Satisfaction surveys as mechanisms to assess the success of an institution of higher learning as an ‘inviting institution’: A case study

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Abstract
This study reflects on an institution of higher learning’s study to determine the satisfaction and importance values of questions that relate to services rendered by the institution. This institution’s Academic Plan and its teaching and learning strategies underpin theoretically socio-constructivism. This study was conducted from an invitational education point of view. The above-mentioned ‘Institution A’ utilised a satisfaction survey questionnaire that measured the respondents’ satisfaction per question as well as the respondents’ view regarding the importance of the respective issues. The questions reflected a wide spectrum of services rendered to the students of the institution. The information gathered during this study was interpreted within the framework of invitational education and utilised for quality enhancement purposes. The rationale for the study was to collect information that would identify deficiencies and inform remedial action processes as well as the collection and identification of data in order to determine the degree to which the institution could be regarded as an ‘inviting institution’. There is strong link between the principles of invitational education, Total Quality Management (TQM) and socio-constructivism. The principles of TQM are generic management principles that can be applied to quality management of institutions of higher learning. The article reflects on the method that was used during the study as well as the outcome of the exercise and the interpretation of the data within the context of invitational education and quality management.

INTRODUCTION
The majority of quality management systems of institutions of higher learning are underpinned by the notion of continuous improvement of processes in order to meet the expectations of the ‘customers’ (Meyer 1998, 32). For the purpose of this article, the primary customers in higher education are regarded as an institution’s staff and students. It is, therefore, important to determine and to address the needs and expectations of the customers in higher education (Evans and Lindsay 2002, 246). ‘Institution A’ developed a quality assurance system based on the principles of total quality management (TQM). De Bruyn (2002, 324) refers to TQM as a ‘carpetbag term’ for more than one approach to quality management, Ferreira (2003, 9) states
that TQM principles become the driving force for quality improvement with institutions around the world and forms the basis for the development of the majority of quality management models such as the Baldrige Quality Award, the European Foundation for Quality Management, the South African Excellence Model and the International Organisation for Standardisation. Horine (1992, 38) emphasises the tendency of educators in the United States of America to implement principles of TQM in order to enhance quality of teaching and learning. Central to the quality management philosophy of TQM is the notion of continuous improvement (Oakland 1998, 32) and customer satisfaction (Oakland 1998, 124). The TQM approach can be described as a customer-centred approach. This approach concurs with invitational education. TQM has generic management principles, techniques and processes in comparison with quality management models. TQM principles have been proven to be effective for many organisations and especially for institutions of higher learning (Brits 2010, 68; Cole 1995, 59).

Institution A developed its Academic Plan and teaching and learning strategies within the theoretical framework of socio-constructivism, these documents reflect a strong student/customer-centred approach. This institution regards its students as internal customers, it developed a quality assurance system based on the principles of TQM i.e. quality is addressing the needs and expectations of the customer (Oakland 1988, 27). An assumption can therefore be made that Institution A concurs in its views with regard to its learning theory with that of Suchman (1987, 50) i.e. effective learning is an interaction with and support from human beings and physical artefacts. As already mentioned, it also concurs with the customer-centred philosophy of TQM. Hunter and Smith (2007, 1) defines invitational education as ‘a student-centred approach to the teaching-learning process’. The aim of invitational education is to ‘make school the most inviting place in town’ (Purkey and Novak 1984, 2). The assumption can therefore be made that an institution that implements the theory of socio-constructivism in its teaching and learning approach that is underpinned by the principles of TQM, should be regarded as an ‘inviting institution’.

Satisfaction surveys form part of Institution A’s quantitative data collection methods during academic programme and departmental reviews. The institution utilises staff and student satisfaction questionnaires as quantitative instruments to measure the satisfaction level of its primary customers. This article wishes to investigate, by means of a student satisfaction survey, the degree to which Institution A succeeds in being an ‘inviting university’ with reference to Purkey and Novak’s (1984, 2) statement of the aim of invitational education, that is, ‘to make school the most inviting place in town’. The rationale for this exercise is to determine what the perceptions of the students are with regard to their experience as internal customers of Institution A. The survey will also indicate the degree to which the institution’s students regard it as an ‘inviting institution’. The outcome of the survey will be utilised by the institution to facilitate a process of remedial actions as part of its quality assurance system and to stimulate an institutional discourse on invitational education.
MEASUREMENT AND SAMPLE

Survey questionnaires were designed to give the respondents an opportunity to comment honestly and anonymously on the best and worst aspects of their experiences (Davies 2003).

