarded funding from central and state governments respectively. Based on analysis of data collected from staff and students, it thus emerges that none of these universities are using quality assurance and accreditation measures to enhance the quality of teaching and learning. In contrast, however, the assurance process is being used for the purposes of meeting the accreditation requirements either to obtain funding in the case of central and state universities, or to stay afloat as government-authorised universities in the case of private universities.

Conclusion

Based on the data analysis, it was found that the reservation policy is perceived to be having a detrimental impact on the delivery of quality of teaching and learning, which also appears to conflict with the fitness-for-purpose notion of quality of teaching and learning. The datedness of curricula also seems to contrast with this notion of quality, as the majority of respondents were dissatisfied with its current state.

The data analysis also revealed that certain good practices in private and central universities were identified with quality of teaching; however, areas of concern within the wider sector remain, as the UGC-introduced NET prerequisite for staff employment appears to offer practitioners with low value for teaching skills. Furthermore, the overall staff student ratio was low in all four universities, due to the overall staff shortages particularly of well-qualified and

experienced lecturers in the Indian higher education sector; this, in turn, appears to be impacting upon staff and students' morale.

The data analysis of quality assurance and accreditation revealed a weakness in both internal and external quality assurance measures, and the presence of unfair practices associated with the internal and external quality assurance practices. This also indicates that with the current quality assurance and accreditation processes and procedures, the purpose is perhaps not being achieved.

This chapter has presented the perceptions of practitioners in relation to how quality assurance in their respective universities is being implemented. As discussed, these findings, based on empirical data, have given an invaluable insight into the current practices within universities as perceived by staff and students. It is thus incumbent on this research to now compare, for purposes of identifying similarities and dissimilarities between the espoused theory of quality assurance (discussed in Chapter Four) to the findings of Chapter Five in which the stakeholder's perceptions of quality were analysed. The comparison is facilitated through cross analysis and presented in the next chapter.

Chapter 7

Cross Analysis of Quality Concepts and Data Analysis
in Indian Higher Education Institutions

Introduction

In the preceding chapter empirical data collected for this research was examined against a template containing various attributes of quality assurance. These attributes, with respect to quality assurance in Indian higher education, were identified through an iterative process of documentary analysis in Chapter Four. The examination process in Chapter Six was further informed by the findings from Chapter Five where an in-depth analysis of empirical data and its alignment with the concepts of quality proposed by Harvey and Green (1993). These concepts of quality (Harvey and Green, 1993) were explored extensively in Chapter Two, literature review.

This chapter presents the obscurities surrounding the perceptions of quality assurance processes in Indian higher education institutions in a simplified manner. It synthesises the conceptual and theoretical perspectives discussed earlier, in literature review, with the findings from the analysis of relevant documents in Chapter Four, and staff interviews and student survey data in Chapter Five and Six. This process re-examines Harvey and Green's (1993) concepts of quality in the specific context of Indian higher education, in order to generate originality by building on the theory developed by these authors, thereby making a distinct contribution with new learning to the existing knowledge of quality assurance of higher education in India.

As there was an absence of any specific research to support the concepts as suggested by Harvey and Green (1993), who presented their dimensions of quality on a notional idea, there appears to have been no assessment to test or substantiate their theories in practice, Furthermore, Harvey and Green (1993) appear attractive for this research as that article has 1,974 citations (June 2017), which could well be one of the highest cited literature on quality. Harvey and Green (1993) is an influential paper, referenced regularly by a number of authors and researchers. Cheng (2014) carried out a similar study in a UK setting and explored the application of quality as transformation on 32 PhD students. Whilst most of the findings were different when compared with this research, there were some similarities e.g. the variance in

how the notion of 'quality as transformation' is perceived by different individuals, further proving that quality is subjective. Another commonality to this research was the relationship between quality and standards. Dimensions identified in Cheng's research were different from those proposed by Harvey and Green (1993), in that Cheng introduced, for instance, a dimension relating to the concept of input.

Similarly, Lagrosen, Seyyed-Hashemi, and Leitner, (2004) carried out research in which they too interviewed 49 individuals and conducted an online survey of over 400 participants. Their approach explored Harvey and Green's dimensions, albeit in a Swedish setting and found that all dimensions signify excellence in varying aspects of the universities' activities. They also explored other values proposed by Harvey and Green, e.g. value-for-money, and found that it did not correspond to the same extent as excellence. They concluded that Srikanthan and Dalrymple's (2003) proposal of quality as excellence was best to suited to the students' perspective.

These examples are a sample of the many researches based on Harvey and Green (1993) which suggests that their work is influential which has been explored in various settings over a period. However, a lack of empirical testing in the Indian context was perceived as a gap therefore, this research has tested Harvey and Green's (1993) dimensions of quality within this specific context. The way in which these dimensions (i.e. quality as exceptional, quality as perfection, quality as fitness-for-purpose, quality as value-for-money, and quality as transformation) have been presented, implies that they are mutually exclusive, which does not appear to be the case, in the Indian context. Furthermore, the authors also appear not to have delved into the complexities associated with each of the dimensions, especially when synthesised with the perceptions of separate stakeholder groups. This is something this research has addressed at a macro, meso, and micro level, especially in relation to the three dimensions that were most dominant in the findings. Quality in the context of Indian higher education does not yet relate with "quality as exceptional" or "quality as perfection", however there is in fact an interrelation between the other three dimensions of quality proposed by Harvey and Green (1993) which featured prominently in this research. These dimensions are discussed in subsequent sections, after establishing the context in which the dimensions have been explored. The cross analysis thus illustrates that the definitions of quality for higher education are not necessarily mutually exclusive as they are dependent on comparative perceptions of stakeholder groups, which appear to be significantly different from one another. Additionally, the cross analysis has

informed suggestions on bridging gaps between the current policy and practices, and identified measures that can enhance the current quality assurance processes.

Context

To test the aforementioned dimensions of quality, it was considered important to segregate the contextual framework into three levels, i.e. macro, meso and micro in accordance with government/university-(sector), university departments/administration and staff/students respectively, to evidence different stakeholder views. These categories have helped in simplifying the amalgamation of the findings of this research with the complex concepts of quality. For instance, transformation according to Harvey and Green (1993) means that when something is done to the consumer by the provider, the consumer experiences a change of form, which is a very liberal view. This applies at the macro level to the Indian government's objective of developing an employable human resource through higher education i.e. 'transformation' of the Indian society: through education. The consumer i.e. student will experience a transformation into an employable human resource. However, the expansion of the higher education sector to support the increasing masses appears to be aligned with the 'fitness-for-purpose' concept of quality i.e. to meet customers' needs (Harvey and Green, 1993), which in this case are the students and the society. Likewise, the government's objective in making education accessible to disadvantaged communities can also be considered in alignment with the concept of 'fitness-for-purpose', especially when it is considered in the context of literacy enhancement of the Indian society. Collectively, these government objectives are aligned with the projected increase of university students, due to the shifting demographics of India which is forecasted to have the youngest population by 2030 (OECD, 2015). The funding of government universities, on the other hand, relates closely with the 'value-for-money' concept of quality. Like any other, the Indian government, too, expects returns on its investment in higher education: apart from having an educated society, it will contribute to national research and the creation of an employable workforce. This leads to socio-economic benefits for the government, and it thus is considered to align with the 'value-for-money' concept of quality. From these examples, coupled with the findings from Chapter Five, it can be argued that Harvey and Green's (1993) concepts of quality relate to higher education in an interconnected manner, as opposed to singular distinct concepts. Irrespective of this, each of the concepts have been discussed individually in relation to the research findings in the following subsections.

Quality as Exceptional and Perfection

The debate of the 1960s on elitism and expansion, where some academics were in favour of the expansion of higher education (expansionists), whilst others were not (elitists) (Halsey and Trow, 1971), was subtly evidenced in this empirical research on Indian universities. Lecturers who expect students to be drawn from an elite educational background can be considered as elitists. One revelation from the interview data analysis is that there is quite a strong elitism sentiment among many lecturers who have suggested that quality is being degraded, and that the current students are not suited for higher education. A considerable number compared the quality of students to their own days as students in India. However, this view relates to Harvey and Green's (1993) traditional notion (expounded on in Harvey, 2006) of quality as exceptional, where only the elite (social class) studied at university. Currently, staff expect students to at least be of elite calibre and in small numbers per group, which does not align with the prevailing trend of massification in Indian higher education, an attribute which is dictated by the shifting demographics of India and supported by governments policy on higher education (macro level), which appears more aligned with the expansionists viewpoint and presents a tension with the viewpoints of lecturers (micro level).

However, the notion of quality as exceptional (Harvey and Green, 1993) does not appear to apply to Indian universities, even though the National Assessment and Accreditation Council's vision states "To make quality the defining element of higher education…" (NAAC, 2017). Whilst government agencies may be attempting to align their views on quality with the notion of exceptionalism, this is not necessarily the consensus amongst other stakeholders, particularly as most university participants alluded to the absence of Indian higher education institutions in the world university rankings. Quality as exceptional implies high standards of academic achievement which, if true for Indian institutions, would logically result in some of them being featured prominently in world rankings. This has unfortunately, with a few exceptions, never appeared to be the case. Furthermore, far too many issues were identified in relation to the poor quality of higher education in the preceding chapters which were highlighted in the analysis. Based on those collective findings, the dimension of quality as exceptional does not apply to the context of Indian higher education.

Furthermore, staff of central university alluded to the lack of quality consciousness amongst staff which was also evident from interview data analysis, from which it transpired that most

staff did not seem to be aware of what quality assurance and accreditation was. The quality of infrastructure and resources in certain colleges of the central university is also very poor; according to staff, these have been neglected for over 40 years. Additionally, quality of human resource appointed as university staff including vice chancellors, are perceived to be unjust, biased and heavily politicised i.e. influenced by politicians or individuals of authority. The quality of course curricula of many subject streams has been left unrevised for almost a decade, according to staff. There is no doubt as to why employers express their dissatisfaction to university staff in feedback sessions on the quality of undergraduates. Collectively, these findings suggest anything but a quality culture and zero defects, to use terminology that comes from quality in an engineering context (Harvey, 2006). The question that thus arises is: "how can quality in Indian higher education be defined as exceptional, when it is not being awarded with a commendable or credible reputation"? Exceptional as described by Harvey and Green (1993) relates to something that is excellent; however, they argue that excellence is a relative term based on an individual's perception. It may be true that the government has ambitions of developing world-class research universities (MHRD, 2012), but, in practice, as evidenced by this research, such aspirations are not being met.

In a similar vein, the majority of state university staff referred to very low levels of funding. Furthermore, the selection criteria for lecturing staff was also highly criticised by participants of all universities, who stated that the qualifying test for lecturers (designed by the UGC) was not robust enough to test the calibre and skills of lecturers. Staff responses on suitability of curricula ranged between latest and relevant, to outdated and obsolete across all universities. Additionally, staff of all universities referred to acute shortages of lecturing staff in the Indian higher education sector. The lecturers appeared to be concerned with the government's mandate to rapidly increase student numbers, especially in central and state universities, without increasing teaching resources, indicating that 'more meant worse', especially in relation to the reservation policy (discussed under fitness-for-purpose). Collectively, these findings reveal that Indian higher education cannot be considered fit for purpose, in alignment with one of the dimensions of Harvey and Green (1993).

Furthermore, the Indian government aims to foster expansion and socially engineer society by making it socially inclusive for more people to enter into higher education, especially those from marginalised backgrounds. This opposes the elitist expectations of central and state universities' staff, presenting a tension between macro and micro level, with reference to

quality assurance of teaching and learning. Such tensions can possibly be related to the sense of declining education standards, yet more people need to enrol into higher education. The majority of student participants, along with many staff members, think that the curriculum is too theory orientated, whilst others think it is becoming too vocational. The perceived lack of consistency in higher education processes and their arrangements is indicative of the inapplicability of the concept of quality as perfection to the Indian higher education system. This has become apparent through responses from participants of all universities in this research, in which many complaints have been shared about the deficiencies in procedures. Collectively, these deficiencies are found to be misaligned with three of the dimensions of quality proposed by Harvey and Green (1993), i.e. fitness-for-purpose, transformation and value-for-money. Each of these have been discussed separately in subsequent sections.

