Identification of Resource Needs in Postgraduate Studies

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Abstract: The desire to pursue higher education is constantly increasing. The government and the institutions of higher learning are striving to attract more students, especially at the graduate level by making every effort to provide quality education. Some scholars proposed that the strategic success of a service organization depends on its ability to consistently meet or exceed customer service expectations. Students as institutions’ customer, need information and support to cope in balancing the demands of the different environments. One of the major problems facing by the higher education nowadays is attrition and completion rates. To manage this issue, a constant effort should be made. The resources offered by the institution determine the ability of the institution to manage their students effectively. The main thrust of this paper is to provide the relevant input for resource development in institutional of higher education. It is hoped to assist the institution to identify and address implementation issues related to postgraduate studies. The major contribution of this review is the guideline for effective resource and in developing distinguished human capital.

Key words: Higher education, Quality education, Information and support, Resource development.

INTRODUCTION

The learning that takes place during graduate studies is a maturing, must be enhanced with timely and appropriate support. University should provide information and support to graduate students without sacrificing the coherence and generic input needed in any academic program. Students undertaking graduate study at universities are under increasing pressure to complete their candidature within particular timeframes, and 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 research profile. 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. Research students represent a significant range of diversity: (1) age; (2) cultures; (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. There are also 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 thesis et cetera.

The major issue of postgraduate studies is attrition and completion rates. A recent 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[17]. For the UK, completion rates after 10 years differed by general discipline area with arts/humanities rates being 51%, and sciences cited at 64%[19]. For Australia, Martin et al.,[43] 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.

Postgraduate students need proper resource and support as being a graduate students, they have to overcome a lot of challenges such as family commitment, work commitment, finance et cetera, which may affect their achievements since most of them are working and married students. These challenges are much greater if the students are doing part time which really consumes time, money, effort, patience and enthusiasm. Most of them either financing their study by themselves or receive a scholarship, so it is important for them to complete their study as soon as possible, and certainly within the time frame given. Numerous research have pointed out that there are high proportions of graduate student who fail to complete their studies within the time given. Many factors

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contributing to this and the major problem is related to the resource of information and services offered by the institution. Their needs in this particular matter are always become a conflict. Lack of input and resource from supervisor also will eventually caused them to extend their studies and have difficulty to finish their thesis or project. This situation will lead to a poor quality of postgraduate studies comprising the research outcome.

Literature Review:
Postgraduate Studies is a Learning and Maturing Process: Graduate education programs worldwide, attract professionally-based, nonresidential students studying part-time. Many graduate students are mature and/or distance learners with needs different to those of residential and undergraduate students[29]. 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[35,40]. Graduate students report anxiety as a result of uncertainty about what is expected of them and procedures such as assessment[39,41].

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 [33]. 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, Sureshchandar et al.[46] 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 author addressed the customer as the students.

As being explained before, the major concern in Higher Education nowadays is attrition and completion rates. Lessing and Lessing[16] 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. Humphrey and McCarthy[29] 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. McApline and Norton[45] stated that a serious problem exists in the academic world – doctoral education attrition rates that approach 50% in some disciplines. He 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.

McApline and 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. Students are central to the graduate undertaking. Yet, theirs is the voice that is least heard[21]. This absence of the student’s voice begins with undergraduates[15] 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[46]. Today’s students come to graduate programs with increasingly varied backgrounds, preparation, expectations, motivations, and responsibilities (e.g., child-care, work). In the US, 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[17].

Many of these students want to enrich what is to them a new community with their knowledge and experience. 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 perceived as an important factor in this process. A student is frequently his/her supervisor’s closest colleague. 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 is 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 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. 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 RAships 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. Funding is critical, so is the nature of the responsibilities attached to it.

According to Helm, problems that delay postgraduate studies or prevent them from finishing are threefold, namely problems in the research design, the collecting and processing of information and the writing of the report. The problems could be due to inexperience of the student, to poor supervision or an inefficient system. Rademeyer 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 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. Students also need determination and perseverance (rather than brilliance) to complete their research. In addition, they need adequate supervision and clear communication with supervisors. They should also be familiar with evaluation criteria.

Lessing adds 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. Humphrey and McCarthy 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.

Postgraduate Students’ Resource Needs: Graduate student needs can be investigated from various perspectives. A institutional perspective could provide valuable insights, for example Lessing and Schulze refer to the South African higher education context, where transformative processes, increased graduate student numbers and the drive for quality and accountability place high demands on the academic environment for information and support to graduate students. Various studies have approached the question on how to deal with graduate students from a supervisor perspective. Another approach to this area of concern would
be to question the current graduate students themselves, as proposed by Lessing and Schulze[38], Lin and Cranton[39] and McApline and Norton[40]. McApline and Norton[41] found that a student voice is seldom heard in research on graduate studies. The project in question will eventually take the institutional perspective, the perspective of the supervisor and that of the student into account, although this research will focus mainly on a student perspective.