**Questionnaires** The university’s Quality Promotion Unit (QPU) conducted a satisfaction survey with the students of three faculties at Institution A. A probability sampling method was followed by selecting classes that represented senior (not first-year) students of programmes under evaluation for the review cycle of 2010. The completed questionnaires per faculty were fed into the optical mark reader after a process of elimination of partially completed questionnaires. Structured questions (attitudinal type) were used in the survey in order to determine the perceptions of the customers (students).

The student satisfaction questionnaire measured the respondents’ satisfaction with regard to programme-related items, institutional culture items, teaching and learning facilities and support items, admission and registration processes, finances and fees, as well as general student services and support items.

**Scaling**

Scaling is ‘a procedure for the assignment of numbers to a property of objects in order to impart some of the characteristics of numbers to the properties in question’ (Bernard 1971, 205). The respondents evaluated each statement on the questionnaire on a five-point (Likert) rating scale (Cooper and Schindler 2003, 251). The questionnaires consisted of statements regarding which the respondents were asked to agree or disagree. The respondents chose one of four levels of agreement, or they chose ‘not applicable’ if a particular statement was not applicable. Each question had four possible values; the numbers indicated the value to be assigned to each possible answer (1 for very dissatisfied or not very important and 4 for very satisfied or very important). Each question had a separate column that measured the satisfaction and the importance per item on the questionnaire.

The respondents rated the satisfaction as well as importance level during the completion of the questionnaires. The satisfaction and importance levels are important indicators in order to determine the ‘performance gap’ per item. The performance gap can be determined by means of subtracting the satisfaction rating per item from the particular item’s importance rating. The larger the performance gap for a particular item, the greater the concern should be to improve the specific issue. This article only reflects on the issues with a significant performance gap of ≥ 20 per cent. The latter is not only a reflection on the institution’s success in being an inviting institution, but emphasises the necessity of becoming one.
INVITATIONAL EDUCATION

Invitational education is a theoretical model that addresses the total educational environment (Purkey and Schmidt 1996), based on perceptual psychology. Invitational education is a ‘perceptually based, self-concept approach to the educative process and professional functioning’ (Novak 1983, 5). Invitational education is an education model that promotes a person’s realisation of his or her full potential. This educational approach postulates that a person creates his or her own reality by means of what he or she believes is real (Combs and Gonzales 1994). It assumes that an individual’s behaviour is dependent on his or her perception and interpretation of what he or she experiences. The assumption that a person’s behaviour is based on his or her perceptions and that the latter (an individual’s interpretation of the environment) is learned is underpinned by perceptual psychology. This postulation, therefore, suggests that what the individual has learned from his or her interpretation of the environment can also be unlearned, provided that the particular individual is exposed to new experiences or new information. It is, therefore, imperative to understand the perception and interpretation of the individual’s life experience (frame of reference) in order to understand his or her behaviour. The notion ‘self-concept’ in the context of invitational education refers to the individual’s unique system of perceptions about the self in relation to his or her environment. A person maintains a consistent self-concept by declining those perceptions that do not fit his or her preconceptions and by incorporating those perceptions that fit his or her preconceptions. The self-concept of a person can be changed or developed as a result of inviting acts.

The basic principles that underpin invitational education are the following:

1. People are able, valuable, and responsible and should be treated accordingly.
2. Education should be a collaborative, cooperative activity among people.
3. People possess relatively untapped potential in all areas of human development.
4. This potential can be realised by places, policies, and programmes that are designed specifically to invite optimal development and by people who are intentionally inviting to themselves and others (Novak 1983, 5).