The foregoing discussion thus demonstrates that Indian higher education is encountering some deep-rooted challenges, explaining why quality is not understood as exceptional or as perfection. Currently, the basic level attributes such as government funding or staff calibre and appointments, or currency and validity of curricula, are far from being without zero defects and in need of enhancing. These attributes relate more closely with the input concept of quality as purported by Cheng and Tam (1997). At the same time, funding, staff training, and updating curricula relate to the service concept as suggested by Doherty-Delorme and Shaker (2001). The use of these concepts is more suited to quality in Indian universities in order to align higher education with the NAAC's vision that has an intonation which refers to the notion of quality as exceptional. To achieve this vision, it will be incumbent on all stakeholders such as government agencies, universities' management, and academic staff to focus on enhancing the basic attributes discussed in this section. By all stakeholders in higher education using the suggested concepts of input and service, they could contribute to yield NAAC's vision.

Quality as Fitness-for-Purpose

Quality as fitness-for-purpose was another dimension proposed by Harvey and Green (1993) which appeared as a central theme in this research amongst responses from universities' staff and students. The Government's education policy is broad and appears to be aligned more with the fitness-for-purpose concept of quality, however it is open to interpretation by stakeholders. In the absence of any guidelines on the implementation of its higher education policy, the subjective element of interpretations can add to the complexity surrounding stakeholders'

perceptions of quality as identified in Chapter Five. Hence the question: is the current state of policy 'fit for purpose'?

The Indian Government's perspective is for higher education to cater to all sections of society which it achieves through its reservation policy, mainly for the inclusion of marginalised sections of society (NPE 1968, NPE 1986, UGC 2016, AICTE 2016). State and central university staff, however, perceive the implications of the reservation agenda through an elitist lens proposed by Campbell and Rozsnyai, (2002). Students from marginalised backgrounds are perceived by these staff to be academically inferior to those from the mainstream students. The mainstream students seemingly stand disadvantaged, as 50% of places in central and state universities are reserved for students from marginalised backgrounds. This presents a dichotomy between the government's strategy and its practical implication, as perceived by university staff. This tension between government and university staff aligns closely with the debates based on 'whose-purpose' purported by Moodie (1986). The reservation policy thus does not seem to align with quality as the fitness-for-purpose notion for all stakeholders. The reservation policy also seems to disadvantage mainstream students in central and state universities, as 50% of seats are locked away from mainstream students. Furthermore, from the central and state university lecturers' perspective, the reservation policy places challenges on lecturers to pitch their lectures and an appropriate level to classes of students from a wide range of academic background and capability. This too presents a tension between the government and university staff based on their subjective perceptions of the concept of fitness-for-purpose – what appears to be fit for the government is considered a challenge by staff, which places the notion of fitness-for-purpose on a very wide spectrum of applications.

The reservation policy does not apply to private universities, as they operate on a significantly different principle; that of offering education to those who can afford their substantial fee. This also does not relate to the fitness-for-purpose concept. as it caters only to the elite (wealthy) sections of society and not to the students who are academically capable. However, some private university staff alluded to their universities' strategies which apparently aim to provide education to those who deserve to be in higher education, irrespective of their social or financial background. This, however, could be a marketing ploy by private universities to win over social sentiments of the society.

Similarly, despite the mandate of government agencies' such as UGC and AICTE for all universities to meet infrastructure and resource standards (which also has funding implications for state and central universities), some staff suggested that infrastructure was inadequate. Most students, too, suggested a betterment of infrastructure and resources, implying that the resources are not yet fit for purpose. Lack of resources can perhaps be attributed to bureaucratic barriers to accessing funds allocated by government to central and state universities; as a result, quality as value-for-money is not forthcoming and impacting on the current undergraduate qualification. This suggests an interdependence of dimensions of quality as fit for purpose with quality as value-for-money, both proposed by Harvey and Green (1993).

Despite what could be described as punitive measures, e.g. withdrawal of funding or university status in cases of noncompliance with mandated standards (albeit in absence of any implementation guidelines), the adequacy of any standards set by government agencies appear misaligned with the 'fitness-for-purpose' concept. For instance, staff qualifications in some cases, particularly in state universities, were deemed questionable by participants as they seem to have been acquired by unethical means; yet, these candidates have been employed as lecturers. This certainly cannot be considered a resource that is fit for purpose. Similarly, application and interview processes were also criticised by participants who stated that the recruitment process is not free from nepotism and political influence. Whilst the policy on staff recruitment appears fit for purpose, the practice, in the opinion of staff members, is not. To circumvent the aforementioned issues of malpractice in relation to recruitment, a few state university staff stated that procedures like videography are becoming common, yet the practice is perceived to be inadequate by staff who feel that "mischief mongers find ways around" all such measures (senior lecturer 1, state university, 2016). This puts pressure on government agencies to eliminate malpractice in higher education recruitment, a pressure worsened by the inadequacy of any current punitive measures included in the policy. However, for the process to be effective, requirements by regulatory bodies should be explicitly stated (Rowley, 1996), but not in the absence of corrective measures, especially where malpractices are well established and non-transparency prevails.

Likewise, policy on curriculum revision recommends provisions of academic boards within universities, but the explicit element of the inclusion of representatives from industry appears to be absent from policy (NPE, 1986). In the context of private universities, staff viewed the practice of curricular revision to be aligned with industry requirements by way of collecting

feedback from employers of recent graduates which can be considered as a passive measure. Staff also suggested that they had complete autonomy to revise the curricula, but some were concerned with the over-relaxed attitude of their respective university's academic board towards reviewing the revised syllabi. In comparison, some central university staff suggested that the curricula were revised regularly, although other lecturing staff of the central university stated that the curricula had not been revised for almost a decade. As such, some staff voiced their dissatisfaction with the current state of curricula and their delivery and considered the current curricula inadequate, especially with respect to its relevance to the graduates' employment. Central university students, too, appeared discontented with the current curricula and suggested its update and inclusion of practical element, despite the most recent revision having taken place in the preceding one or two years. Furthermore, most students from all universities unanimously suggested that the current curriculum is not meeting their needs, implying a sector-wide perception amongst students, and most staff, that the curricula are not fit for purpose. This also suggests a lack of staff and student consultation in the process of curricular revision.

According to staff participants, curricular design and content is dictated by the UGC and other regulatory bodies, perhaps under the guise of standardisation, which allows little opportunity for staff and students to contribute to the curricular content or its delivery. Greatrix (2001) argues that standardisation is an industrial model and is inappropriate for academic programmes in higher education. Irrespective, the strategy adopted by quality assurance agencies presents a tension between its expectations, which are aligned with the UGC's mandate, and those of academic staff who expect some flexibility and autonomy with respect to curricular content. This suggests that the practice of updating curricula is therefore a long way from the notion of fitness-for-purpose on various counts.

In a similar vein, there appear to be tensions between the prescribed staff-student ratio by UGC as compared with those observed in this research. Staff participants alluded to an acute shortage of academic staff with UGC-mandated qualifications due to which staff of all universities expressed their concerns of heavy workloads which they say is restricting them from performing their contractual duties, and negatively impacting personal development. Staff of all universities suggested that such shortages are also causing concerns in the way assessments are being marked. Many staff referred to the poor state of staff-student ratio at a national level in India, which indicates it does not conform to the notion of fitness-for-purpose. Such issues

can be placed at the opposite end to the concept proposed by Campbell and Rozsnyai (2002), who suggest that the notion of quality relates to establishing and meeting specific criteria by institutions which, in the case of participating universities of this research, revealed a significant scarcity of staff numbers as compared to the figure mandated by UGC, the regulatory authority.

Despite the foregoing issues, most undergraduates are employed by industry, according to staff of private and central universities. Some private and state University staff suggested that student enrolment in their universities is dictated by a social design whereby their institutions are approached only by those students who have not qualified for a place in central university. These students attend university for gaining qualifications which are, however, accepted by the employment sector, albeit to a lesser degree than graduates from central university. Graduates from central university are considered the brightest amongst job-applicants, based on a notion that is nested in any central university's enrolment process which selects students with the highest marks in secondary education, even though these students make up the smallest percentage of graduates. This suggests acceptability of the current inadequate higher education standards which is not fit for purpose for the Indian industry and/or society, as perceived by staff and students. This presents a conflict between the expected quality of human resource [input] for industry and society, and the actual quality of graduates [output] from universities.

Similarly, it was revealed through the research that employment of staff across all universities was only based on the highest academic qualification rather than on qualifications in teaching, which means that although lecturers may have suitable knowledge of their subject, the same does not imply that they have the necessary skills to teach. This was brought to light when most staff, and students to some extent, commented on the ineffectiveness of staff to teach. This highlights the contradiction surrounding qualifications as being deemed fit for purpose for employing lecturing staff. The notion of fitness-for-purpose in this case appears to be significantly misplaced from the purposes of employment, staff calibre, staff student ratio and staff development.

It was argued in the literature review that the perception of quality as fitness-for-purpose (Harvey and Greene, 1993) can range from meeting minimum standards to being of exceptional quality, especially in the Indian context where the cultural attitude is 'anything goes' in higher education (Campbell and Rozsnyai, 2002). Most staff and student responses related to this

concept, wherein the implied meaning across stakeholder groups was significantly different among universities, which aligns more closely with the concept proposed by Moodie (1986) where 'whose purpose' needs to be the focus. The nuances that fall under fitness-for-purpose are manifold which, inter alia, include suitability of syllabi for industry requirements, staff calibre in teaching, and employability of graduates. For these reasons, the concept of quality as fitness-for-purpose (Harvey and Green, 1993) does not appear to mean the same for all Indian higher education stakeholders and/or institutions. However, due to the current programme of expansion of the Indian higher education sector, a combination of concepts such as 'input' (Cheng and Tam, 2002) and 'output' (Tsinidou et al. 2010), 'non-elitist version of quality' (Campbell and Rozsnyai, 2002) and 'quality from non-standardisation' (Greatrix, 2001) could help shape up assessing the quality of what is actually provided by Indian universities (Pearce, 1995). Therefore, a combination of the suggested concepts i.e. input, output, efficiency, quality as non-elitist, and non-standardisation, collectively could be more suited to the context of a rapidly expanding Indian higher education sector, as these concepts have narrower spectrums of interpretations as compared to the dimensions of quality proposed by Harvey and Green (1993).

Quality as Value-for-Money

India is a third-world country and an emerging economy where the government funds higher education to enhance the intellectual quotient of the Indian society; students, however, mainly relate higher education with employability and a means to income. This presents a contrast of perception with respect to 'value' amongst stakeholders. The two different meanings of value were argued earlier in this research in literature review, Chapter Two; value as a noun that relates to the notion of quality as purported by Harvey and Green (1993), and value as a verb, as one of the four constituents of quality proposed by Kemenade et al. (2008). These concepts are notional ideas proposed by respective authors and not based on empirical data. However, this research benefits from the application of empirical data on these notional concepts to verify their application in the context of Indian higher education, and to specific university types and their respective stakeholders. As inferred from higher education policy and other related documents, the concepts of value-for-money applies from the Indian government's perspective as they seek a return on the investment of educating its society and enhancing its economic benefits. These attributes relate to both meanings of value.

In the context of private universities, the concept of value-for-money, from the analysis of interview and student survey data, appeared to be different for each of the two participating universities. Staff of one private university believe that, because most of their staff are trained abroad and their curricula is designed in consultation with leading academics of India and the rest of the world, their university offers education at par with the world's best institutions. Thus, they offer stakeholders excellent value for their money; at the same time, the university builds its own brand reputation. Staff members of the other private university believe that the university operates as a business enterprise with the aim of maximising enrolment of students with minimum expenditure and outlay on resources. These two beliefs relate to two different notions of value, one as a verb and the other as a noun. In the first case, stakeholders expect good returns (i.e. capacity to earn after graduation, and enhanced efficiency of sponsored candidates) for the money invested in educating/sponsoring students and the university benefits from an ever-enhancing reputation compared to its competitors. In the second case, the university focuses on value-for-money from its own perspective of maximising profits; as such, students do not get the expected level of satisfaction. The latter is also true for the first private university, wherein staff alluded to poor staff-student ratio in certain departments. This presents a tension between the two universities and their students, where value-for-money from one stakeholder's [university] perspective appears to disadvantage the other stakeholder [students] i.e. universities would profit by spending less on resources which would consequently disadvantage the students because of scarcity of resources. As such, students would not receive full value for their money paid to universities as fee.