Lin and Cranton[39] describe the process of graduate study as growing from a scholarship student to becoming a responsible scholar, which Lovitts[39] refers to as a critical transition. The graduate growth process is not always a fluent and untroubled transition. The growth that takes place by working through what Malfray[42] refers to as a necessary creative tension and the development of independence, critical thinking[43] and creativity[44], are essential elements of graduate development. Lin and Cranton[39] add that students need to be supported in their growth to establish an individual scholarly identity. Lovitts[39] found that graduate students are often ill-prepared to deal with the challenges graduate studies pose to them.

Lessing and Schulze[38] also distinguishes between the support needs of Master’s and doctoral students, where the Master’s student needs to methodologically master the research process and the doctoral candidate is expected to produce more original work and may therefore need more input in developing depth, synthesis and critical ability. All graduate students need to acquire technical competence, analyze data, manage their time and personal responsibilities, and build up a network of peers and expert colleagues. Lessing and Schulze[38] emphasize students’ needs in terms of finding literature, data analysis and interpretation, and interactive learning opportunities. Training in research methods, seminars, response time for students, and supervisory input are deemed important factors in enhancing students’ success.

MacKinnon[40] summarizes the influences on the graduate experience as personal, professional and organizational factors. Graduate studies therefore have both an intellectual and a psychological component that need to be acknowledged. Mackinnon[40] and McApline and Norton[45] therefore argue that graduate students’ needs need to be addressed at institutional, departmental and individual levels. Lovitts[39] include elements in the macro- and microenvironments, as well as individual resources as influences in graduate completion and creative performance. McApline and Norton[45] follow a similar line of thought, but use the departmental context as a point of departure (rather than the individual) and then refer the influences the institutional and societal contexts have on graduate students. They do, however, emphasize the central role of the student in graduate endeavors.

**Postgraduate Research Students’ Needs:** Research is an interactive process and requires the development of social as well as academic skills[35]. A school’s administrative (School of Graduate Study) function is commonly interpreted as referring to managing, operating or directing an organization[46] 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[47], setting up adequate methods of assessing coursework, thesis or dissertation supervision record keeping and project advancement[48,49] and submitting a comprehensive annual progress report to the supervisor[49]. 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[8,50] due to organisational or professional factors. Organisational factors could include policies and procedures established or not established for graduate student supervision[44], 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[44] and should match the personalities of supervisors and students[28,61]. A school must ensure that an optimum student-to-supervisor ratio of less than or equal to 6:1 is established[44]. 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[44]. 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[24].


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The Importance of Effective Resource: There is no doubt that inaccessibility of information and services provided by school, faculty or university contributes to low quality of student's studies. The main responsibility of these institutions is to ensure that the facilities provided are always appropriate. This is to enable students to work in an environment that is conducive and comfortable to study. They should provide good facilities, such as common rooms and a desk in a small shared room, similar to those used by staff member or any other aid in terms of information and services. The benefit in having good facilities is that it can be a factor in students choosing the institution to pursue their study. These days, students are increasingly looking for a high quality work environment, and not just a high quality supervisor. There are circumstances where students face personality clashes, barriers to communication, cultural and language difficulties or personal differences in working approaches. For example, both international and local students perceived different problems at the different phase of their graduate studies. As an educational institution, all of these should be handled effectively to facilitate these students. Good facilities are very important as one of the mechanics for getting the work done.

Delivering quality service, relevant information and support, and appropriate supervisory system have become an important goal for most higher education institution. One of the missions of an organization is to increase organization effectiveness, optimizing department potential through high quality in human resource development program that will bring changes to the entire management. For an excellent educational institution, students are emphasized to have a good knowledge and skills. Research students commonly have a responsibility to enhance the image of university especially as a Research University. However, they are also the customer for the institution that should be taken care of. One of the most essential component in developing a competitive country is the investment in human capital. Investment of human is very vital in order to achieve organizations’ aim. The general purpose of human capital is knowledge gained through education and training in areas of value to a variety of firms. Becker considers education and training to be the most important investment in human capital.

Many institution of higher learning are now trying to understand and achieve an effective resource. There is a prevailing belief that education has entered a new environment in which quality plays an increasingly important role. Feigenbaum believes that quality education is the key factor in invisible competition between countries. Education, in particular to higher education itself, is also being driven towards commercial competition imposed by economic forces. This competition is the result of development of the global education markets on the one hand, and next is the reduction of governmental funds that force public organizations to seek other financial sources. Within this environment, faculties, schools and research centers are expected to create and maintain a vibrant excellent resource to put forward in which graduate students and their supervisors, in collaboration with industry partners and/or funding bodies, collectively build capacity and intellectual capital for the benefit of all. Within this context, concern for quality in higher education is perhaps at an all time high. Being quality minded in education means caring about the goals, needs and interests of the students and other external groups. Moreover, students are aware of their educational rights and are more likely than before to demand competent and accessible resources. Clarity about the support and services are therefore of the utmost importance. In return, it is expected this will increase knowledge and self-quality for good resource. Optimistically, these will lead to realization of the university’s mission of becoming a centre for academic excellence.

