

## **Attrition and Completion Issues in Postgraduate Studies for Student Development**

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### **Abstract**

The range of postgraduate students keep increasing and striving for excellence. Good resources at this level are of vital importance. This culminates support and services offered by university and institution. A recent study in Australia indicated that 60 percent 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 percent [1]. The same study also reported considerable variation in completion rates between institutions. This issue is worrisome if the completion rates become lower and lower. Meanwhile, the government and the institutions is trying to attract more students by making every effort to provide quality education. However, this sometimes are not consistently meet students expectations. They needs certain support and guidance from institution so that they can finish their study within time frame. Thus, a review of literature and discussion concerning the attrition and completion rate in postgraduate studies is hoped to assist the institution and the students to articulate their expectations clearly, and thereby to reduce potential problems and to facilitate the creative process of postgraduate studies.

**Keywords:** Postgraduate Students, Support, Services, Attrition, Completion Rates, Postgraduate Studies

### **1.0 Introduction**

The learning that takes place during postgraduate studies is a maturing process. It must be enhanced with timely and appropriate support. Support and guidance should be provided to postgraduate students without sacrificing the coherence and generic input needed in any academic program. Poor information and services affect the

attrition and completion rates of postgraduate studies. Students undertaking graduate study at universities are under increasing pressure to complete their candidature within particular time frames, 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.

Based on the data gathered by Graduate School of Studies (GSO) of one public university in Malaysia, in 2005 graduate student with thesis (research and coursework) completed their Masters averagely within 2.69 years and Ph.D student completed their Ph.D within 4.84 years averagely where as they could complete it earlier than that. This scenario is worrisome if the duration of their study become longer and longer. The research process should run smoothly if there are adequate and excellent supports by the institution. The concern about higher degree non-completion and time taken to completion has attracted many scholars to explore especially in overseas for example in Canada, UK, USA and Australia. In some cases reported studies have focused on attrition statistics, with some American attrition estimates for doctoral studies being far higher than 50% [2]. However, some university estimates have suggested that attrition over the first several years of candidature is less than 40%. Other studies have suggested that more than one third leave in the first year [3]. At the high end of the scale, some estimates based on cohort studies have been that doctoral candidate attrition overall may be as high as 85% in the USA [2]. At the lower end, Colebatch [4] suggested that completion rates for research degrees in Australia have increased considerably since the 1980s to between 80% and 90% in the mid 1990s. 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 [5]. For the UK, completion rates after 10 years differed by general discipline area with arts/humanities rates being 51%, and sciences cited at 64% [6].

## **2.0 Postgraduate Studies**

Postgraduate studies is a growth process by which students, need to develop as scholars under the thoughtful support and guidance by the institution. Postgraduate students are those that are matured person, building an academic career path after their Bachelor Degree or Higher Education. In this part, the literature will discuss the main factors why postgraduate students' attrition and completion rates become a problem and propose the best solutions for the problems discussed.

Postgraduate 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.

## 2.1 Problems and Barriers in Postgraduate Studies

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 [7]. 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 [8, 9]. Graduate students report anxiety as a result of uncertainty about what is expected of them and procedures such as assessment [10, 11].

Lots of challenges force postgraduate students to deal with such as family commitment, work commitment, finance etc., which may affect their achievements since most of them are working and married students. Most of them either financing their study by themselves or receive a scholarship, it's 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 contributing to this and the major problem is related to the information and services offered by the institution. Their needs in this particular matter are always become a conflict as their journeys through their studies are so independent.

Students from previously disadvantaged backgrounds 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 [12]. 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. [13] 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.

Lessing and Lessing [8] 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 McCarthey [7] 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.

McAlpine and Norton [14] 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. 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 [5].

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.

## **2.2 Resource and Guidance Support**

There is no doubt that inaccessibility of resource and guidance support 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 services and facilities provided are always in an appropriate manner. This is to enable students to work and study in a conducive and comfortable environment. The benefit in having good resource is that it can be a factor in students choosing the institution to pursue their study. There are circumstances where students face personality clashes, barriers to communication, cultural and language difficulties or personal differences in working approaches. 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 in order to become as an excellence centre.

Departments are important sites of learning and change that exist within larger organizations: faculties/schools within universities. 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 [5] 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 [15]. As the level of competitiveness among universities increases, promoting the positives of their own programs and outcomes becomes essential.

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### 2.3 Postgraduate Research Scenario

Research is an interactive process and requires the development of social as well as academic skills [16]. A school's administrative (School of Graduate Study) function is commonly interpreted as referring to managing, operating or directing an organization [17] in order to support students towards the completion of Ph.D. 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 [18], setting up adequate methods of assessing coursework, thesis or dissertation supervision record keeping and project advancement [19, 20] and submitting a comprehensive annual progress report to the supervisor [21]. 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 [19] due to organisational or professional factors. Organisational factors could include policies and procedures established or not established for graduate student supervision [21], 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 [21] and should match the personalities of supervisors and students [22, 23]. A school must ensure that an optimum student-to-supervisor ration of less than or equal to 6:1 is established [21]. 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 [21]. 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 [22].