This complexity is heightened if the notion of value-for-money is considered in conjunction with fitness-for-purpose, especially from the university's perspective. A university which provides the bare minimum number of staff to meet regulatory requirements, though with an aim to deliver the same standard, can also be perceived as attempting to enhance its own efficiency according to Vlãsceanu et al. (2004). However, this can cause conflict of interest in the qualitative context with respect to value-for-money from a student's perspective, who would stand disadvantaged, due to a lack of individual attention from lecturers. In considering universities as service providers, this also relates closely with the concept forwarded by Parasuraman et al., (1985), who suggest that quality is perceived based on tangible attributes made available to students; however, with the university's minimalist approach to meet laid-down standards, the students would be disadvantaged due to an inevitable scarcity of resources.

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Furthermore, according to private university students, the syllabi appear to be dated and lack an element of practical application. Such attributes further dilute the definition of value-for-money, which in turn impacts upon the two notions of value discussed earlier. Similarly, private university staff alluded to the shortcomings in course curricula with specific reference to purpose and currency of most courses, implying a lower return on students'/sponsors' expectations of value-for-money. Since the current institutions-to-student ratio is significantly low, despite these shortcomings, the private university fee is significantly high, in comparison with state and central universities. It is for this reason that most staff of one private university alluded to its working as a for-profit-business rather than as a higher education institution which, from the university's perspective, relates to value in keeping with the notion of quality as proposed by Kemenade et al (2008).

In comparison, most staff of central university mentioned the university's excellent reputation, implying that the government appears to have achieved value through funding. However, most staff of the central university remarked on the bureaucratic difficulties in accessing those funds, which implies low value-for-money for students/sponsors. State university staff stated that the government had started to reduce funding which was impacting on the university's reputation and students' education, implying a dilution of both concepts of value. Similarly, from the students' perspective of both universities (captured through online surveys), it emerged that students were not getting value for their money, as the course curricula were dated and failed to prepare them for subsequent employment. This indicates that students expect their investment in education to yield financial returns in the future, a feature which also relates to the concept of fitness-for-purpose.

This research also benefited from learning that some departments of the central university were operating as university spin-offs and collaborating with commercial enterprises internationally, resulting in profits for those departments and adding value to the university's brand. This implies that the university appears to be achieving both concepts of value, which, although a paradox, relate closely with the concept of quality as excellence. However, at the same time, some staff suggested that their departments have been neglected by the government and central university administration for over 40 years, resulting in a large deterioration in facilities for staff and students who were highly dissatisfied. This suggests that all departments/colleges were not achieving value-for-money, and stakeholder groups were also not perceiving the current facilities as being fit for purpose. Yet again, this highlights the interrelationship of the

two different concepts of quality i.e. fitness-for-purpose and value-for-money. Similarly, whilst many staff also perceived funding to be abundant and felt that it related to a high level of satisfaction for staff and students, most senior lectures and administrators felt that access to funds was very difficult, due to university's finance department's bureaucratic procedures, thereby diminishing the effect of what could have been a healthy funding mechanism.

In comparison, and perhaps also in direct contrast, staff of state university referred to drastic cuts in funding by government, coupled with an expectancy from university staff to generate subsidy for their respective departments/colleges/university. This approach was perceived by many staff to be responsible for demotivating staff and disenchanting students. Furthermore, state university staff felt that access to funds as well as exclusive campus facilities were locked away under high piles of bureaucratic paperwork which the participants stated had caused very high levels of frustration, resulting in reduced motivation in staff and students. Such examples imply a significantly low level of value-for-money for the university, students and sponsors. Furthermore, this also presents another perspective on the notion of fitness-for-purpose, where funding and facilities are provided and deemed fit for purpose at macro-level by government funding agencies however, the availability and benefits of this at a micro-level (to staff and students) is another matter. These examples provide an insight into tensions between government funding agencies and university administration and its staff and students, in relation to the fitness-for-purpose concept of quality, though interrelated with the concept of value-for-money.

There appears to be a withholding of funds from central and state universities, which impacts upon the immediate quality of education at meso/micro level; as such, the notion of value-for-money, despite the availability of government funds, does not appear to apply to central and state universities of India at micro-level. In contrast, private universities perceive value-for-money in terms of recruiting the maximum number of students for the least amount of resources. It thus transpires that perception of quality as value-for-money varies significantly amongst universities with a 'for-image/profit' in the case of private universities, for 'student satisfaction' in the case of central university, or 'no value' in the case of State university.

From students' perspective, value-for-money related to high quality education and employability on completion of their respective courses. However, in their subjective online survey responses, most students across private, state and central universities alluded to outdated

syllabi and a lack of practical element in the current curricula. This presents a stark opposition to the notion of value-for-money for students; as such, the concept of value-for-money does not appear to apply for this stakeholder group as well.

However, if funding can be considered in terms of an input, which in accordance with Cheng and Tam (1997) contributes to identifying quality, it will help in ironing out disparities as discussed above, but only if there are processes to measure output. In the case of Indian institutions, there appear to be no processes to measure the output which, as per Tsinidou et al. (2010), is yet another measure of quality. Additionally, it can be argued by government agencies and university administrators that students' retention and completion of degree courses are measures of output which can contribute to measuring efficiency. Nevertheless, this would amount only to a quantitative measure, while qualitative value/s remain elusive. As such, it appears challenging to measure the current levels of efficiency (and value-for-money) in Indian universities. However, measuring efficiency can be achieved by measuring and comparing output (Tsinidou et al. 2010) with the input (Cheng and Tam 1997). The application of concepts of input and output for measuring quality are more suitable for the current state of Indian higher education. These concepts can serve well, as these are simple-to-understand concepts of quality with all stakeholders capable of relating to these in a similar manner. The concept of value-for-money, as purported by Harvey and Green (1993) however, is open to multiple interpretations by different stakeholders, and is therefore considered to be a complex notion of quality. To enhance quality in Indian universities, which is one of the objectives of the quality assurance process (Harvey, 2006), perhaps the experience of students and staff can be considered. In the absence of such processes to measure efficiency, the aforementioned concepts of input, output or for that matter, value-for-money will remain a notional concept and thus inappropriate in the context of any enterprise, let alone Indian universities.

Based on the foregoing, it is fair to state that the notion of quality as value-for-money as perceived by the government agencies contrasts with its perception by universities. Furthermore, the universities' perception of value-for-money presents a conflict when compared to its perception by students. However, irrespective of these tensions, the perceptions of value-for-money in the Indian context are more aligned with the notion of value as a verb, related to real money, by most stakeholders. It is for this reason that there is a high level of pressure on government agencies and all universities to report matters in quantitative terms, because it is with these bodies that the accountability to deliver the returns of investment lie.

In a similar vein, private universities advertise the percentage of graduates who secure employment which is usually a very high figure and a more tangible measure for stakeholders. It is such aspects of value that are the driving force of the Indian education sector. The private universities' concept of value-for-money relates to their respective brand images which are closely related to the *for-profit* notion of value, achieved through advertising to attract more students/business for their respective universities.

Quality as Transformation

As evidenced through the National Policy on Education (1986) and NAAC Guidelines on Accreditation (2016), the Indian government's aims and objectives appear expansionist and in alignment with the concept of quality as transformation, proposed by Harvey and Green (1993). The Indian government's desire to develop all sects of Indian society through fostering a sustainable higher education can be related to the concept of transforming society through education and developing human resources to transform their own world into a more nonbiased place to live (Freire, 2000). This attribute could further enhance the Indian society, as is desired by the government. Transformation of human resources through higher education, available to all sections of community, is also perceived to be an essential ingredient to establishing, sustaining and enhancing India's economy. This is another objective of all emerging economies like India, which relates more closely with the concept of value-for-money evidencing interdependence of concepts of quality proposed by Harvey and Green (1993) and Kemenade et al. (2008).

At an institutional level, however, transformation is perceived differently by elitist university staff members who want to transform students into academics, with a focus on high-calibre capability, as opposed to an all-encompassing development of student population. This presents a tension between the government's expansionist strategy and the elitist desire of universities' staff. Furthermore, staff of all universities alluded to several types of transformation. Staff of private university, for example, focus on employability of their graduates, whereas central university's staff focus more on making students capable of post higher-education and research-related education. State university staff, on the other hand, focus their attention on awarding graduates with certificates that can help them get jobs so that the students can support themselves and their families. Collectively, this aligns closely with the concept proposed by Daloz (1986), who suggested transformation as a developmental process

in which students learn to negotiate development and, during the process, change into an employable human resource. Thus, the objectives of universities allow the governments' ambition of empowering students to become more attainable. These perceived university objectives are also interrelated with the government's expansionist views and economic perspective through transformation of students into employable human resources.

Culturally, the reputation of Indian universities is heavily dependent on the percentage of students who secure employment after graduation. Most private universities advertise the percentage number of students who are placed into employment via 'campus-placement'. Private universities facilitate employment of students by organising recruitment-camps organised by the universities in collaboration with employers and/or companies who visit university-campus for recruitment of new graduates. In contrast, central university staff referred to the concept of transforming students to be capable for higher studies/further research. However, most staff alluded to central university students who seek employment after graduation. This presents a dichotomy between staffs' perceptions of transformation to those of students who interpret transformation as capability to earn their living immediately after graduation. In comparison, state university staff perceived transformation as turning students into employable human resources capable of earning their daily bread and supporting their families. The state university staff felt that transforming their students was most challenging, as most of the students hail from a rural upbringing and what is perceived to be a rather challenging (inadequate) secondary education background. As such these students are considered to have a very poor academic background at the time of joining university, which presents state university staff with a whole host of challenges, especially in the area of teaching and learning.

This comparison of universities' perspectives on transformation indicates significant variation. Private universities, for example, are focused on making graduates employable in higher paid jobs, whilst central universities' focus is more on transforming students into those capable of further higher education and research education. In contrast, due to the rural settings of its location, the state university is focused on making students only capable of sustaining themselves and their families through employment and/or entrepreneurship which also relates to the concept of value-for-money. These findings are aligned with Pounder's (1999) concept of quality, where it was suggested that different stakeholders have different meanings of the same thing; in this case, it is transformation. The central and state universities are funded by

the government and are thus expected to stay aligned with the government's policy on higher education. However, transformation within central and state universities is identical with reference to the concept of transformation, but significantly different with respect to the level of transformation. Therefore, from the university's perspective, the concept of transformation is interlinked with the concept of value-for-money. Thus, the concept of transformation at the undergraduate level is separated by the different meanings of 'value' in the three types of universities. In private universities, value relates to both its meanings as a noun and as a verb. For the central university, the meaning of value is perceived mostly as a noun, and for state university, it is mostly considered in its verb sense.

Students' perspectives on transformation were collated from staff responses of all three universities, and it transpires that students of private and state universities are mostly interested in acquiring an undergraduate qualification due to the pressures of employment and/or social stigma which bounds students from business backgrounds. Staff of both these universities suggested that students are not keen to learn, but they do desire to secure high marks in their graduation, as graduates with higher marks have a higher probability of securing high-remuneration jobs. This is a mindset that appears to be totally aligned with value-for-money where a students' attitude/ perspective is: 'this is how much I have paid for education, this is how much I should get back in earnings'. In contrast, as most central university students are recruited from a high-academic performance background, the students are automatically selected by the top employers with most highly-paid salaries. Yet again, these discussions highlight that transformation is closely linked with value-for-money for students who choose employment over further higher studies or family businesses.

Harvey's (2006) suggestions imply that quality assurance cannot help transforming students; however, it can apply emphasis on provisions of facilities and services that meet standards and aid student to become critical learners. He argues that this can be achieved through a two-way feedback process: that of feedback for, and from, students. However, most staff and students of central and state university suggested that neither form of feedback was mandatory. In contrast, most staff of private universities stated that both forms of feedback were mandatory; nevertheless, feedback from-students was ineffective, as no action was taken in response. Feedback for-students was also said to be non-existent, due to acute staff shortages. Irrespective of the reasons, this finding indicates a lack of importance given to the feedback process that can facilitate quality assurance for transformation. In the perceived absence of a mandate for

feedback, which exists according to some staff and students, this research does not explore the 'transformative value' of higher education institutions [see: Harvey and Knight, 1996; Eckel, Hill and Green,1998].

Nevertheless, it was explicitly clear from data analysis that the motivation for students to enrol onto undergraduate courses was to acquire employment and earn a living. Employment of graduates can be considered yet another dimension of quality in lieu of the concept of transformation. The employment-related dimension contrasts with the dimension of transformation as perceived by the government agencies or universities, presenting a dichotomy of perceptions amongst three stakeholders, i.e. government, university staff and undergraduate students. It also highlights that the concepts of quality discussed in this section are not distinct in the context of Indian higher education; rather, they are interrelated.