Higher Institution has to manage their resources and maneuver their research culture. One of the measures taken by the Ministry of Higher Education to set the quality in higher education is to designate and upgrade certain key universities. It is very clear that since this university has attained the status of a Research University, the existing funding systems and management structures strongly support the research activity since it plays a dominant role in knowledge creation and the dissemination of knowledge, which are crucial for the development of human capital. The aims of these research universities are to develop creative and innovative human resource, develop globally competitive new technological products for the industries of tomorrow and to be the engine of growth, particularly for the fields of science and technology. Currently, most of the research grants are turned into scholarship for graduate studies. The students that are awarded by the scheme known as Fellowship or GRA (Graduate Research Assistant) or RA (Research Assistant) play a major role in the research university. Their needs and problems should be concerned since they are the factors of the research’s success.

Merging the Resource Needs: Phillips and Pugh and Spear agreed that the school should establish a reputation for research and a real commitment to the development of doctoral students. They also stated that it has to provide the students with good facilities. The benefit in having good facilities is that it can be a factor in students choosing the school to pursue their
study. Other issues that the school should emphasize have to do with the mechanics of getting the work done, for example, access to laboratory equipment, library facilities, potential samples and their availability and ease of access, the amount of support from secretarial staff, photocopying facilities and in the case of survey research, the potential for help with postage. These include study cubicles, common room, and desk in a small-shared room similar to those used by staff members. All university or school should offer student e-mail network and access to the internet since personal computer, email and internet technologies are such an integral part of research.

Not surprisingly the contemporary student poses a particular challenge to this sector in terms of their differing needs and wants. Mature age students, for example, view education very much in the same light as any other form of commercial exchange activity. Consequently, they are every bit as demanding in terms of the product purchased and service received in relation to the delivery of that product. They demand the same qualities in their education, as they receive from any other commercial establishment, high quality, convenience, service, and low costs. They compared shop for the service (educational) provider that coordinates with their demands and needs both personally and professionally. Many feel that they are equal to faculty members, and resent traditional passive learning styles, favoring a more personal one-on-one relationship with their educator. In short, valued relationships are perceived as being those, which are both user friendly and convenient, much like the partnership formed between banks and supermarkets and the modern day consumer. Because of their busy and dynamic life style and needs, they expect the educational institution to offer a variety of course, campus and delivery options that are timely, easily accessible and very much user friendly. These trends, combined with the fact that employers increasingly demand a university education as a necessary prerequisite to employment have driven up the need for a higher education as a vital antecedent to career success within today’s society. For example, in Australia alone, university enrolments have risen 125% between 1990 and 1996. With more students holding full and/or part-time jobs, nuances and convenience are major issues that need to be addressed, as well as the quality of the services offered by higher educational institutions, in an attempt to meet their needs. Students’ disposable income levels are being stretched to the limit; meanwhile they desire higher quality and more convenient services for their time and money.

That said, the highly subjective and intangible nature of the educational product, which can be a cumulative measure of service delivery, a post-purchase experience, or an accumulation of tangibles and offerings does make it extremely difficult to evaluate. This, however, should not preclude any worthwhile attempt to measure actual service performance. Education is directly impacted by the provider and is only as effective or inadequate as the professor, or technology used in its delivery. As a service provider the university is defined by the quality of service it provides and within the higher education sector, the services offered and the way in which they are offered now serve as a form of competitive differentiation for educational providers. Often these packages are the main attraction for potential and current students and as universities continue to become more student oriented, student perceptions of higher educational facilities and services are becoming increasingly more important. It is absolutely critical therefore that this sector develops some means of evaluating, tracking and managing student perceptions of service quality. The desire to pursue higher education is constantly increasing. School leavers recognize that higher educational qualifications result in more job options, lower rates of unemployment, and, in most cases, a higher salary than those with a secondary school qualification only. Not only are school leavers entering colleges and universities, but working and mature adults are also entering or returning to higher education. These adults hope to use the higher educational qualification to play a more ambitious role in their organization or society, to fulfill a personal desire to acquire new knowledge and abilities, or respond to a need to develop intellectually.

Earlier studies have indicated that the problems include adapting to the new educational and social environment, pressures of staying away from home, financial pressures, language problem, and lack of friends. Other studies that have examined the problems of international students, grouped them into 11 categories: financial aid, placement services, English language, academic records, health services, sociopersonal, admissions and selection, living/dining services, orientation services, student activities, and religious services.

