Enhancing Quality of Higher Education for Graduate Research Students Development

Norhasni Zainal Abiddin, Affero Ismail & Tukiran Taniredja

ABSTRACT: *Quality education becomes a major issue in higher education. The numbers of graduate students to pursue their higher education keep increasing by years. In the meantime, the institutions of higher learning are striving to attract more students, especially at the graduate level by making every effort to provide quality education. Graduate students contribute to the development of research outcome. Some scholars proposed that the strategic success of a service organization depends on its ability to consistently meet or exceed customer service expectations. A constant effort should be made to ensure the customer satisfaction. This paper provides the relevant input for effective resource development in institutional of higher education. The approach would address the needs of students further along the process with an emphasis on data gathering, management and analysis, compiling a thesis or dissertation, assessment, and the publishing of research results. Another approach would relate to generic aspects of graduate growth, development, and progress. Conceptual evidence is presented which combination of resource needs to focus. It is hoped to contribute a proper insight of effective resource in developing distinguished human capital.*
KEY WORDS: *Higher education, quality education, graduate students, resource development, and student development.*

Introduction

The desire to continue graduate education is increased by years. The obstacles of their studies are waiting ahead. This journey is a maturing process. It must be enhanced with timely and appropriate support. The institution of higher education should provide support to graduate students without sacrificing the coherence and generic input needed in any academic program. Students undertaking graduate program at universities are under increasing pressure to complete their candidature within particular time frames. Faculty are also under similar pressure to attract and retain quality candidates who will be able to complete on time and attract funding and research quantum as well as raise the level and status of the institution's

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research profile. It is important to enhance the image of institution. At the same time, universities are attempting to do more with less in all areas of teaching and research as funding becomes more competitive and tied to key performance indicators and accountability measures.

Institutions should cater the needs of graduate students that come from various background and levels, especially research students. Graduate research students represent a significant range of diversity: (1) age; (2) cultures and religion; (3) experience and ability; (4) part-time, full-time, internal or external; (5) their needs change over time/place/space; and (6) sometimes with, but mostly without, scholarships or other funding support.

Currently, graduate students at most institution are obliged to publish and present conference papers in order to graduate. During graduate process, a student encounters many problems and obstacles. It is normal for them to face difficulties during the study but it is the responsibility of the institution to handle their issue effectively. There are pressure on research students to: (1) Complete within candidature time – reduced learning entitlement; (2) Publish/present conference papers; (3) Support families/jobs; and (4) Develop a broader range of skills that will enhance their marketability. These exclude creating new knowledge, producing ground-breaking work, keeping up with the literature, and writing a dissertation.

Institutions and universities are handling many issues regarding graduate studies. One of the major issues of graduate studies is attrition and completion rates. A study in Canada indicated that discipline area was important for completion, with completion rates varying from 45% in arts and humanities to 70% in life sciences, with science completions being generally in the high 60% range (Elgar, 2003). In United Kingdom, completion rates after 10 years differed by general discipline area with arts/humanities rates being 51% and sciences cited at 64% (Wright & Cochrane, 2000). For Australia, Y.M. Martin, M. Maclachlan and T. Karmel (2001) estimated that 60% of beginning doctoral candidates in 1992 would have completed successfully by 2003 (that is 11 years after initial enrolment), suggesting an attrition rate of 40%. The same study also reported considerable variation in completion rates between institutions and disciplines of study.

Part time student really consumes time, money, effort, patience, and enthusiasm during their studies. It is important for them to complete their study faster and certainly within the time frame given since most of them either financing their study by themselves or receive a scholarship. Many factors contributing to graduate student who fail to complete their studies within the time given and the major problem is related to the resource quality offered by the institution. Quality is essentially a function of human psychology. Ignoring the psychological aspects of human beings in pursuit of quality leaves us with a mechanistic understanding. Their needs, in this particular matter, are always become a conflict. This situation will lead to a poor quality of graduate studies comprising the research outcome.