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Students are central to the graduate undertaking. Yet, theirs is the voice that is least heard [23]. This absence of the student's voice begins with undergraduates [24] 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 [25]. 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 [5].

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#### **2.4 The Requisite of Resource and Guidance Support**

Graduate student resource and guidance needs can be investigated from various perspectives. A institutional perspective could provide valuable insights, for example Lessing and Schulze [12] and Van Tonder et. al [28] 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 [11, 29, 30]. Another approach to this area of concern would be to question the current graduate students themselves, as proposed by Lessing and Schulze [12], Lin and Cranton [31] and McAlpine and Norton [14]. McAlpine and Norton [14] found that a student voice is seldom heard in research on graduate studies.

Lin and Cranton [31] describe the process of graduate study as growing from a scholarship student to becoming a responsible scholar, which Lovitts [10] 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 Malfroy [11] refers to as a necessary creative tension and the development of independence, critical thinking [31] and creativity [10], are essential elements of graduate development. Lin and Cranton [31] add that students need to be supported in their growth to establish an

individual scholarly identity. Lovitts [10] found that graduate students are often ill-prepared to deal with the challenges graduate studies pose to them.

Lessing and Schulze [12] 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 [12] 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 [9] 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 [9] and McAlpine and Norton [14] therefore argue that graduate students' needs need to be addressed at institutional, departmental and individual levels. Lovitts [10] include elements in the macro- and microenvironments, as well as individual resources as influences in graduate completion and creative performance. McAlpine and Norton [14] 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.

### **2.5 Dispense an Effective Resource and Guidance Support**

Delivering quality service, relevant information and support, 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. Investment of human is very vital in order to achieve organizations' aim.

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 [32] 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 [33]. 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 [34].

Being quality minded in education means caring about the goals, needs and interests of the students and other external groups [35]. Moreover, students are aware of their educational rights and are more likely than before to demand competent and accessible supervisors. Clarity about the roles and responsibilities of supervisors and of students is therefore of the utmost importance. In return, it is expected this will increase knowledge and self-quality for good information and supports. Besides, effective supervisory system will become indication to students' accomplishment. The resource of potential supervisor, the information of supervisors' specialized field should be clearly provided. Optimistically, these will lead to realization of the university's mission of becoming a centre for academic excellence.

Phillips and Pugh [16] and Spear [36] 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 [37]. They demand the same qualities in their education, as they receive from any other commercial establishment, high quality, convenience, service, and low costs [38]. They compared shop for the service (educational) provider that coordinates with their demands and needs both personally and professionally [39]. 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 [40]. 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 [41]. 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 makes it extremely difficult to evaluate [42]. 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 [43] 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 [42] and as universities continue to become more student oriented, student perceptions of higher educational facilities and services are becoming increasingly more important [44]. 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 [45]. 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 [46]. 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, socio-personal, admissions and selection, living/dining services, orientation services, student activities, and religious services [47].

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 [45]. 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 [48]. These international students also need information for a variety of purposes in their studies, including preparing course assignments and project papers [49]. Wilson [50] 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.

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 [51]. Besides, the attrition and completion rates could be enhanced. 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 [52]. 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 [53]. 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 [52] 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.

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 about the resource and support offered by institutions of higher learning becomes very important. The outcome will proposed the solution to students' attrition and completion rates.

### **3.0 Summary and Conclusion**

Many factors can be assigned as the major influence in students' completion and attrition rates. This paper refers the main caused of this issue comes from lack of resource and guidance support. Each Educational Institution should provide information and support to graduate students, without sacrificing the coherence and generic input needed in any academic program to ensure that the students' could finish their study on time. There will be two 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.

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 support and services to ensure that they receive optimum learning processes to help them developing and maximizing their capacity and to inspire them so that in turn they develop into the innovative and creative workforce that the nation needs. Today, institutions of higher education are becoming more interesting as a place of knowledge exchange, enhanced with the best resource exist. Students' perceptions of the resource and support experienced have become increasingly important for the development of students-oriented centre.

Previous scholars have stated that graduate students need support from the institution. The institution should realize their weaknesses in their organization. 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. Lack of information and guideline in their studies will bring inconvenient in graduate studies. Therefore it is crucial for institutions of higher learning to maintain and continuously improve their resources and provide the best support to students.

Providing effective resource and guidance 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 providing proper service and resource, the process of learning will be more convenient. 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. This should be catered properly based on students' ability and needs.

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