Malaysia is one of the countries that attract not only local students but also international students for higher education. The Malaysian Government and the institutions of higher learning are striving to attract international students, especially at the graduate level. The institutions make every effort to provide quality education. A wide range of courses are offered. Living costs are generally kept low. English has been made the medium of instruction for science and technology courses. These factors have resulted in Malaysia becoming an attractive destination for international students from various parts of the world. At the end of
2005, it was estimated that there were about 40,000 foreign students studying in Malaysian public and private higher educational institutes. Among the goals of the university are to increase the percentage of international students. To meet this goal, the university provides appropriate academic, recreational, cultural, counseling and informational support for these students.

Among the problems faced by this culturally heterogeneous group of students are those related to information provision and services. These students come from a wide diversity of cultures and have different experiences with libraries in their home countries. Many of them are unfamiliar with electronic resources in their home countries. Yet information is an important resource to these students for educational and personal success. Given the critical importance of information in today’s world, these students need information for various purposes, and university can play an important role in meeting their information needs through their programs, facilities, and services. But, in order to accomplish this task effectively, university must first understand the information and service needs of this group of students.

The need for quality higher education often takes students to out of their home countries. Due to limited places in institutions at home, many students pursue their studies abroad. Students also study abroad to acquire a more global perspective, to develop international attitudes, makes their resumes more attractive, or to further develop their language proficiency. Students also benefit through learning about new customs, holidays, foods, art, music, and politics firsthand. They may also study abroad to advance their studies in specialized areas not available at home. In many developing countries, a foreign degree, especially if earned from certain countries, is considered more prestigious than a local one.

Studying in a foreign country is challenging for many students, because their cultural-educational background may be different from the local students and university staff. These international students also need information for a variety of purposes in their studies, including preparing course assignments and project papers. Wilson noted that information needs are influenced by cultural background, characteristics such as emotional, educational, demographic, social or interpersonal, environmental, and economic intervening variables; and by social context in which the need arises. Mohamed carried out a survey on the information need of foreign women in Malaysia, with special reference to Sudanese community. The findings of the study showed that the main information needs of respondents were related to continuing their education, education of their children, parenting, and concerns about their family health, child-care, tackling youth problems and other every day concerns. Other findings of this study revealed that main barriers of foreign women in meeting their information needs were limitations in Bahasa Melayu and the English language. It needs to be acknowledged that while these students come from diverse backgrounds and cultures, and may be very different in demographic and educational characteristics, they are sufficiently different from the locals to be treated as a separate entity. Faculties, and university administrators, could benefit from an understanding of the information and services needs of this category of students. The literature thus suggests that diversity of students’ background will have needs that are somewhat different from the others.

**Resource Needs on Service in Higher Education:**

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. 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. 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. 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. Firdaus 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.

Firdaus 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\[29\]. 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.

Jusoh et al.\[12\] 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.

Hattie\[24\] and Soutar and McNeil\[65\] 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\[85\]. 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 Owlia and Aspinwall\[83\] 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\[21\].

According to Firdaus\[20\], 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. Lagroen, Seyyed-Hashemi and Leitner\[24\] 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\[87\]. Previous study by Chong\[10\] 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 Parasuraman et al.,\[26\] 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 Parasuraman et al.,[55] 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); 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. Adeo[2] 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 Safaieh and Singh[59], 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%). Soutar and McNeil[63] conducted a pilot study in an attempt to assess service quality in a number of units in a large Australian university. 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.

Summary and Conclusion: As we take in students, the institution has a high responsibility and has students pursuing studies in various disciplines. Given the democratization of education, higher education is no longer the sanctity of the elites but accessible to students from varied backgrounds and from all levels of society. Students would have gained places at the institutions of higher learning with varying entry-level qualifications. Therefore it is essential that they are exposed to the best resource and research culture to ensure that they receive optimum learning processes to help them develop and maximize their capacity and to inspire them so that in turn they develop into the innovative and creative workforce that the nation needs. Higher 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 postgraduate 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 information and support to graduate students, without sacrificing the coherence and generic input needed in any academic program. There will be three approaches proposed here regarding this issue: The first approach is 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;

The second 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; and the third 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.

The learning that takes place during postgraduate studies is a maturing process where students need enthusiasm, strength, support and commitment to keep on their study. Postgraduate student needs to be treated properly without sacrificing the apt and basic input needed by graduate students. Postgraduate students have different resource and support needs at the different phases of graduate studies and that there are various ways in which these needs could (and should)
be met. Providing effective resource and support to postgraduate students is primarily the responsibility of the institution. At the level of the postgraduate studies, students survived independently with the support from the institution. By offering proper service and resource, the process of learning will be more convenient.

REFERENCES