Learning and Maturing Process

Graduate education is learning and maturing process (Zainal Abiddin & Ismail, 2012). Graduate education programs worldwide attract professionally-based, non-residential students studying part-time. Many graduate students are mature and/or distance learners with needs different to those of residential and undergraduate students (Humphrey & McCarthey, 1999). Part-time students struggle to cope with their simultaneous academic and professional workloads and experienced a lack of support and understanding from their supervisors, inflexible program organization and structures, and a feeling of isolation (Lessing & Lessing, 2004; and Mackinnon, 2004). Graduate students report anxiety as a result of uncertainty about what is expected of them and procedures such as assessment (Lovitts, 2005; Malfroy, 2005).

Some scholars have discussed the behaviour of students' aspect such as students from previously disadvantaged backgrounds. They may have further distinctive needs in order for them to cope with the pressures of a technologically advanced environment and a system that demands independent research (Lessing & Schulze, 2002). These factors need to be taken into account in the design of information and support resources provided to graduate students. Service provided for students have to be well-managed and fits the students' needs. Satisfactory of these services will lead students to achieve a better quality of studies. In an effort to conceptualize service quality, G.S. Sureshchandar, C. Rajendran and T.J. Kamalanabhan (2001) identified five factors of service quality as critical from the customers' point of view. These factors are: (1) Core service or service product; (2) Human element of service delivery; (3) Systematization of service delivery: non-human element; (4) Tangibles of service – services capes; and (5) Social responsibility. These are the factors involved in customers' satisfaction. Here, the authors addressed the customer as the students.

As being explained before, the major concern in higher education nowadays is attrition and completion rates. N. Lessing and A.C. Lessing (2004) provide the following general aspects that influence graduate completion rate: student-friendly, accessible administrative procedures, understanding academic and scientific requirements, ability to judge workload related to different components of the research process, retaining supervisor contact, overcoming isolation, conflict management, and the ability to take a stand and argue a position in terms of the study. R. Humphrey and P. McCarthey (1999) add the important role the provision of adequate facilities, financial support, interaction within the department and wider university, logistical arrangements, and demographic factors play in graduate student success.

L. McAlpine and J. Norton (2006) stated that a serious problem exists in the academic world – doctoral education attrition rates that approach 50% in some disciplines. They then proposed a framework to guide research and graduate programs; its strength resides in its integrative and systemic perspective with

student experience of learning at its core. The framework integrates the range of factors influencing students experience so that we can envision responding to this issue in a coherent and effective fashion and potentially improve poor doctoral completion rates.

L. McAlpine and J. Norton's framework is a heuristic, a visual image that serves as a mnemonic by providing a simplified representation of complex dynamic systems in an integrative fashion. The intent is to understand the interaction and influence of multiple factors across different contexts in influencing retention and completion. The value of the framework is to remind us to consider contexts not presently in our focal area; integrating these allows us to examine the extent to which changes in one context may create disequilibrium or be contestable and contested in other contexts. It also enables us to consider contesting changes in contexts beyond our own that we believe will have deleterious effects (McAlpine & Norton, 2006).

Students are central to the graduate undertaking. Yet, theirs is the voice that is least heard (Golde, 2000). This absence of the student's voice begins with undergraduates (Dunwoody & Frank, 1995) where information is rarely, if ever, collected as to why students drop classes. This silence becomes loud for doctoral students who meet the criteria of people who have not been heard because their points of view are believed to be unimportant or difficult to access by those in power (McLaughlin & Tierney, 1993). Today's students come to graduate programs with increasingly varied backgrounds, preparation, expectations, motivations, and responsibilities (e.g. child-care, work). In the USA (United States of America), they tend to be older than in the past, mostly in a relationship, parents, employed in areas unrelated to their discipline, and domiciled far enough away from campus that it is not easy to be present (Elgar, 2003).