Invitational education is based on the understanding of intra- and interpersonal as well as institutional ‘messages’. In their work, Purkey and Novak (1984) emphasise the concept ‘teaching is inviting’. They are of the opinion that every person and everything in and around schools and, for the purpose of this article, universities, serve as signal systems that invite or disinvite academic success. Therefore, the physical environment, curricula, and policies of an institution send messages to the students as internal customers that can be inviting or disinviting. In this regard, Novak (1983, 12) uses the metaphor of the school (university) as an ‘inviting family’ rather than an ‘efficient factory’. The inviting family as metaphor for an institution of learning has characteristics of respect, cooperation, a sense of belonging, a pleasing
habitats, and positive expectations (Novak 1983, 12). Actions, policies, places, and programmes are developed as a result of this understanding, which is attached to attitudes of respect and care, aimed at enhancing positive relationships and human potential.

### Four assumptions

Invitational education is centred on four assumptions in the form of four propositions based on trust, respect, optimism, and intentionality.

#### Trust

According to Purkey (1991, 3), education is ‘... cooperative, collaborative activity where process is as important as product’. Interdependence of human beings is a basic ingredient of invitational education. ‘Each individual is the highest authority on his or her personal existence’ (Purkey 1991, 3). This is why it is imperative that each person should be given an optimally inviting environment in order to find his or her own best way of being and becoming.

#### Respect

Invitational education views human beings as able, valuable, and responsible. They should be treated accordingly (Novak 1983, 8). Shared responsibility based on mutual respect is essential for any institution of learning. Every member of an institution of higher learning should, therefore, exhibit caring and appropriate behaviours. With regard to the mutual respect in a school and, for the purpose of this article, relevant to an institution of higher learning, Purkey (1991, 3) states that ‘This respect is manifested in the caring and appropriate behaviours exhibited by everyone in school as well as the places, policies, programmes and processes they create and maintain’.

#### Optimism

Invitational education makes the assumption that every individual possesses untapped potential. A person is unique in the sense that there are no clear limits to his or her potential, which should be discovered. In this regard, Novak (1983, 9) states that ‘seeing people as able is an acknowledgment that each person has relatively untapped capabilities for thinking, choosing and learning’. Inviting is not enough; what is imperative is to be optimistic about the process. Every individual chooses directions in life, with the hope that change for the better is possible. From the viewpoint of invitational education, people have untapped potential, which necessitates that curricula be devised, policies be established, programmes be supported, processes be encouraged, the physical environment be created, and relationships be established and maintained (Purkey 1991, 3). The inviting approach
assumes that people will choose to cooperate in activities that are perceived by them as having significance in their lives.

**Intentionality**

The potential of the individual can be best realised by means of places, processes, and programmes that are designed to invite development and by human beings who are intentionally inviting with themselves and others. An invitation is viewed as an intentional act designed to offer something beneficial for consideration. Educators should create and maintain caring institutions that are characterised by purpose and direction.

**Five environmental areas of invitational education**

The focus of invitational education is on its five environmental areas or the so-called five ‘Ps’, that is, people, places, policies, programmes, and processes. The five components of the invitational teaching process are realised within the teaching environment or teaching ecosystem.

**People**

Within the context of this article, the word ‘people’ refers to the academic staff as educators and the students as learners. Educators create learning theories and approaches (Purkey and Schmidt 1990, 37). Within the context of invitational education and teaching, the educator should embrace and live out the characteristics of trust, exclusivity, respect, optimism, accessibility, courtesy, intentionality, and concern, as they transmit invitational messages (Purkey and Stanley 1991, 68–71). The concept ‘people’ also relates to the degree of respect and honouring of staff members for diversity. It, therefore, refers to the teacher’s and support staff’s positive influence on invitational teaching. Characteristics of disinviting educators contribute to what Cloer and Alexander (1992, 2) call ‘unfavourable quality of school life’. Academic staff should develop an ‘inviting attitude’ towards themselves and to others.