Summary and Proposed Model for Quality Assurance in Indian Higher Education

The findings of this research were synthesised and analysed in relation to various concepts of quality which were introduced in the literature review (see Chapter Two). This process has facilitated an in-depth understanding of various areas within Indian universities that require focus and attention in the immediate to short term. The understanding can help enhance the efficiency of quality assurance practices related to teaching and learning in Indian higher education institutions. Initial thoughts were that identifying a specific concept, or a combination of concepts, of quality that relate well to the context of Indian universities would be instrumental in efficiently operationalising quality assurance. However, the discussions presented in this chapter revealed that identifying and applying suitable concepts of quality to the Indian universities alone will not help improve the efficiency of quality assurance processes. What has emerged from the discussions in this chapter is that to efficiently assure quality in Indian universities, a combination of attributes should be considered simultaneously. With respect to quality assurance of teaching and learning, at least six attributes have been identified from the discussions, which need to be considered simultaneously. These are: student-centric learning, policy of higher education, employability of students, teaching quality to include staff training, resources for teaching and learning, and curricular design, the most critical of such attributes, should be at the centre of these considerations.

The first letter of each of these attributes make up the acronym SPECTRE, which might be thought of as a reference to the elusive and invisible nature of quality. A regular pentagon shape

was considered most suited to graphically represent all six attributes simultaneously with curricular design shown in the centre to signify its importance in relation to the current findings. These are as shown in diagram 7.1. A regular pentagon comprises five triangles; as such, each triangle is used as a slot for five of the six attributes identified through this research which relate to quality assurance. The sixth and most vital attribute of curriculum design is placed in the centre as it is central to the success of the other five elements and as such signifies the importance which must be accorded to it. The layout of these attributes within the pentagon also helps explain the interconnected and interdependent relationship amongst the five attributes, most so to the teaching and learning activity, albeit routed through curricular design.
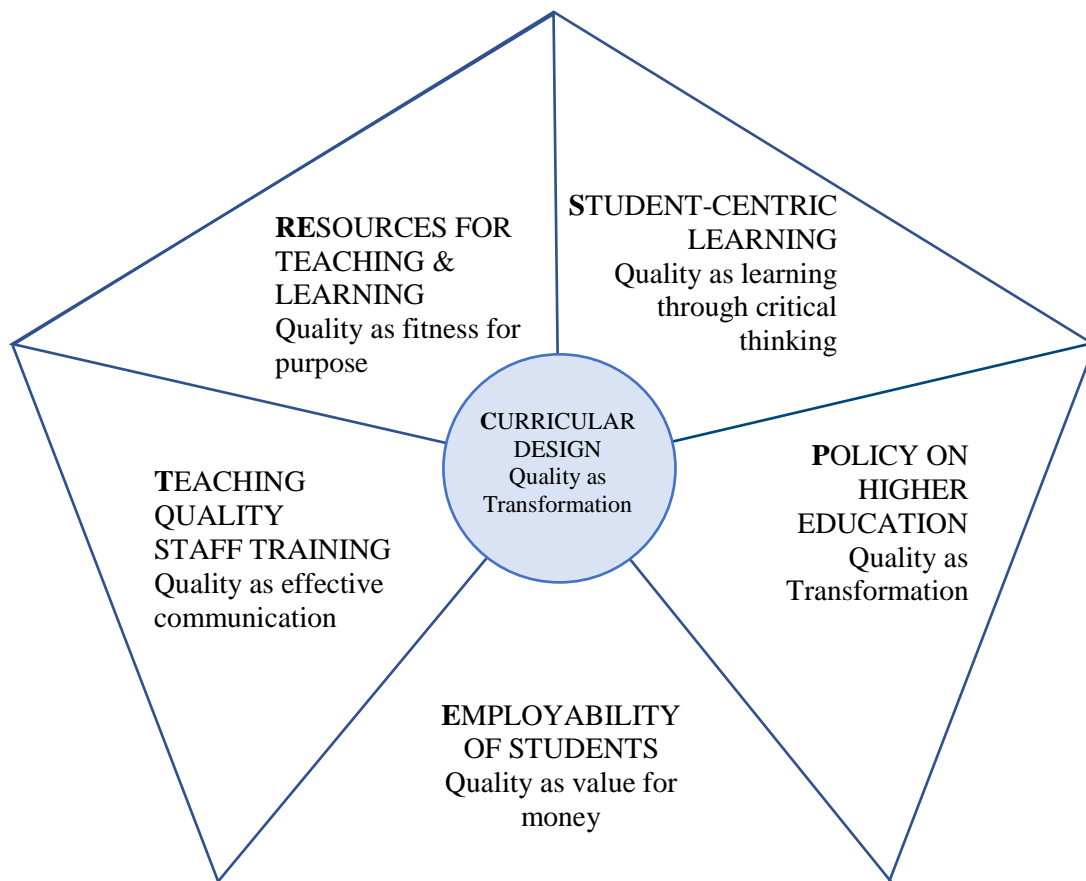

Diagram 7.1 The SPECTRE of Quality Assurance

The foregoing diagram depicts six, attributes that all contribute to quality assurance of Indian higher education in a unified manner. Collectively, these attributes also symbolise the strength that the quality assurance process can offer to the sector. However, these six attributes currently require immediate attention to enhance the current state of quality assurance in Indian universities. The attributes are interrelated and interdependent, as can be seen from the way these have been laid out in the diagram above. Student-centric learning, for example, is contiguous with policy that should support such learning, and with a university environment that fosters student-centric learning through use of modern resources. The triangle of student-centric learning is connected to teaching quality through the sphere of curricular design, depicting the transfusion of knowledge and skills facilitated by pedagogical skills, all in an interrelated and interdependent manner. Likewise, the apices of all triangles are shown to be connected at the centre depicting the interrelated connections of all these attributes. Furthermore, to depict the synthesis of the various concepts of quality with these findings, the relevant quality concepts have been superimposed on the relevant attributes in the diagram.

Conclusion

To summarise, this chapter explored the dimensions of quality as purported by Harvey and Green (1993) in the context of Indian higher education, using empirical data. It was identified that the exceptional and perfection dimensions were not applicable to the Indian higher education sector as these are rooted in the concepts of elitism, which is a view shared by many lecturing staff with respect to students' calibre, but not applicable to the current scenario of massification mobilised by the governments expansionist strategy. The government's expansionist views are rooted in the meteoric rise of current and projected demands for higher education due to shifting demographics. It was also identified that the dimensions were perceived differently by different stakeholders of the sector, and differently within stakeholder groups. In both cases, the differences presented many dichotomies; at the same time, it also transpired that the proposed dimensions were interrelated. However, the challenge presented by the findings from this research is the complexity of measuring quality of various aspects of undergraduate teaching and learning in Indian universities. The complexity has mainly arisen from the way in which Harvey and Green's (1993) proposed dimensions are perceived at different levels within the Indian higher education sector, often involving contrasts between two stakeholder groups of consecutive levels e.g. macro [government] versus meso [university management], and meso versus micro [lecturers and students]. The differences are mainly

based on expectancy of each stakeholder group. Differences within stakeholder groups of the same level were also observed in this research, e.g. at the macro-level where government agencies had different interpretation of the higher education policy. Similarly, at meso-level, different universities were seen to have different objectives for the concept of transformation.

There were some benefits in perceiving quality in terms of dimensions proposed by Harvey and Green (1993) in the Indian context. However, it has transpired that these dimensions are complex in and of themselves, and therefore can be perceived differently by separate stakeholders. The analysis of these dimensions in the Indian higher education context revealed certain contrasts in the foregoing discussion with respect to the state of play in the selected Indian universities, as cross-analysed in this chapter. This suggests that perhaps some basic level abstracts of quality concepts may be more suited to address the identified shortcomings and enhance quality assurance within the sector.

Given the Indian government's orientation towards centralisation and standardisation, the abstracts of quality that could possibly enhance the current state of affairs could be a combination of simpler concepts of quality such as input, service and output, as suggested by Cheng and Tam (1997), Doherty-Delorme and Shaker (2001), and (Tsinidou et al. 2010) respectively. To ensure any meaningful and purposeful implementation of quality assurance based on these concepts, a robust quality assurance mechanism is required which is capable of meeting all the different expectations of all stakeholders. Use of simpler dimensions of quality such as input, output and efficiency should be used for quality assurance purposes, as these are comparatively simple. Due to their comparative simplicity, these concepts are also capable of being understood by all stakeholders in a similar manner.

It can be hoped that the combined application of these suggested concepts will establish an awareness of quality and quality assurance amongst stakeholders, which currently appears to be lacking. It could also serve as a backbone to all teaching and learning-related activities across the Indian higher education sector, independent of how universities are separated. Additionally, such awareness and application of concepts could facilitate the much-needed support for both internal and external quality assurance mechanisms.

Currently, the notions proposed by Harvey and Green (1993) do not seem to offer a relationship with these suggestions, mainly due to the way each dimension is interpreted differently at each level of the sector, further separated between and within stakeholder groups. These cascading

variations can cause an inevitable dilution of any one dimension, resulting in its impact on other interrelated dimensions. Across stakeholders, commonality of a concept of quality at present appears elusive, linked to which are the identification, through this cross-analysis, of the current shortcomings, gaps, and dichotomies in relation to the quality assurance of the Indian higher education sector. More detailed recommendations to address these issues, are presented in the next chapter along with conclusions and further questions based on this research.

Chapter 8

Conclusions and Recommendations

Outline

In this conclusive chapter, the researcher draws on the findings of this research from Chapters Four, Five, Six and Seven, and proposes some recommendations based on those findings. These recommendations mainly stem from the fact that despite Indian higher education sector being the third largest in the world, Indian universities have maintained a conspicuous absence in the world's university league tables, and trail far behind global universities of high repute such as Cambridge, Oxford and Harvard. Furthermore, despite the mandate of quality assurance in the Indian higher education sector in 2013 (UGC, 2013), the reputation of Indian higher education qualifications remains debatable. Whilst some professional qualifications are in demand in the global arena e.g. information technology, many other qualifications are still not recognised in particular fields, e.g. medicine.

There is a significant and direct link between the reputation of a higher education sector and the quality of teaching and learning that it provides. As recently as 2014, the British Council reported on the "low quality of teaching and learning", stating that "the system is beset with issues of quality in many of its institutions: poor quality teaching, outdated and rigid curricula and pedagogy, lack of accountability and quality assurance" (British Council, 2014, p4).

Efficient quality assurance processes can therefore be fundamental to delivering qualifications of value. These can also, in principle, help in enhancing the reputation of the higher education sector and placing Indian universities in the world university league tables. It is this principle that spurred this research, which has explored and provided an informed understanding of quality and quality assurance amongst Indian higher education stakeholders.

The key purpose of this concluding chapter is thus to present recommendations based on the findings outlined in the preceding chapters in relation to perceived practices of quality assurance in the Indian higher education context, and to summarise the key contributions the study has made to this field. A summary of the major findings of this research is presented along with recommendations, which are informed by the detailed cross analysis of interview and survey data synthesised with the concepts of quality providing the stated new knowledge.

The recommendations specifically address gaps and suggest improvements in the following four areas: policy, curriculum design, teaching and learning, and quality assurance. This research contributes to new knowledge on how quality and quality assurance in Indian higher education sector is perceived and how this lends itself to enhancing the efficiency of processes, expansion and sustainability of Indian higher education institutions with specific reference to teaching and learning. These recommendations are also applicable for higher education sectors of other countries with emerging economies, where similarities to this research's findings might be identified.

Additionally, this concluding chapter navigates readers through a brief overview of the research and its conceptual framework, provides a reminder of the research aims presented in Chapter Two, and addresses the reliability and validity of the research findings through empirical research. The closing section reviews the limitations of this research, before leading on to the concluding section which contains recommendations on further investigations that could possibly take this research forward.

Overview of the Research and its Conceptual Framework

The findings from this research were synthesised in Chapter Seven in which three concepts of quality proposed by Harvey and Green (1993) were, identified for the first time as having resonance in the Indian higher education context. Various Indian quality assurance documents and research data implied reference to three of the proposed five dimensions of quality by Harvey and Green, (1993). These were, fitness for purpose concept of quality which was implied in the National Assessment and Accreditation Council documents (2016); the transformation concept of quality which related mostly with the National Policy on Education (NPE, 1986), and the value for money concept of quality that was implied in the modus operandi of private university (Interview data, 2016) and in the students' perception of quality (Survey data, 2016).