Many of these students want to enrich what is to them a new community with their knowledge and experience (Zainal Abiddin & Ismail, 2012). However, despite such diversity, studies consistently demonstrate a set of variables originating in different contexts that influence graduate retention and completion for all students. This uniformity results from common features that students experience as they begin to acculturate in their chosen community of practice. Their academic experience may include increasing debt, competition for funding, overwhelming program requirements, isolation, competing demands (family and unrelated employment) resulting in concerns about quality of life as well as fears about career opportunities upon completion. Thus, they need support from the institution to keep them continuing their studies.

We assume this is the case at the graduate level where for many the goal is to enter into the academic community with the supervisory/committee relationship (Johnson & Broda, 1996) perceived as an important factor in this process. A student is frequently his/her supervisor's closest colleague (McAlpine & Weiss, 2000). Thus, the resource in supervisory aspect should be managed wisely so that the students will be more convinced to proceed with their thesis.

The departments that exist within larger organizations: faculties/schools in universities are the key of students' resource. They are important sites of learning and change that exist within institutions. Institutions incorporate degrees of diversity just as do student populations and departments. Interestingly, many universities estimate shorter times to and higher levels of completion than other universities (Elgar, 2003) but did not take action into this. Why is the case remains unclear; perhaps with increasingly insufficient public funding, universities now look to the community as well as student tuition fees to augment government funding (Alexander, 2001). As the level of competitiveness among universities increases, promoting the positives of their own programs and outcomes becomes essential. Funding linked to academic work is the last variable since its presence reduces stress concerning finances, links paid work to tasks within the academic rather than the external world, and is often more flexible in scheduling than external employment.

Institutions traditionally play a role in student access to external funding, such as scholarships. Internal funding includes teaching assistantships, largely distributed by departments, with institutions usually setting overall policies, and RA (Research Assistant)-ships negotiated between student and supervisor. Some universities have initiated new internal funding policies to reduce student's need to work outside the university. When one university limited student admissions to the number of research and teaching assistantships that humanities departments could provide, completion rates increased from 34% to 68% over 10 years (Smallwood, 2004). Funding is critical, so is the nature of the responsibilities attached to it.

The problems that delay graduate studies or prevent them from finishing could be due to inexperience of the student, to poor supervision or an inefficient system (Jacobs, 1994; Johnston, 1996; Katz, 1997; Sayed, Kruss & Badat, 1998; and Mouton, 2001). Hence, G. Rademeyer (1994), J. Hockey (1994), Y. Sayed, G. Kruss and S. Badat (1998), and R. Smith (2000) found that the successful completion of a dissertation was just as much a function of the abilities of the student as of the supervisor.

Graduate research has an intellectual as well as a psychological component (Binns & Potter, 1989; Sayed, Kruss & Badat, 1998; and Phillips & Pugh, 2000). G. Rademeyer (1994) claims that internal conflicts (ever changing thoughts and feelings) and external conflicts (personal relationships, time and resource constraints) influence the process negatively. Tenacity, support by the supervisor, personal and collegial support, and previous experience contribute to psychological survival (Smith, 2000). Students also need determination and perseverance (rather than brilliance) to complete their research (Phillips & Pugh, 2000). In addition, they need adequate supervision and clear communication with supervisors. They should also be familiar with evaluation criteria (Smith, 2000).

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workload related to different components of the research process, retaining supervisor contact, overcoming isolation, conflict management, and the ability to take a stand and argue a position in terms of the study. R. Humphrey and P. McCarthey (1999) add the important role the provision of adequate facilities, financial support, interaction within the department and wider university, logistical arrangements, and demographic factors play in graduate student success. Students that are vary in personality and intelligence may have further distinctive needs in order for them to cope with the pressures of advanced culture, environment, and a system that demands independent research. The effectiveness of the resources concerned as the major contribution. For some students that are unable to successfully complete their program within the given time frame have to extend their study although they can complete it faster. Lack of information and support in the system brought this issue out.