Cloer and Alexander (1992, 1) emphasise how important it is for successful teaching and learning that educators should view their students as capable individuals with the potential to learn new skills and subject matter. Students should experience an environment in class that is caring and supportive. It should be a place where everyone experiences a sense of belonging and where every individual is respected and valued. Many factors contribute to the interest and level of engagement of students. Classroom climate is an important contributing factor to ensure students’ full participation in the learning process. The teachers’ teaching philosophy and, according to Brooks, Freiburger, and Grotheer (1988), their beliefs about their own teaching and learning, as well as the expectations that they hold for their students, exert a significant influence on the success of the teaching and learning process.
Educators and students are continuously in interaction. The educator enters a classroom with specific objectives in mind; the classroom forms part of the ecosystem. These objectives or teaching intentions can be achieved by means of sustained interaction with the students as participating partners. All the factors of the five ‘Ps’ contribute to the development of the full potential of the students.

In invitational education, there are four levels of functioning in the personal and professional living of teachers, that is, intentionally disinviting, unintentionally disinviting, unintentionally inviting, and intentionally inviting.

**Places**
The term ‘places’ relates to all physical aspects or the physical environment (Purkey 1999, 2). Within the context of an institution of higher learning, ‘places’ refers to physical infrastructure such as offices, lecture rooms, and laboratories. This area is important because teaching is affected by matters such as the layout of a lecture room and its surroundings. Purkey and Schmidt (1990, 32) emphasise that everything that a person experiences in his or her life is influenced by the physical environment and layout. Shortcomings within the physical environment can be detected by individuals. If the learner can detect shortcomings within the physical environment, it transmits negative or disinviting messages. The physical environment should communicate a message of trust, respect, optimism, and intentionality, which constitute the four elements of invitational teaching. Within this context, lecture rooms, administration and staff offices, and other institutional facilities should give evidence of functionality, cleanliness, and efficiency and testify as invitational space. The physical environment should send a message of intentionality, as it contributes to effective teaching and learning.

**Policies**
Policies refer to an institution’s written and unwritten codes, procedures, and rules that control the continuous functioning of the organisation and its internal customers. The educator is sometimes challenged with conditions where institutional teaching policies with relevant procedures, rules, regulations, and practices do not reflect, or are not on par with, elements of invitational teaching (Purkey and Schmidt 1990, 34).

**Programmes**
Programmes refer to the teaching curriculum in order to develop an academically, physically, and socially inviting environment. The programmes of an institution of higher learning should focus on the needs and expectations at macro as well as
Satisfaction surveys as mechanisms to assess the success of an institution of higher learning etc micro level in order to ensure that the community as well as the individual benefits from them (Purkey and Schmidt 1990, 35).

**Processes**

In invitational teaching, the concept ‘processes’ refers to content and context. The educator communicates content within the invitational teaching. Processes include issues such as academic orientation, networking, skills, democratic character, cooperation, procedures, interaction, grouping, assessment, and opportunities within an institution. Processes refer to an institution’s values and the attitudes of its staff (academic, support, and administrative) and its students.

Institutions of higher learning should achieve in developing students’ full potential by creating and maintaining the five ‘Ps’. The five ‘Ps’ that constitute the ecosystem provide security to the process of invitational teaching.

**INTERPRETATION OF DATA**

The QPU conducted a literature study on invitational education, which informed the development of the satisfaction survey questionnaire. The QPU collected all completed questionnaires and fed the data into an optical mark reader. The results were printed in the form of bar charts. A detailed report was submitted to the institution’s management for quality management and resource allocation purposes. Figure 1 illustrates the values of the clustered items that are related to this study. All the items have performance gaps of significant value. They are viewed by the QPU as significant, that is, ≥20 per cent gap between satisfaction rate and importance per item.

![Student Satisfaction Survey](image)