Another reason for basing the synthesis of research findings on Harvey and Green's five dimensions of quality was that their paper was found to be the most cited paper on quality in higher education. Many authors such as Watty, 2002; Kalayci, Watty and Hayirsever, 2012; Ramsden, 1991; Robert, 1996; Thomas and Busby, 2003; Griffin, 2013; Thompson-Whiteside, 2012; Jones, 2014; and, Weinrib and Jones, 2014 have explored the applicability of various dimensions of quality using various frameworks in Australian and Canadian higher education

settings as discussed in Chapter Two. The concepts proposed by Harvey and Green in 1993 can be superimposed on studies conducted even before these were published e.g. in the case of Ramsden's (1991) study. Similarly, other authors such as Robert, 1996; Thomas and Busby, 2003; Griffin, 2013; Thompson-Whiteside, 2012; Jones, 2014; and, Weinrib and Jones, 2014 all referenced in Chapter Two, have also drawn reference to the said concepts in their work but none has empirically tested it in the Indian higher education context. This research thus contributes to existing knowledge specifically in the context of quality assurance in Indian higher education with a specific focus on teaching and learning. Although the number of participating higher education institutes, staff and students appears insignificant in comparison with the Indian higher education sector's footprint, the in-depth research and analysis of these case studies offers a meaningful insight into the intricacies associated with quality assurance.

Research aims and summary of findings

This research has compared the espoused theory of quality assurance and its perceived practice in three types of Indian universities: central, state and private universities. A detailed analysis of data collected from documents, staff interviews and students' surveys were performed to address the following aims:

1. Establish the quality assurance processes currently practised in teaching and learning within the selected Indian higher education institutes;

2. Explore how quality assurance processes are being practised in Indian higher education institutions to meet the expectations of government agencies;

3. Determine proposals that can be implemented by higher education institutes to assure the quality assurance process for teaching and learning.

A detailed analysis of data collected in response to these aims has been presented in Chapters Four, Five, Six and Seven, wherein the significance of this research is discussed. The response to the first research aim was based on documentary analysis which helped in gaining an in-depth understanding of quality assurance in Indian higher education. In Chapter Four, it was evidenced that the current policies and practices are not without weaknesses and are therefore not providing the desired outcomes. This was perceived to provide an urgent need for a more comprehensive and wider analysis of current practices in Indian universities.

The second research aim addressed this requirement with a detailed analysis of data collected from staff interviews and students' survey of four Indian universities, providing an insight into the current perceptions of quality (Chapter Five) and quality assurance practices at undergraduate level (Chapter Six). The analysis of perceptions of quality and perceived practices revealed a weakness in both internal and external quality assurance measures, and the presence of unfair practices within the internal and external quality assurance system. This also indicated that, currently, the desired levels of quality assurance and accreditation processes are perhaps not being reached.

Chapter Seven contains the findings from this empirical research on how the dimensions proposed by Harvey and Green (1993) can be identified as having particular resonance in the Indian higher education context. The findings reveal that these dimensions are not mutually exclusive, especially in the Indian higher education context. Furthermore, this research has delved into the complexities within each of the dimensions to identify their relationship with separate stakeholder groups, especially in the three dominant dimensions at a meso/micro level. This has helped to comprehend the perceptions of different and individual stakeholders at distinct levels within the higher education sector. Additionally, the cross-analysis has informed suggestions on gaps between the current policy and practices, and has helped identify measures that can enhance the current quality assurance processes. These measures are presented as recommendations (to address the third research aim) in the following section and are based on the findings from empirical data analysis and interpretations which were presented in the preceding chapters.

Proposals and Recommendations

This research is unique in the context of Indian higher education institutions, in that it has empirically verified the applicability of all five dimensions proposed by Harvey and Green (1993) through empirical data analysis. The use of mixed methods, especially online surveys and semi-structured interviews, enabled the collection of first-hand data on the current perceptions of stakeholders. A constant comparison of data from three different sources (to include documentary data) facilitated the study of patterns and common themes which emerged from cross-analysis. This process provided an in-depth explanation of how quality and quality assurance are perceived by Indian higher education stakeholders. The findings of this research are therefore grounded in empirical data which offer a unique understanding of quality and its

assurance in the Indian higher education context. Based on these findings, this research proposes recommendations which are also important contributions to the field of quality assurance in Indian universities. These are split into primary and secondary recommendations – primary being those that are directly grounded in this empirical research, and secondary are more generic and based on general observations made during the exploratory journey of this research.

Primary Recommendations.

Curriculum Design

Analysis of the interview data indicates that the process of curricular revision currently falls short of stakeholder expectations. Curriculum design, based on current practice, is perceived by university staff as having no input from industry. State and central university staff felt that course development and approval by universities' academic councils/boards is also a very slow and a heavily bureaucratic process. Private university staff felt that the curricular revisions were unverified by the university's academic board mainly due to complacency. Furthermore, coupled with the shortcomings in both cases, the curricular revision process takes place without consultation with industry representatives.

1. As such, it is recommended that higher education policy mandates the inclusion of industry representatives at the time of setting, revising or deleting element/s of syllabi from undergraduate curricula, which should be further verified by external agencies.

Some staff of private and central universities considered current syllabi to be excellent, and at par with the syllabi of the best universities of the world. This contrasted with interview data from most staff and students' survey data which suggested that the current curricula are dated, misaligned with current industry requirements, failing to prepare students for real life challenges after their graduation. These findings are similar to a qualitative study carried out in the UK, which suggests that students perceive their academic qualifications as having a declining role in shaping their employment (Tomlinson, 2008). Such findings present a dichotomy between the perceptions of university staff and students, indicating a concern which needs to be further investigated. Another concern that came to light through data analysis was that of scarcity of time allotted to covering curricular content within an academic term. Lecturing staff, particularly of state and central universities, felt that the curriculum is

prescribed by the UGC in terms of what and how much needs to be taught over a fixed, short timeframe. Staff felt that, due to the highly prescriptive nature of curricula, there was no room for lecturers to be innovative and creative with curricular design. According to senior administrators, this has contributed to demotivating lecturing staff. In comparison with the dimension of fitness-for-purpose (Harvey and Green, 1993) these findings suggest that the curricula, time allocated for dissemination of the syllabi, and the academic autonomy offered to lecturing staff are not fit for purpose.

2. It is therefore recommended that curricular design offers autonomy and flexibility to staff with the opportunity to choose from approved syllabi if it must be dictated by the UGC. The autonomy offered should be linked with accountability for lecturing staff with respect to curricular design. This can be achieved by offering staff a flexible approach to teach within a remit of preselected topics for all syllabi. The preselected list of academic topics should be prepared by respective councils in close consultation with academic staff, students and industry representatives.

It also transpired from data analysis that curricular revision across the four universities was being carried out without industry input. Some private university staff stated that industry representatives are involved during the process of curricular revision, whilst others stated that industry representatives were not. In central and state universities, staff did not seem to be aware of the provision for industry input in curricular revision. Senior administrators of state university were not sure if there was a requirement to have representatives from industry at the time of revising curricula. Whilst this presents an uncertainty on what exactly is the requirement for curricular revision, there is a commonality across universities, where most staff alluded to the lack of industry input in curricular design and revision. The ramifications of this are intense in that industry feedback collected by staff of the private university revealed that graduates are not equipped with the current requirements of skills and abilities. The same was also suggested by state university staff. Based on this, the concept of fitness-for-purpose and transformation (Harvey and Green, 1993) do not apply to the process of making undergraduates employable.

3. It is therefore recommended that the active involvement of industry representatives is mandated for the design or revision of curricula.

This can be achieved by having an interface with various government organisations which have the largest uptake of graduates, whose representatives should participate in the process of curriculum design and/or revision. It should be the responsibility of various academic councils

to ensure that adequate cover is provided for industry participation. This should also be verified by independent external agencies on a regular basis.

Teaching and Learning

A closely related issue to curricular design, as identified from interview data, was that of teaching qualifications which are not mandatory for university staff. The selection process of academic staff is currently based on the highest academic qualification a candidate possesses. However, the lack of a teaching qualification relates closely to the quality of dissemination of curricula, and to the quality of lectures as perceived by students. It can be argued that a teaching qualification will yield higher teaching quality as evaluated by students (Ramsden, 1991). However, the commonality in interview and survey data analysis highlighted concerns about the inadequacy of teaching quality (Ramsden, 2003). This can be addressed through staff training, in the short to middle term, to a certain extent.

It also emerged that staff of state-funded universities were particularly unenthusiastic about the use of technology for purposes of teaching and learning, as most staff are currently of a senior age and experience and prefer conventional teaching and learning techniques which were used in their student days. However, some staff stated that central government-run mandatory staff-training courses covered the use of technology by lecturing staff. According to some staff, these government-run courses in staff training institutions for central and state university were unsuccessful in delivering the required training to staff. Interview data further suggests that staff were highly dissatisfied with these staff training courses and perceived these to be ineffective. Some staff of state and central university stated that staff training programmes have failed, and as such the government has decided to close the staff training institutions.

Furthermore, data analysis suggests that many state university staff are not more qualified than the level of qualification which they teach. Interview data further suggests that staff knowledge and teaching skills are outdated, whilst students are more informed through use of technology, a fact which many staff in rural areas are opposed to. State universities offer education to the largest student population of the country, and this empirical research reveals it to be the weakest section of the higher education sector. The situation is not helped by an acute shortage of academic staff in rural areas, particularly in an age of massification. Lecturers, therefore, are inundated with a high workload, especially with respect to their teaching responsibilities e.g.

teaching an over-crowded syllabus in a short timeframe, mentoring undergraduate students, marking assessments every term, and undertaking personal development and research.

This more than necessitates the requirements for staff to go through mandatory training and development, to develop and enhance their teaching skills and knowledge. Here, teaching-staff training and development are a significant element that will augment curricular design; an absence of such efforts would make effective curricular design highly challenging.

4. It is therefore recommended that staff training and development, closely associated with curricular design, is (re)initiated. Based on suggestions by lecturing staff, it is also recommended that any such training, at least at foundation level, should be kept local to respective universities. The training should particularly focus on the use of technology in conjunction with pedagogy that fosters critical learning for students. Additionally, staff should have time allocated for personal development and research.

As identified in documentary analysis of the 12th Five Year Plan (Planning Commission, 2013), "quality in education is inherently dependent on six aspects" (p.55) of which learning is one. However, the interview data analysis revealed that the process of students' learning is currently not meeting national and global standards on several counts. Firstly, the focus is on surface learning. The international standards, however, are based on concepts of emancipation, independence and critical thinking with respect to students' deep learning, and there is largely a Western consensus on critical thinking in higher education. Critical thinking means that students have the propensity and skill to engage in a problem-based activity, and to reflect on, and progress towards, resolving the problem (McPeck, 2016). It also relates to deep learning, which is absent in the Indian context. As such, for Indian higher education institutions to meet the objectives of the 12th Five Year Plan and to position themselves globally, the Indian universities need to imbibe the concept of critical thinking within their teaching and learning methods, which will also serve the interest of employers nationally and internationally. Furthermore, in this era of globalisation and internationalisation, it is incumbent on the Indian government to develop human resources that are at par with their international counterparts, and capable of competing globally.

Another significant and related aspect that surfaced in the analysis is curricular design which according to staff, currently fosters surface learning. The syllabi are far too crowded for the timeframe available in an academic term within which staff must complete teaching to meet

the UGC's mandate of completing the prescribed topics term by term. The students also commented about the scarcity of time related to lack of opportunities to have interactive sessions with their lecturers, practical application of theory, and having no flexibility to discuss syllabus-related topics. These attributes indicate that the immensity of syllabi for the allocated timeframe is a mismatch and it does not foster in-depth learning. Lecturing staff of all universities also indicated varying levels of disappointment expressed by employers in their feedback, suggesting that graduates are not suited for employment. This presents a loss for the employers, as students graduating from universities are less employable.