Process of Research and Development and Quality of Service for Higher Education

Research is an interactive process and requires the development of social as well as academic skills (Phillips & Pugh, 2000). A school's administrative (School of Graduate Study) function is commonly interpreted as referring to managing, operating or directing an organization (Burton & Brueckner, 1995) in order to support students towards the completion of PhD. Some suggestions regarding the supervisory framework for supporting and defining the students' graduate programme include producing a definite plan in writing, probably different for each department, that describes the department's view on good supervisory practice; establishing regular meetings between student and supervisor (Frisher & Larsson, 2000); setting up adequate methods of assessing coursework, thesis or dissertation supervision record keeping and project advancement (Brown & Atkins, 1988; and CGS, 1990); and submitting a comprehensive annual progress report to the supervisor (Donald, Saroyan & Denison, 1995). Faculty and Graduate School Office is the major source of academic guidance for graduate students and they go there and feel at ease discussing their problems and asking for advice. On the other hand, the students consult their academic advisor if they have academic problems.

Given the length and complexity of graduate student supervision, it is understandable that various difficulties arise (Brown & Atkins, 1988; and Moses, 1994) due to organisational or professional factors. Organisational factors could include policies and procedures established or not established for graduate student supervision (Donald, Saroyan & Denison, 1995), the manner in which these are communicated to supervisors and students, the number of student being supervised, the supervisor's inability to manage a research group effectively, and inadequate support services and equipment. Among the professional factors are: misinformed or inadequately prepared supervisor or a supervisor whose research interests are different from those of the student.

All of these issues are related to the responsibility of the school. The school should ensure that the student has been appointed a supervisor who has a similar interest and expertise in the student's research area (Donald, Saroyan & Denison, 1995) and should match the personalities of supervisors and students (Sheehan, 1993; and Holdaway, Deblois & Winchester, 1995). A school must ensure that an optimum student-to-supervisor ration of less than or equal to 6:1 is established (Donald, Saroyan & Denison, 1995). There are circumstances where a student can face a personality clash, barriers to communication, cultural or language difficulties or personal differences in the approach to work. Here, the school has to ensure that it provides the best solution for the student (Donald, Saroyan & Denison, 1995). Besides that, the school should appoint an appropriate administrator to monitor the supervision provided to all graduate students and required that annual reports of student's progress be submitted to the graduate studies office or faculty (Holdaway, Deblois & Winchester, 1995).

Like many other business organizations, institutions of higher learning must also be concerned with the quality of the services offered to their customers that is the students. Service quality can lead to excellence in education and can have lasting effects on the institutions and students. This can influence students' recommendations of their programs to others, as well as their future monetary contributions in support of their institutions (Chong, 2002). Nowadays, higher education is being driven towards commercial competition imposed by economic forces resulting from the development of global education markets and the reduction of government funds that forces tertiary institutions to seek other financial resources (Firdaus, 2006a). Tertiary institutions had to be concerned with not only what the society values in the skills and abilities of their graduates, but also how their students feel about their educational experiences (Bemowski, 1991).

These new perspectives call attention to the management processes within the institutions as an alternative to the traditional areas of academic standards, accreditation, and performance indicators of teaching and research. A. Firdaus (2006a) also added that tertiary educators are being called to account for the quality of education that they provide. While more accountability in tertiary education is probably desirable, the mechanisms for its achievement are being hotly debated. A. Firdaus (2006b) further indicated that the six dimensions, namely: non-academic aspects, academic aspects, reputation, access, program issues, and understanding were distinct and conceptually clear in managing service quality in higher education. Therefore, it can be posited that students' perception of service quality can be considered as a six-factor structure consisting of the identified six dimensions. Consequently, tertiary institutions should assess all the six dimensions of service quality to ascertain the levels of services provided, and to determine which dimensions need improvements. Evaluating service quality levels and understanding how various dimensions impact overall service quality would ultimately enable tertiary institutions to efficiently design the service delivery processes (Firdaus, 2006b). In addition, knowing the strengths and weaknesses of these dimensions

and their relative influences may result in better allocation of resources so as to provide a better service to students.