**Figure 1: Satisfaction survey**
The following is a discussion of Figure 1 against the background of invitational education. The abbreviation ‘Q’ stands for a specific question, and a number (for example, Q1) refers to a specific question on the satisfaction questionnaire that was used. The bars in Figure 1 represent the outcome of several questions that were clustered under different topics: programmes, communication, teaching and learning, administration, and academic support. The topic ‘programme’ in Figure 1 is an average value in percentage for the respondents’ reflection on the following questions: programmes have a satisfactory orientation for students (Q3), programmes employ interesting and appropriate teaching and learning methods (Q6), programmes have a workload that is manageable in the time available (Q7), and programmes have a majority of staff who regularly consult students about the quality of the programmes (Q8). There is a huge gap between the satisfaction and importance values of the item ‘programmes’ (a performance gap of 24%). The performance gaps in the respondents’ response to the questions with regard to Q3, Q6, and Q8 raise concerns from an invitational education perspective with regard to the five ‘Ps’. They indicate a very low participation of the students with regard to the enhancement of programme quality, which transgresses the view that invitational education should be cooperative and collaborative activities. It is further a transgression of a principle in invitational education, that is, the acknowledgement of the individual as the highest authority with regard to his or her existence. The fact that the respondents felt that the staff did not always offer them an opportunity to reflect on the programmes emphasises the possibility that they do not have the characteristics of invitational educators, but are what Cloer and Alexander describe as ‘disinviting educators’.

The proposition ‘optimism’ in invitational education makes the assumption that the untapped potential of human beings necessitates actions such as the devising of curricula that should be conducted with the participation of the students themselves. It further seems that the institution failed to offer the respondents an induction programme that satisfied their needs. There are, therefore, from an invitational education point of view, evidence and serious concerns with regard to the message that the students receive, which contradicts the characteristics of an ‘inviting university’ as an ‘inviting family’ (Novak 1983, 12). It contravenes the propositions of trust, respect, as well as intentionality. The latter refers to the proposition of invitational education that human beings should be intentionally inviting with themselves and with others – a proposition that is ignored with regard to the institution’s offering of its academic programmes, but also with regard to communication. The bars on communication (the second pair on the horizontal axis) have a performance gap of 30 per cent, with an importance value of 80 per cent. This emphasises that the academic staff are not viewed as invitational educators and that the proposition of ‘optimism’ with regard to relationships that are established and maintained is overlooked by the institution. This bar reflects the average of the responses to communication questions, that is, Q23 (students and staff), Q24 (academic staff and students), and Q25 (administrative staff and students). This indicates that there is insufficient interaction between staff and students at all institutional levels. This is
also emphasised by the above-mentioned lack of opportunity for reflection on the quality of programmes by students. This relates to the environmental area of ‘people’ in invitational education, that is, that students and staff should be fully engaged in the learning process (Purkey and Schmidt 1990, 37).

The third pair of bars reflects the teaching and learning facilities and support. The satisfaction bar for teaching and learning facilities and support has a very low value of 40 per cent and a significant high importance value of 86 per cent. The performance gap is an alarming 46 per cent. These values reflect issues that are especially related to ‘places’ with regard to the five ‘Ps’ of invitational education. The responses to these questions relate to the physical aspects of the environment and received extremely low values during the survey. The following aspects were evaluated: adequacy of study space and desks, access to the Internet, availability of printers, a library that can accommodate the number of students, the number of computers available for students, classes that comfortably accommodate students, and well-equipped laboratories. The physical environment is an important contributing factor in invitational education, as it influences the experience of the individual (Purkey and Schmidt 1990, 32). According to the viewpoint of invitational education, the shortcomings transmit negative or disinviting messages and not messages of trust, respect, optimism, and intentionality (that is, the four elements of invitational education).

The last pair of bars on the horizontal axis reflects the institution’s admission and registration processes and procedures. The outcome of the survey shows a relatively low satisfaction value of 51 per cent and a performance gap of 33 per cent. With regard to the five ‘Ps’ in invitational education, these questions relate to ‘policies’. The regulations of the institution with regard to admissions and registration send messages that can be regarded as disinviting. The respondents referred to unclear and inaccurate information, inconvenient procedures to follow, an ineffective system to solve administrative problems, etc.

**REMEDIAL ACTIONS**

As already mentioned in this article, satisfaction surveys form part of Institution A’s review mechanisms within a quality assurance framework that is based on the TQM philosophy. The institution’s quality assurance processes include satisfaction surveys, focus group interviews, as well as the critical self-reflection on its activities of the particular department under evaluation. This information gathered during the review process of a department informs its remedial action plan.