Yet another issue related to surface learning is that most students focus purely on securing high marks, as the students' subsequent employment are, in many cases, indexed to their final assessment marks to assess their suitability for employment. The higher education system is thus geared up to teach students to secure high marks and students therefore prefer surface learning as opposed to the more desirable deep learning. Under these circumstances, the marking criteria are also aligned with surface learning i.e. the more and better (word for word) a student can regurgitate, the higher the marks a student is awarded. Furthermore, as per data analysis, since most syllabi have not changed in years, a set number of questions are repetitively used year after year on many courses. As such, a parallel publishing industry is known to provide printed solutions to these questions which further encourages student absenteeism and surface learning to pass their final assessments. Collectively, these attributes foster minimal proactive involvement of the student in the learning process, which is, in the majority of cases, solely dependent on knowledge (as outdated as it may be) being disseminated by lecturers. These attributes certainly do not foster learning through interactive teacher-student discussions, let alone critical thinking. This was suggested by most staff to be the current state of learning culture amongst the majority of Indian higher education institutions. During this process, the students' ability to form their own view or to challenge the theory being taught through constructive debate and engagement in actual learning remains insufficient.

As such, staff feel that these pressures collectively act as the biggest barriers in getting students to engage in critical thinking. However, higher education must move away from the mindset/culture and practices alluded to in this section. Collectively, these findings are opposed to the concept of fitness-for-purpose and transformation (Harvey and Green, 1993) with respect to having an effective human resource, especially if the purpose is employability, which has been identified in this research.

5. It is thus recommended that critical thinking is inculcated in curricular design and implemented via respective education councils. To facilitate critical thinking, it is recommended that the breadth of the syllabi to be delivered is reduced so that fewer topics are taught to deeper levels ensuring critical engagement, whilst simultaneously staff are mandated to keep themselves abreast with the latest knowledge in their respective fields and trained to exercise pedagogical practices using technology.

Critical thinking can be achieved through fostering pedagogy related to deep learning, adequate availability of time, and the inclusion of practical elements, group discussions, and greater staff-student interaction during lectures. It will also require subject specialists to be employed to infuse a culture of critical thinking amongst undergraduate students. This can be further reinforced by introducing courses nested in the concept of problem-based learning and specially designed to teach students how to think about the real-life problems placed before them. This should be done in close consultation with industry representatives to identify skills and ability required of students, culminating in a provision for industry placements in their final term. The foregoing can be achieved by introducing current and relevant topics in the syllabi, coupled with appropriate technology-aided pedagogy to facilitate in-depth learning. It should then be possible to have a meaningfully developed human resource in the middle-to long-term which is relevant to the requirements of national and international employment sector.

To operationalise recommendations 4 and 5 effectively, it will be imperative to consider the two new concepts of quality proposed in Chapter Five which were based on the summary of findings therein to affect students' transformation into efficient and skilled human resource. Quality of teaching thus should be perceived in alignment with the concept of 'quality as effective communication' and in a similar vein, quality of learning should be perceived through the lens of critical thinking i.e. quality as learning through critical thinking.

Further contributions to the overall quality of teaching and learning can effected by the use of the SPECTRE model which was developed on the basis of cross analysis in Chapter Seven. The SPECTRE model has six attributes that need to be considered simultaneously and has the potential to address in the short-term issues surrounding awareness of quality assurance attributes by staff and students. In the long-term it has the potential to address various challenges that were highlighted in this research.

Quality Assurance

Within the quality assurance and accreditation documentation, the concept of quality in the Indian higher education sector is thought of as fitness-for-purpose (NAAC, 2016), nevertheless the phrase is left unexplained with no explanation of purpose in the quality assurance guidelines. It was suggested in the preceding sections that policy and documents published by various academic councils relate more closely to standards. Adherence to standards can also ensure quality and foster a quality culture.

6. It is therefore recommended that the policy on quality assurance processes should aim at measuring standards, as opposed to assessing quality of the higher education sector based on concepts of quality such as fitness-for-purpose and transformation. It is recommended that concepts which relate better with standards such as input, process or through-put, output and efficiency should be considered in the quality assurance process.

A standard-specific quality assurance process for the current state of Indian higher education will prove better. Assessment of quality can be introduced separately, either in parallel or later, after the procedure for measurement of standards has been successfully embedded.

Secondary recommendations

Quality Assurance

As identified in the chapter on documentary analysis, the functions of Internal Quality Assurance Cells (IQAC) include, inter-alia: (1) development of quality culture in the institution; (2) arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes; (3) facilitating the creation of a learner-centric environment conducive to quality education; and (4) faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process (NAAC, 2016). However, it transpired from data analysis that most staff were unaware of quality assurance and accreditation, let alone development of quality culture (1). The staff members who had active involvement with their university's quality assurance process, appeared the most knowledgeable about quality assurance and accreditation. This highlights a significant lack of awareness of the quality assurance process, even though it has been mandatory for universities to have internal quality assurance cells for nearly half a decade. Furthermore, most staff and students of state and central universities stated that there was no provision for

feedback (2) with respect to any activity in their universities. Private universities staff and students gave a mixed response over the provision of feedback; in any case, staff confirmed that any feedback collected was not operationalised. In relation to the third function espoused by quality assurance mechanisms, many staff suggested that their universities did not operate in a student-centric manner. The fourth attribute of technology aided teaching and learning has been discussed in the preceding sections and is far from being achieved, especially in the state universities. It is reiterated here that state universities are responsible for educating the largest student population of India, yet it is the state university which fared the worst in this research.

Another measure put in place by the accreditation agency was the Code of Conduct and Ethical Standards, to circumvent the corruption culture prevalent in the Indian higher education sector (Agarwal, 2009; Altbach, 2009; Kapur and Mehta, 2004), which became effective from April 2007 (NAAC, 2016). However, senior administrative staff of private and state universities stated that the problem of corruption was rife and gave examples of bribery being accepted by quality assurance staff. Some staff alluded to the phrase 'academic mafia' whilst making references to unethical practices. These examples demonstrate various forms of dishonesty and malpractices by university staff and staff of regulatory authorities.

7. It is therefore recommended that an awareness campaign of quality assurance is carried out across the Indian higher education sector coupled, with transparent guidelines and sanctions with respect to universities facilitating student-centric environment which also fosters staff maturation, with stringent levers against unethical and corrupt practices in higher education institutions [see recommendation 3].

The quality assurance agency should target all university staff with an aim to make them aware of the enhanced and new quality assurance mandate whenever it is ready, along with the procedures in place to operationalise the sanctions and levers for higher education institutes that violate the mandate. This can be done through web-based seminars (webinars) coupled with literature disseminated over the Internet for all higher education institutes. Using the Internet will be most cost and time-effective method of disseminating information.

Policy

The documentary analysis revealed that whilst the National Policy on Education (1986) addresses the breadth of higher education, especially equality for women and those from

marginalised backgrounds (NPE, 1986), it is not well-received or adhered to by government-funded universities. Based on staff interview data, the higher education policy seems to be unimplemented in practice, particularly when it comes to its reservation policy which mandates that 50% of seats are to be reserved for students from marginalised backgrounds. Staff and students appear to be dissatisfied and disadvantaged, respectively, with the implementation of this reservation policy at an institutional level. Furthermore, the current policy has not been revised in the preceding 31 years and is rooted in the principles of National Policy on Education (1968). Therefore, it appears to be distanced from the needs of current society and practices, especially due to the advent and application of technology, and massification in the higher education sector. The policy also does not meet the purpose of transformation of society through higher education in the manner which had been envisaged by the Indian government. The consensus of government-funded university staff was that the policy is not fit for purpose in current times, implying a desire for the revision of policy. Collectively, these gaps also indicate that the policy does not conform to the concept of value-for-money (Harvey and Green, 1993) for all stakeholders of the Indian higher education sector.

8. It is thus recommended that, in the middle term, relevant authorities reconsider replacing the 'reservation category' with a 'reservation and deserving category' which should support the admission of deserving candidates on the basis of merit. In the phrase 'reservation and deserving category', the word 'deserving' should mean students who are of similar calibre, ability and/or skill as those from the mainstream category. In the absence of such students enrolling, or there being small numbers at the time of admissions, the reserved seats should be opened to the mainstream category students who currently stand disadvantaged, due to the availability of only 50% seats on all courses offered by government universities. In the long term, any reservation policy should be considered purely based on academic capability. If reservation policy for the marginalised must be retained, then it is suggested that access to those students be offered on separate courses, to circumvent what staff perceive to be the degradation of education quality.

This will help the higher education policy to define the government's *purpose* (Moodie, 1986) with respect to admissions when relating quality to the concept of fitness-for-purpose (Harvey and Green, 1993), where the *purpose* would be to offer a place in higher education to the academically deserving.

Another observation was the comparison of the logical and lexical semantics of the Indian higher education policy's contents which presents a dichotomy between what is stated and how it can be interpreted/perceived. This research identified that the interpretation of the higher education policy, and thus its application, is not the same across all parts of the higher education sector i.e. central, state and private. If the implementation of policy is compared with the fitness-for-purpose concept of quality, the purpose in each of these universities is interpreted in accordance with their individual requirements rooted in their respective missions (Harvey and Knight, 1996). For instance, purpose in private university is perceived as having the maximum number of students possible, to maximise their profits. In contrast, central university considered the purpose to be the academic development of students, whereas state university considered the purpose to be the transformation of students into employable citizens. Collectively, this highlights the difference in interpretation of the higher education policy by different universities.

In a similar vein, the higher education policy is interpreted differently by various academic councils. On analysing statutes laid down by various councils like the MCI, ICAR, AICTE and others, it transpired that the focus is on maintaining standards as opposed to the concept of implementing transformation, even though phrases and words like social development and empowerment have been used in these documents. The differing interpretations of the policy can thus be said to arise from what is written in the higher education policy to how it can be understood by various academic councils of higher education. As such, the application of higher education policy is not consistent between regulatory bodies. Data analysis further reveals that academic boards' practices are inconsistent and do not rigorously adhere to guidelines for their respective academic disciplines. For this reason, quality assurance in separate academic disciplines of Indian higher education sector appears to vary significantly. The Medical Council of India (MCI), for example, appeared to be the most rigorous in terms of sanctions for non-compliance to its guidance. In comparison, the All India Council for Technical Education (AICTE) was reported by state university staff as being insufficient for ensuring and assuring quality offered by technical colleges, especially in rural areas. Collectively these findings suggest a significant variation of education policy's interpretation by various academic regulatory bodies.

9. It is therefore recommended that the uniformity in practice amongst regulatory bodies should be ensured by introducing common standards for all higher education

disciplines which should have the same level of robustness. It is further recommended that the guidance is published on how higher education policy should be interpreted by all stakeholders. The publication of guidelines could be operationalised in the following chronology:

a. Inform all stakeholders of the impending publication of policy guidelines through sector-wide awareness campaigns.

b. Carry out a countrywide survey to ascertain variations in how the higher education policy is interpreted by stakeholders.

c. Give staff ample notice and opportunity to be actively involved in the development of guidelines.

d. Publish a 'Draft set of Guidelines' and test it as a pilot exercise.

e. Observe due diligence to establish efficiency and liabilities.

f. Keep stakeholders engaged in the process before, during, and after a definitive version of policy guidance is published and implemented.

These steps will help inclusivity of staff (through point (a)) especially those who complained of the lack of concomitant innovations undertaken by regulators. Through point (b), the Ministry of Human Resource Development will be in a better position to ascertain issues related to policy from across the third-largest higher education sector of the world. Point (c) should help in circumventing the current issues surrounding high volumes of staff workload caused by an acute shortage of staff in the Indian higher education sector. Points (d) and (e) will help identify deficiencies and enhance the draft policy before it is considered a definite version (point f). The definitive version of policy guidelines can help bridge the current gap between the policy document and its interpretation by practitioners and other stakeholders.

Within higher education policy, there is only a subtle mention of addressing corruption and malpractices in higher education. Staff of all universities referred to the widespread malpractices in the Indian higher education sector ranging, from unsuitable appointments of vice chancellors to bribery associated with procedures and practices at every level of the sector. The worst of these corrupt practices included quality assurance and accreditation agency staff accepting bribes; persons who, in theory, should be the guardians of fair play and justice, and who should practice integrity and transparency. The policy does not come across as robust against malpractices and corruption, especially in government-funded institutes. As such, the

problem of corruption is now perceived to be endemic with some staff claiming that the authorities are hand-in-glove with such practices.

10. It is therefore recommended that the policy be revised, and anticorruption legislations be elaborated and strengthened further. It is also recommended that new anticorruption laws are instated, especially for the Indian education sector. This can be achieved in the medium-to-long term through a separate and independent penal code specifically for the education sector, which is implemented through an independent policing agency.