A. Jusoh *et al*. (2004) proposed a model for Service Quality in Higher Education (SQHE). They have developed six dimensions of service quality in education. There are: tangibles, competence, attitude, content, delivery, and reliability. *Tangibles* refer to facilities provided by the institution in serving good conditions to their customers. This dimension is applicable to personnel and condition of equipments. *Competences* refer to sufficiency and highly qualified of the academic staff, the program structure, and the capabilities to render good image and strong attraction in teaching. *Attitude* concerned with the communication, caring, individual attention, and understanding students' needs. *Content* in the context of education is referring to the curriculum design and how its can develop and prepare the students for their potential job market. *Delivery* means the capability in giving lecture and presentation effectively, the compliance of course works with the module, focusing on the learning outcome, providing useful information, and proper channel for feedback and ideas. The final dimension is *reliability*. In the higher education context, *reliability* can be defined as the degree to which the knowledge, information, and skills learned are correct, accurate, and up to date. It's also concern on keeping promises, handling complaints, giving resolutions, and solving problems.

J. Hattie (1990) and G Soutar and M. McNeil (1996) in their studies opposed the current system of centralized control, in which the government sets up a number of performance indicators that are linked to funding decisions. There are a number of problems in developing performance indicators in tertiary education. One such problem is that performance indicators tend to become measures of activity rather than true measures of the quality of students' educational service (Soutar & McNeil, 1996). These performance indicators may have something to do with the tertiary education's quality management, but they certainly fail to measure the quality of education provided.

A survey conducted by M.S. Owlia and E.M. Aspinwall (1997) examined the views of different professionals and practitioners on the quality in higher education and concluded that customer-orientation in higher education is a generally accepted principle. They construed that from the various customers of higher education, students were given the highest ranking. As recipients of higher education, it was the students' perceptions of quality that were of interest. Students' views on all aspects of their higher education experiences are now being widely canvassed and regarded as essential to the effective monitoring of quality in universities (Hill, Lomas & MacGregor, 2003).

According to A. Firdaus (2006b), service quality has attracted considerable attention within the tertiary education sector, but despite this, little work has been concentrated on identifying its determinants from the standpoint of students being the primary customers. G. Srikanthan and J. Dalrymple (2003) and S. Lagrosen, R. Seyyed-Hashemi and M. Leitner (2004) highlighted some weaknesses in the issue of quality in higher education whereby the adoption of quality control has

been superficial and diluted by the exercise of academic freedom, as well as being hampered by lack of shared vision and lack of a match between quality management and educational processes. Previous study by Y. Chong (2002) on service quality in institutions of higher learning had focused on examining the institution's strategic positions by evaluating existing services, and adapting to customers' perceptions and to enhance their leadership positions. The study had sought to find out the truth on students' complaints on their services. The variables used are tangibility, reliability, responsiveness, assurance, and empathy; quality dimensions taken from A. Parasuraman, V.A. Zeithaml and L.L. Berry (1994). The study measured service quality in terms of objectivity of the measurement tool and not much on the actual perception of the customers that is, the students.

While institutions of higher learning are becoming more competitive with the emerging market growth, students' perceptions of the higher education experience have become increasingly important as institutions also attempt to become more students-oriented. Therefore, it is crucial for institutions of higher learning to maintain and continuously improve the quality of education. However, there has been little research seeking to identify the quality factors of education from the students' viewpoint. This lack of knowledge by the institution's management might lead to their misallocating resources while attempting to improve their institution's quality. Such efforts could result in students' dissatisfaction with the institution. Hence, students' perception of quality of information and services in institutions of higher learning becomes very important.