The data gathered by means of the survey has two purposes, that is, informing the remedial action process by means of replanning and resource allocation and, secondly, the development of a conceptual framework document on invitational education and the particular institution’s way forward to become a successful ‘invitational institution’. Invitational Education is a model and philosophy that should
be considered by institutions such as Institution A to be utilised as a mechanism to learn its learners methods to release their human potential.

**CONCLUSION**

Invitational education and total quality management are mutually inclusive approaches to quality management in higher education (Paxton 1993). This article demonstrates how satisfaction surveys can be utilised as a quality assurance mechanism to measure the degree in which an institution of higher learning fulfils the demands of invitational education and the generic principles quality management with special reference to TQM.

The satisfaction survey findings identified the need for enhancements in a variety of areas. The key focus of this study was on two issues, that is, the implementation of appropriate remedial actions in order to improve services rendered to staff and students and the collection and interpretation and dissemination of information on the students’ perception of the degree to which the institution could be regarded as an invitational institution. The following can be regarded as positive factors that contributed to the success of this study:

- The respondents responded not only on how satisfied they were with regard to a specific service rendered to them, but also how they regarded the importance of the particular service. This information is valuable from a quality assurance point of view, as it indicates the performance gap per question. The issues with significant performance gaps were viewed as indicators of deficiencies within the framework of invitational education.

- The study showed the similarities with regard to the generic principles of quality management and for the purpose of this study, of TQM and invitational education. They have certain concepts and assumptions in common, that is, the client-centred approach (e.g. TQM) and the learner-centred approach of invitational education. The study was conducted to determine the satisfaction levels of the respondents as the institution’s ‘internal customers’, which also mirrored the degree to which the respondents perceived the institution as invitational. The purpose of quality management models such as TQM is to identify the customers’ needs and expectations, to identify and rectify the deficiencies, and, by doing that, to enhance (from an invitational education point of view) the ecosystem of the learner by focusing on people, places, programmes, processes, and policies.

- The questionnaires were completed anonymously.

- The questions were clearly phrased.

- The data of the pre-coded questions were fed into an optical mark reader system. This ensured the processing and availability of data for the purpose of interpretation within a relatively short period.
Issues that should have been avoided:

- Too many questions were asked. A respondent should answer each question by reflecting on how satisfied he or she is with a particular issue and, secondly, how important the particular service or issue is.

- The many questions and the limited time available to complete the questionnaire (within one contact session) should be regarded as factors why a large percentage of the incompletely completed questionnaires were discarded.

- The two columns to be completed per question led to confusion. The majority of respondents completed the questionnaires only partially, for example, one column per question (either satisfaction or, sometimes, importance was completed).

- The respondents should have been instructed on how to complete the questionnaires, for example, that both the satisfaction and importance columns per question should be completed, that they should only use black pens or pencils, etc.

- The utilisation of qualitative information, for example, the utilisation of focus group interviews, could have added more value to this study. Interviews would have allowed the institution to collect more in-depth information on certain issues and could have enhanced the scientific value of the study due to the triangulation of information.

This study was valuable, as it furnished the institution with data that could be utilised to determine the performance gap per specific service rendered. In this study, the utilisation of satisfaction surveys functioned as a mechanism to measure to what extent the institution was viewed by its students as an invitational institution. From a quality management point of view, it is important that the respondents receive feedback on the outcome of the survey, that is, how this study has informed the institution’s initiatives in enhancing its core business and how selected data has been used to start a discourse on campus on becoming a successful invitational institution.

The QPU drafted a second report that reflects on the outcome of the survey within the framework of invitational education. This report is regarded as a discussion document that will introduce and sensitise the relevant stakeholders to the principles of invitational education. It is imperative that the stakeholders on all levels of the institution should be introduced to the philosophy and approach of Invitational Education i.e. top management (rectorate, senior managers and all stakeholders that functioning on the institution’s strategic- and tactical levels), the institution’s student support services (teaching and learning support units), institutional services (maintenance services, IT services, finance, etc), quality management (aligning quality assurance mechanisms to Invitational Education approach, as an example, revising minimum standards for programme and department reviews, utilising review
methods such as focus group interviews and surveys to measure how successful the university is as an ‘inviting’ institution on strategic as well as operational levels).

REFERENCES

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