Reflection, Limitations and Further research

This section presents the key reflections and limitations of this research related to the research context, its participants, and data. A couple of key challenges of this research were to get universities and staff to agree to participate in this research. First, it was difficult to get a response from any department of any university in India to participate, despite repeated attempts to contact the Vice Chancellor's office, heads of departments, or individuals. It was later, only through personal networking that research was made possible, although a lot of valuable time was wasted. Some staff who agreed to participate (only verbally), later withdrew their verbal consent on grounds that their employment contract had a clause to not participate in any research concerning their university. A couple also stated that they were fearful of losing their employment. The lack of research culture in Indian universities is widely known and documented (Altbatch, 2004), and this example substantiates that claim. There is a concerning lack of cooperation for academic research by practitioners within Indian higher education sector, even though research is stated at the core of most universities' mission statements. Furthermore, staff might have been reluctant to participate, because they were concerned not to appear disloyal to their institution, especially if they perceived the topic of this research to be sensitive and capable of harming the reputation of their universities.

Second, once the links with universities were established, it was rather challenging to get university staff to agree to participate, as most were sceptical to return a signed consent form, a requirement nested in research ethics (Macfarlane, 2010) and mandated by University of Southampton's ethics approval. This was so, even though staff who participated were informed that their participation would be on an anonymous basis. This exposes a cultural issue within

the Indian academic sector which makes it challenging for staff to participate in academic research, particularly if it is on a sensitive topic. It was only with great difficulty and after exchanging many communications that staff agreed to participate in this research. This also caused a further delay in the research process. The common question which most staff asked was that "if their participation is anonymous, then why do they need to state their name and sign on the consent form?" The hesitation of staff to participate in this research was purely related to a subtle level of fear that pervades the higher education sector. The fear can be related to job insecurity or staffs' name getting involved in something controversial. It also appears that some private Indian universities do not offer academic freedom for their staff; in one case, as suggested earlier, this research was stalled on grounds of academic staff having a contractual obligation to not participate in academic research involving their university.

On reflection, it is felt that perhaps it would have been better to be personally situated close to the universities at the time of carrying out staff interviews and student surveys, as proximity and face-to-face communications fare far better than communications from greater distances. This would perhaps have helped to build more trust. It was also felt, while carrying out data analysis, that this research could have benefited more from including participants from statutory bodies and industry to cross-verify the data collected from other sources. However, given the challenges this research experienced in establishing contact and getting participants to give their consent, it would be advisable to allocate at least a year for anyone pursuing further research relating to or involving Indian government organisations.

Limitations and Further research

This research has a couple of key limitations. First, this research was based on universities within proximity of each other in a single geographic area, to circumvent issues surrounding diversity of culture. Whilst data was collected with an aim to establish staffs' perception of quality of the Indian higher education sector, it is not quite the same as collecting data from the universities from all parts of the country to develop a deeper insight. It would be prudent to carry out further research including perceptions and practices of quality assurance in Indian universities from all over the country.

Second, some limitations are nested in the Indian culture, where students are not forthcoming in expressing their opinion on their higher education institutions or their lecturers. This is rooted in the age-old culture of 'guru knows all' and is thus considered a taboo to formally

express their opinion against lecturers and education centres, especially in rural areas. This was more than evident in the survey data collected from students of rural backgrounds. Thus, the findings of this research are limited to the data that was collected under the overarching Indian culture which instils students with a respect for lecturers and education institutes. These limitations can be used to fuel further research in social sciences.

Summary

The findings of this research suggest that the five dimensions of quality proposed by Harvey and Green (1993) do not entirely apply to quality and quality assurance as it is understood in the Indian higher education sector. It is argued in this research that the concepts of quality as perfection and quality as exceptional do not apply to teaching and learning at undergraduate level, due to the current (2016) complexities and challenges within the sector. However, partial alignment with the other three dimensions proposed by Harvey and Green (1993) i.e. quality as fitness-for-purpose, transformation and value-for-money was evidenced in this research. To address the gaps evidenced through the identification of partial alignment of the three concepts of quality, this research also fostered the development of two new concepts of quality. These are specifically in relation to teaching and learning in Indian higher education institutions at undergraduate level i.e. quality as effective communication and quality as learning through critical thinking. These concepts can be considered as the finer-grain concept of quality under the overarching dimensions of quality as fitness-for-purpose and transformation, as proposed by Harvey and Green (1993). The research also proposed the SPECTRE model for quality assurance based on the current deficiencies identified through this research within the Indian higher education sector. The model highlights current areas of concern which can be improved through a focused application of the proposed recommendations in this concluding chapter, albeit when applied in conjunction with the suggested concepts of quality.

The suggestions indicate the need for the Indian Ministry of Human Resource Development to address the gaps identified through its operational arms, e.g. UGC, AICTE, to establish a robust, facilitative and sustainable strategy for India's quality assurance agency e.g. the NAAC and others. This research, whilst sampling a minuscule proportion of Indian higher education's footprint, has identified certain significant deficiencies that need immediate attention for a meaningful development of Indian human resources. These deficiencies can be addressed through enhancing quality assurance mechanisms and aligning these with the most suitable

concepts of quality for the Indian culture. Quality assurance agencies offering a facilitative service to the higher education sector and fostering competition amongst Indian universities will help in providing an even better bureaucratic environment and generating a quality culture amongst the Indian higher education sector. It will also help Indian higher education institutions to move in the direction of placing themselves amongst international universities in world university rankings.

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Annex 1 - Consent Form

CONSENT FORM

Study title: Quality of Teaching and Learning in Indian Higher Education Institutions

Researcher name: Adesh Joshi

Ethics reference: 19735

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (08.04.2016 ; version 1) and have had the

I agree to take part in this research project and agree for my data to be recorded and used for

I understand that my responses will be anonymised in reports of the research

~~I consent to having my responses identified personally with me in reports of the research~~

Please delete statement as appropriate

I understand my participation is voluntary and I may withdraw at any time without my legal

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study.

Name of participant (print name)………… …………………..……..............………………..

Signature of participant…………………………………………………………………………..

Date…………………………………………………………………………………………………

Annex 2 - Participant Information Sheet

Participant Information Sheet

Study Title: Quality of Teaching and Learning In Indian Higher Education Institutions

Researcher: Adesh JOSHI   **Ethics number**: 19735

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

I am a part-time research student at the School of education, University of Southampton conducting this research to identify the quality of teaching and learning in Indian universities, which forms a part of my thesis for an academic qualification of PhD. The aim of this study is to focus on the answers to the following research questions:

1.   How is internal and external quality assurance carried out in Indian higher education?

2.   What are the factors that influence the quality assurance processes?

3.   What are the implications of quality assurance processes in Indian higher education for the international reputation of Indian graduates?

Through mixed method approach I hope to identify areas of concern that are likely to have an on-going effect on quality of Indian higher education in the context of teaching and learning. Based on these findings I then hope to make suggestions that will help enhance the quality of education in Indian universities in the short to middle term.

Why have I been chosen?

The focus of this study is on the three types of Indian universities; centrally funded, state funded and privately funded Universities. As a member of one of these types of universities, your voluntary participation is expected to help develop an insight into the areas surrounding the research question.

What will happen to me if I take part?

If you participate in this research, we will get an opportunity to meet at a predetermined date and time most convenient to you. We will have an informal discussion around the questions stated above. Furthermore a questionnaire that will guide our discussion will be forwarded to you before our meeting. Our meeting should not take more than 30 to 40 minutes. Our chat would be recorded and the recordings transcribed. The transcription will be sent back to you for your approval. If you wish to make any changes to anything that you have said, this will be a perfect opportunity to do that. Once you are completely satisfied with the transcription, you will send it back to me. I will then analyse your answers as a part of this research. If I am not clear about anything/s that you have said or mentioned, I will collect all my doubts and email them to you to seek clarification. No further follow-up is envisaged.

Are there any benefits in my taking part?

It is my personal view that every experience is beneficial in one way or another. I hope that by participating in this research you too will benefit from gaining a deeper insight into the area of quality of teaching and learning within your own school. It should be an experience that you hopefully use to your personal advantage as well as that of your school and university. Our discussion may spring some interesting questions that you may wish to pursue as part of your own research sometime later.

Are there any risks involved?

There are no risks involved with this research. However, if you feel uncomfortable whilst discussing any particular topic then you are more than welcome to decline discussing it any further.

Will my participation be confidential?

Your participation will be completely confidential. All research participants will be anonymised through pseudonyms and data collected in the form of voice will be stored electronically in password protected files to restrict identification and access to information in any event of an accident. Furthermore the recorded voice will be modulated before saving it electronically so that it cannot be recognised by a third party in the event of accidental access. Data collected through interviews will only be used for the purposes of this research. Any paper work e.g. consent forms will be scanned and all information will be secured electronically only. Information obtained from participants will be electronically backed-up and not shared with any other person.

What happens if I change my mind?

You are free to withdraw from this research at any time with no follow-ups. Furthermore, you will also be able to withdraw your participation at a later date and time even after the interview. You will also be able to do so by withdrawing your consent via e-mail.

What happens if something goes wrong?

In the unlikely case of something going wrong with this research, please feel free to contact:

Head of Research Governance
University of Southampton
e-mail: rgoinfo@soton.ac.uk

Where can I get more information?

If you need more information about this research please contact me on the following email address:
adesh.joshi@Solent.ac.uk

Annex 3 - Research Questionnaire for Staff

Research Questionnaire for Lecturing Staff within the context of Teaching and Learning in Indian Universities.

<u>Staff</u>

1. What is your understating of quality of Higher Education in India?
    a. What do you think about quality of education in your University?
    b. Is there a minimum qualification that lecturers must have in your University?
    c. What is the criterion for enrolling students?
2. What is quality of curriculum (course content)?
    a. What do you think about the quality of your curriculum?
    b. When was the curriculum revised?
    c. Are staffs consulted for revising/developing curriculum? If yes, what is the procedure?
    d. Do any non-University staffs get involved in revising/developing curriculum? If yes, who?
3. What is quality of teaching?
    a. What do you think about the quality of teaching on your course?
    b. Are students consulted on evaluations of the quality of teaching? If yes, how and how often? How is this feedback communicated back to lecturing staff?
    c. Are lecturing staff observed by peers/mangers while lecturing? If yes, how often? Does such observation help? If yes, how?
    d. How can teaching be further improved on your course?
4. What is quality of learning?
    a. What do you think about the quality of learning on your course?
    b. What resources, other than teaching and library, are available to students for learning?
    c. How could students on this course further improve their learning?
5. What is quality of assessment?
    a. What do you think about the quality of assessment/s on your course?
    b. Are the assessments anonymised? If yes; how?
    c. How is the assessment procedure monitored?
    d. Can the assessment procedure be improved further? If yes; how?
6. What is feedback (with respect to your course and /or assessments)?
    a. How does your University involve staff and students in gaining feedback/comments on the assessments and content of your course?
    b. What do you think about the quality of such feedback?

     c. Have you witnessed any changes on the basis of feedback received? If yes, please state the incident/s.

7. What is quality of University / college environment?
     a. What do you think about the quality of University environment?
     b. How can this environment be improved further?

8. What is quality assurance of teaching and learning?
     a. How is (internal and external) quality assurance of teaching and learning carried out at your University?

9. What is the importance of accreditation?
     a. What do you think about the accreditation of the academic award (Bachelor's degree) offered by your University?

Research Questionnaire for Higher Education Institution (HEI) Administrators within the context of Teaching and Learning in Indian Universities.

<u>**HEI Administrators**</u>

1. What is your perception of quality within the context of teaching and learning in your institution/university?
2. How is quality assurance of teaching and learning carried out in your institution/university?
3. Which factors need improving?
   a. How according to you, can the existing system be enhanced / improved through quality assurance processes?
4. How does your institution/university implement quality assurance of teaching and learning?
   a. How often, and in which way, do you participate in the process?
5. How do you measure the effectiveness of the quality assurance processes in your institution /university?
   a. How can these processes be improved and regulated internally and externally in a more efficient manner?
6. How often does liaison with external regulators take place and in what form?
7. What is the process in your institution/university for benchmarking teaching and learning, and for measuring success against this?
8. What communication and review mechanisms are in place with teaching staff to assure standards and quality of teaching?
9. How are the validity and performance of quality assurance measures in your institution/university guaranteed?
10. How, and in which areas of teaching and learning, can quality be improved and what measures can be implemented by your institution/university for quality assurance purposes?

Research Questionnaire for Internal Quality Assurance Staff within the context of Teaching and Learning in Indian Universities.