The aim here must be to put the best possible gloss on services provided for reasons of competitiveness, but without making false claims that "everything in the garden is rosy". One trick employed by commercial organizations is to acknowledge problems facing a sector as a whole – in the case of higher education, say, increasing class size – but outline the steps that a particular organization is taking to overcome such problems, and which differentiate it from competitors. Some other antecedents which the research of A. Parasuraman, V.A. Zeithaml and L.L. Berry (1994) suggests can serve to lower consumer expectations, thereby making them more realistic, include these: *perceived service alternatives* (consumers' perceptions of the possibility of obtaining better service from other service providers); *self-perceived service role* (consumers' perceptions of the extent to which they themselves influence the level of service they received); and *situational factors* (performance contingencies that customers perceived to be beyond the service provider's control).

Service quality measurement has become a feature in the higher education and quite a volume of studies and researches has been conducted in this field and in other service-oriented organizations. A. Adee (1997) conducted a study in a medium-sized university in Australia to measure students' belief about eight services and service attributes of the university. He also reported the satisfaction with enrolling in the university by mail surveys conducted at two different time periods. Only 37% of the first time respondents (n = 1342) returned the questionnaires and used in his study. He concluded that perceived quality depends on satisfaction.

Based on a study by H. Safahieh and D. Singh (2006), they found that the main information needs were related to the university, the faculty and their program of study. They also found that the main information barrier was language, 22 respondents (40.7%). G. Soutar and M. McNeil (1996) conducted a pilot study in an attempt to assess service quality in a number of units in a large Australian university. About 109 students from three classes were surveyed. The aim of the study was to determine the students' expectations and assessing their perceptions of both the academic and non-academic service quality and also to examine the gap differences.

Conclusion

Educational institution needs to move on from here or work simultaneously with these processes to ensure that there is constant improvement which impact directly on our future human resources. It has responsibility to provide these students with an effective resource. Effective resource is the key factor to the success of graduate studies. Good resource will contribute to self-development, professional growth, and career development of the students. As the learning takes place, the institution should provide relevant information and input to students. The development of students' progress will be determined by the support and service offered to them. Each institution of higher learning should provide diversified information and support at the different stages of progress in graduate studies, for instance a general information guide outlining the graduate process and various information sources and support structures available to facilitate initial progress, as well as interactive sessions on the use of the library, information management, scientific writing in general as well as the writing of a proposal, and research methodology.

The approach would address the needs of students further along the process with an emphasis on data gathering, management and analysis, compiling a thesis or dissertation, assessment, and the publishing of research results. Another approach would relate to generic aspects of graduate growth, development, and progress. This could take on different forms. An interactive website (a so-called *blog-space*, *chat room*) could facilitate discussion and sharing between students. Graduate students all need to write and defend research proposals, and eventually defend their work. Presenting a proposal, progress report, or final results could facilitate student interaction, peer learning, scholarly discourse and development, critical reflection, formative assessment, as well as student throughput. The last approach could be optional needs-based components, while the central part could be a mandatory component of all graduate programs at the university. This will have to be negotiated with students upon registration, so that they know in advance what will be expected of them.

Graduate students need enthusiasm, strength, support, and commitment to keep on their study. They need to be treated properly as an important customer without sacrificing the apt and basic input needed by graduate students. Graduate students

have different resource and support needs at the different phases of their studies and that there are various ways in which these needs could and should be met. Providing quality resource and support to graduate students is primarily the responsibility of the institution. At the level of the graduate studies, students survived independently with the support from the institution. By providing convenience services and resources, the process of learning will be more convenient.

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Lecturers Have to Support the Students
(Source: ASPENSI's photo album, 20/5/2009)

Graduate students need enthusiasm, strength, support, and commitment to keep on their study. They need to be treated properly as an important customer without sacrificing the apt and basic input needed by graduate students.