<u>**Internal Regulators**</u>

1. What is your perception of the quality with respect to teaching and learning in Indian higher education institutions?
2. What measures are in place for quality assurance of teaching and learning in Indian higher education institution/university?
   a. Would you say these measures are adequate?
3. Is there scope of enhancing/improving the existing teaching and learning system through quality assurance processes?
   a. Which factors need improving?
   b. How can these improvements be effected (put in place)?
4. What quality assurance processes have worked best thus far?
   a. Within your institutions, are quality assurance processes the same for all schools?
   b. If not, what are the main reasons for variations in practice?
5. Is the quality of teaching and learning better in specific schools than others?
   a. If so, which ones are better and why?
   b. What are the main differences in the quality assurance practices in the schools which are doing better than others?
6. What are the challenges at national and institutional levels in the application of quality assurance process?
   a. How can these challenges be overcome? (e.g. policy, governance both at national and institutional level, resource and infrastructure).
7. How correlation is maintained between external (e.g. NAAC) and internal quality assurance processes of teaching and learning of your institution?
8. How do you communicate best practice and innovation to various schools within your higher education institution and at what level?
9. How can regulatory agencies contribute to enhancing quality assurance processes to improve the quality of teaching and learning, and elevating the value of Indian higher education qualifications?

Annex 4 - Research Questionnaire for Students

Online Research Questionnaire for final year undergraduate University Students within the context of Teaching and Learning in Indian Universities.

<u>**Students**</u>

10. What is quality of your curriculum (syllabus)?
    a. Good; (syllabus demands that concepts are studied to a sufficient depth, demands application of that understanding to problems, students should get lots of practical/hands-on experience, syllabus is extremely relevant to industry requirements).
    b. Moderate; (syllabus demands that concepts are studied to some depth, application of that knowledge to problems, students should get some practical/hands-on experience, syllabus is mostly relevant to industry requirements).
    c. Poor; (syllabus is mostly irrelevant to current industry requirements and requires some updating as well).
    d. Unsatisfactory; (syllabus is outdated and not relevant for today's industry).
11. Is the syllabus for every subject provided to the students every semester?
    a. Yes
    b. No
12. Is a reading list (name of books and/or publications, their authors and year of publication) for every subject provided in every semester?
    a. Yes
    b. No
13. How can the syllabus be improved on your course? Please state points only. Max 25 words/200 characters. [Provide space for 200 characters here.]
14. What is quality of teaching on your course?
    a. Good; (professors come well-prepared for lectures, spend time on understanding students' difficulties, clarify those difficulties using various methods including practical, students get good value for money, students are satisfied).
    b. Moderate; (professors are somewhat prepared for lectures, mostly focused on completing syllabus and give students some practical experience, students feel somewhat satisfied getting some value for their money).
    c. Poor; (professors are not prepared for lectures, professors expect students to memorise rather than understand, large portion of syllabus is completed towards the end of the semester mainly due to their irregular attendance, students feel mainly unsatisfied getting little value for their money).
    d. Unsatisfactory; (professors appear to be ill-prepared for the lecture, unable to solve students' difficulties, unable to explain concepts, incoherent teaching, overall appear incompetent, students feel completely unsatisfied getting no value for their money).

15. Do professors give students a lesson plan with topics to be covered in each lecture for the entire semester?
    a. Yes
    b. No
16. Do professors give students copies of all presentations that are made in lectures and/or post those copies on internet/intranet?
    a. Yes
    b. No
17. How often are professors absent from their lectures?
    a. Very frequently
    b. Frequently
    c. Sometimes
    d. Never
18. If a professor is absent is the lecture rearranged?
    a. Yes
    b. No
19. How often do professors leave early from their lectures?
    a. Very frequently
    b. Frequently
    c. Sometimes
    d. Never
20. How often do you feel that professors rush to complete the syllabus towards the end of the semester?
    a. Every semester
    b. Most semesters
    c. Sometimes
    d. Never

21. How good are professors in teaching their subjects?
    a. Good; (professors ask students to read-ahead on topics before coming to a lecture, prepare their lecture very well, use many different methods to teach e.g. use of board, videos, case studies, break-out groups, group-work, power-point presentations, current and latest research etc., explain the concepts extremely well, students feel confident to apply those concepts after lectures).
    b. Moderate; (professors prepare their lecture well, use two or three different methods (see 'a.' above) to teach, explain the concepts well, students feel they can apply those concepts with some help).
    c. Poor; (professors come somewhat unprepared, use predominantly one method of teaching, they do-not explain the concepts well, you are not confident to apply those concepts, you feel you need additional help (e.g. tuition) to understand the taught concepts).

d. Unsatisfactory; (professors come unprepared, mainly read from published literature, cannot explain any concept, students feel they have not learnt anything and feel that they need additional help to learn the same topic again).

22. Do you think that there is adequate number of professors for the number of students on your course?
    a. Yes, staff-to-student ratio is adequate.
    b. No, staff-to-student ratio is not adequate; more professors are required.

23. How can teaching be improved on your course? Please state points only. Max 25 words/200 characters. [Provide space for 200 characters here.]

24. What is quality of learning on your course?
    a. Good; (students gain in-depth knowledge and understanding of concepts which gives them confidence to solve real life problems later at work).
    b. Moderate; (students gain some knowledge and understanding of concepts but do not feel confident to solve real life problems later at work without help from others).
    c. Poor; (students feel that they have learnt but not understood the concepts and do not feel confident to solve real life problems later at work).
    d. Unsatisfactory; (students feel that they are struggling to learn what is being taught on the course).

25. Do you have access to college/university computers with Internet facility and/or a Wi-Fi network whilst on-campus to facilitate learning?
    a. Yes; computers with Internet and/or Wi-Fi network are abundantly available.
    b. Student access to university computers with internet is not easy due to computer-student ratio and/or Wi-Fi facility is limited.
    c. Students don't have access to university computers and/or Wi-Fi facility.

26. Is there adequate variety of books in the library to meet the needs of your course?
    a. Yes
    b. No

27. Do you have access to demonstration-videos on subjects of your course to help you learn better?
    a. Yes
    b. No

28. How can learning be improved on your course? Please state points only. Max 25 words/200 characters. [Provide space for 200 characters here.]

29. What is quality of assessment/s on your course?
    a. Good; (the assessments test students' understanding and application of concepts and is directly relevant to the industry requirements).
    b. Moderate; (the assessments test students' knowledge and application of concepts and is somewhat relevant to the industry requirements).
    c. Poor; (the assessments demand replicating memorised information and is mostly not relevant to the industry requirements).

d.   Unsatisfactory; (the assessment are replica of previous years and set answers get students good marks and is completely irrelevant to the industry requirements).
30. What methods of assessment are used on your course?
   a.   Combination of examination, assignment, presentation, group assignment and project work.
   b.   Combination of examination, assignment, presentation and project work.
   c.   Combination of examination and assignment.
   d.   Only examinations
31. Are students informed of plagiarism and how to avoid it?
   a.   Yes.
   b.   No.
   c.   I do not know what plagiarism is.

32. Do you get an opportunity to examine your answer scripts and get a feedback after the exams?
   a.   Yes
   b.   No
33. How can assessments be improved on your course? Please state points only. Max 25 words/200 characters. [Please provide space for 200 characters.]
34. How does your college/university involve students in gaining feedback/comments on the syllabus, teaching and assessments of your course?
   a.   Objective style anonymous-feedback form (yes/ no, tick mark, scoring a number)
   b.   Subjective style anonymous-feedback form (open-ended questions where students can write their views)
   c.   Named feedback system (students have to write their names).
   d.   There is no formal feedback system.
35. What is the quality of such feedback?
   a.   Feedback is taken very seriously and students' issues are resolved very quickly.
   b.   Feedback is a slow process; students do not see many changes during their course.
   c.   Feedback system has no effect; no changes are noticed by students.
   d.   Feedback system does not exist.
36. What is quality of your college's/university's environment?
   a.   Good; (easy and affordable transport to-and-from university, secure and well-maintained clean and hygienic campus, 24 hrs supply of electricity and water, comfortable furniture, latest electronic and media facilities, free Wi-Fi for students, wide variety of sports facilities, strict law and order in and around campus, large variety of hygienic food, and on-campus hygienic medical facilities).
   b.   Moderate; (affordable but intermittent transport to-and-from university, some electronic equipment with internet facilities, campus could be cleaner and more hygienic, some incidents of electricity and water supply failure, some sort of law

and order, some variety of food, only some facilities for sports, and on-campus medical facilities could be better).

    c. Poor; (no regular public transport to-and-from university, dated electronic equipment with very poor internet facilities, campus facilities dirty and unhygienic, Intermittent supply of electricity and water, poor law and order, no variety of food, old sports facilities, and poor on-campus medical facilities).

    d. Unsatisfactory; (no public transport to-and-from university, no electronic equipment or internet facilities, campus facilities very dirty and very unhygienic, hardly any supply of electricity and water, unsafe campus with very poor law and order, unhygienic food, hardly any sports facilities, and no medical facilities on-campus).

37. How can your college's/university's-environment be improved further?
    a. More funding (money required to be spent on campus and facilities).
    b. More and appropriate staff for running facilities.
    c. Ensuring that staffs work as expected.
    d. A combination of all these factors.

38. Which of the following applies to the accreditation of your Bachelor's degree?
    a. Valid all over India and abroad.
    b. Valid all over India but not abroad.
    c. Valid in India only but does not have a good reputation.
    d. Valid only in the state where the University is situated and not elsewhere in India.

39. Do you think 'quality assurance' processes and procedures will help improve the overall education in your college/university?
    a. Yes
    b. No
    c. I do not know what quality assurance is.

Annex 5 - NAAC Weightages for Criteria

NAAC Weightages for Criteria and Key Aspects for Indian Higher Education Institutions

Criteria	Key Aspects	Universities	Autonomous Colleges	Affiliated Colleges
I. Curricular Aspects	1.1 Curriculum Design and Development	50	50	--
	1.1 Curricular Planning and Implementation	--	--	20
	1.2 Academic Flexibility	50	50	30
	1.3 Curriculum Enrichment	30	30	30
	1.4 Feedback System	20	20	20
	Total	**150**	**150**	**100**
II. Teaching-Learning and Evaluation	2.1 Student Enrolment and Profile	10	30	30
	2.2 Catering to Student Diversity	20	40	50
	2.3 Teaching-Learning Process	50	100	100
	2.4 Teacher Quality	50	60	80
	2.5 Evaluation Process and Reforms	40	30	50
	2.6 Student Performance and Learning Outcomes	30	40	40
	Total	**200**	**300**	**350**

NAAC Weightages for Criteria and Key Aspects. Cont.

Criteria	Key Aspects	Universities	Autonomous Colleges	Affiliated Colleges
III. Research, Consultancy and Extension	3.1 Promotion of Research	20	20	20
	3.2 Resource Mobilization for Research	20	20	10
	3.3 Research Facilities	30	20	10
	3.4 Research Publications and Awards	100	20	20
	3.5 Consultancy	20	10	10
	3.6 Extension Activities and Institutional Social Responsibility	40	50	60
	3.7 Collaborations	20	10	20
	Total	**250**	**150**	**150**
IV. Infrastructure and Learning Resources	4.1 Physical Facilities	30	30	30
	4.2 Library as a Learning Resource	20	20	20
	4.3 IT Infrastructure	30	30	30
	4.4 Maintenance of Campus Facilities	20	20	20
	Total	**100**	**100**	**100**
V. Student Support and Progression	5.1 Student Mentoring and Support	40	40	50
	5.2 Student Progression	40	40	30
	5.3 Student Participation and Activities	20	20	20
	Total	**100**	**100**	**100**

NAAC Weightages for Criteria and Key Aspects. Cont.

Criteria	Key Aspects	Universities	Autonomous Colleges	Affiliated Colleges
VI. Governance, Leadership and Management	6.1 Institutional Vision and Leadership	10	10	10
	6.2 Strategy Development and Deployment	10	10	10
	6.3 Faculty Empowerment Strategies	30	30	30
	6.4 Financial Management and Resource Mobilization	20	20	20
	6.5 Internal Quality Assurance System	30	30	30
	Total	**100**	**100**	**100**
VII. Innovations and Best Practices	7.1 Environment Consciousness	30	30	30
	7.2 Innovations	30	30	30
	7.3 Best Practices	40	40	40
	Total	**100**	**100**	**100**
TOTAL		**1000**	**1000**	**1000**

NAAC Weightages for Criteria and Key Aspects.