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Roles and Competencies of Distance Education Tutors in a Public University

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Abstract

This study was conducted to determine the roles and competencies of distance education tutors in public universities. The main objectives of the research were to identify these roles and competencies based on student perceptions, to find out whether there is any significant relationship between selected demographic factors and their roles and competencies as well as to determine whether any gap exists between their required and acquired competencies. The research deployed the survey methodology, where 128 (60.38%) out of 212 respondents completed the distributed questionnaires. The results showed that the "social role" is the most important role for a distance education tutor to perform, while "managerial competencies" are the most important competencies they should possess. The findings indicated that there are significant relationships between the respondents' gender, the distance between their residences and the learning centre, their level of experience with internet tools, their level of interaction with their tutors outside the tutorial sessions and the roles and competencies of their tutors. The study also found that gaps exist between the required and acquired competencies among distance education tutors, with the biggest gap being in "pedagogical competencies" and the smallest in "social competencies".

Abstrak

Kajian ini bertujuan untuk mengenal pasti peranan dan kecekapan tutor pendidikan jarak jauh. Objektif utama kajian ialah menentukan peranan dan kompetensi tutor berdasarkan persepsi pelajar, sama ada terdapat perhubungan yang signifikan di antara faktor-faktor demografi yang terpilih dengan peranan dan kecekapan tutor, dan sama ada terdapat jurang perbezaan di antara kecekapan yang diperlukan dengan tahap kecekapan tutor. Kajian menggunakan kaedah tinjauan, di mana 128 (60.38%) dari 212 responden telah melengkapkan borang soal selidik yang telah diedarkan. Hasil kajian menunjukkan "peranan sosial" merupakan

peranan yang terpenting yang perlu dimainkan oleh tutor, manakala "kecekapan pengurusan" merupakan kecekapan yang paling penting yang perlu ada pada tutor. Kajian juga mendapati terdapatnya perhubungan yang signifikan di antara beberapa item demografi dengan peranan dan kecekapan tutor iaitu jantina, jarak dari rumah responden ke pusat pengajian, tahap pengalaman responden tentang internet dan tahap interaksi responden dengan tutor di luar kuliah. Kajian juga menunjukkan wujudnya jurang di antara kecekapan yang perlu ada dengan tahap kecekapan tutor, dengan jurang yang terbesar adalah "kecekapan pedagogi", manakala jurang yang terkecil pula ialah "kecekapan sosial".

Introduction

Distance education is not a recent phenomenon to Malaysia. Many individuals, especially those who are employed and aspire to be more successful in their career development, have painstakingly worked for external degrees offered by universities of repute such as the University of London, United Kingdom, as early as the 1960s if not earlier (Cheah, 2004; Syed Othman, 2002). The advantages of learning via distance education include factors such as flexibility, timely distribution, scalability and multi-modality of learning resources which help many adult learners balance the demands of work and family in their pursuit of further education. However, the fundamental concept for distance education still remains the same as that of conventional classroom education. The only difference is that the hallmark of distance education is the separation of student and teacher in space and/or time (Gorsky & Caspi, 2005; Schrum & Ohler, 2005; Sadik, 2000; Sherry, 1996; Moore & Kearsley, 1996).

However, facilitating learning in distance education requires the use of different knowledge, skills and attitudes from what are normally required in a conventional classroom. In distance education, the assistance of tutors is necessary to help in facilitating learning and these tutors are required to understand the characteristics and needs of distance education students. The tutors have to work effectively as skilful facilitators, mentors, motivators, interpreters and content providers (Mehrotta, Hollister & McGahey, 2001).

The roles and competencies possessed by tutors are accordingly important elements in distance education (Egan & Akdere, 2005; Smith, 2005; Williams, 2003; Thach & Murphy, 1995). Through the identification of specific roles and competencies within a discipline, they can serve as useful guides to effective professional development.

What are roles and competencies? According to McLagan (1989), a role is a major area of functioning which encompasses any number of competencies and outputs that a person can perform. A role is a part played by an individual in meeting his/her objectives by working competently within the context of an organisation's objectives, structure and processes. On the other hand, a competency is a broad concept that describes individual's ability. It involves a set of knowledge, skills, values and attitudes that is critical in producing key outputs (McLagan, 1989). It is the ability of the individual to use a specific set of knowledge and skills in performing some task given to him/her (Swanson & Holton, 2001). Competencies indicate what an individual should be able to do in order to demonstrate that he/she has achieved the standards set, and they provide the foundation upon which related assessment are developed (Melton, 1997).

Thach (1994) was among the first researchers who conducted a study to identify the roles, outputs and competencies needed by distance education tutors in the United States and Canada and laid the groundwork for competency studies in distance education (Williams, 2003). In Thach's study (Thach & Murphy, 1995; Thach, 1994), the McLagan and McCullough competency model was used to identify the roles, outputs and competencies for tutors. Thach identified 11 of the most important roles of tutors in distance education – as instructor, administrator, instructional designer, technology expert, support staff, technician, librarian, graphic designer, evaluation specialist, site facilitator and editor. Among these roles, the roles of instructor, administrator, instructional designer and technology expert are the most critical ones played by tutors.

The research indicated that both communication and technical skills are important in the field of distance education. Thach (1994) concluded that the ten most important competencies for tutors are interpersonal communication, planning, collaboration, English proficiency, writing, organising, feedback, knowledge of distance education, basic technology

knowledge and technology accessing knowledge. Williams (2003) identified 13 roles needed to implement and manage distance education. He then added two new roles, namely, as a change agent and trainer.

Goodyear et al. (2001) identified eight major roles of tutors based on feedback of practitioners and researchers from the United States, United Kingdom and other European countries. These include their roles as researcher, content facilitator, technologist, designer, manager, process facilitator, adviser/counsellor and assessor.

Goodyear et al. (2001) also identified 66 competencies for tutors. In another research, Smith (2005) indicated that tutors play a multi-dimensional role which can be divided into four major roles, these being those in administration, facilitation, technical support and evaluation. He also identified 51 competencies for tutors.

In Malaysia, studies have indicated that tutors are important in ensuring that distance education programmes are effective (Nik Aziah & Nik Suryani, 2005; Azhari et al., 2001; 2003; Mokhtar et al., 2003; Azizan, 2001; Abu Daud et al., 2001; Daing Zaidah & Abu Daud, 1997). Numerous other studies conducted are related to distance education but do not focus on the roles and competencies of tutors in distance education.

The existing literature indicates that studies on the roles and competencies of distance education tutors have been undertaken by researchers outside Malaysia. However, most of the studies conducted on tutor roles and competencies did not focus on student perceptions. Thus this study was conducted to identify the perceptions of distance education students vis-a-vis the roles and competencies of their tutors, using Berge's study (1995) as the research framework. In the study, the tutor roles were categorised into four major categories: pedagogical roles, social roles, managerial roles and technical roles.

This study was conducted primarily to answer the following question: what are the roles and competencies of distance education tutors as perceived by students?

Research Objectives

The general objective of this study was to identify the roles and competencies of distance education tutors as perceived by students. More specifically, the study had the following objectives:

- To identify the roles of tutors.
- To identify the competencies of tutors.
- To determine whether there is any significant relationship between selected demographic factors and the roles and competencies of tutors.
- To identify whether there are any gap exists between the required and acquired competencies of tutors.

Methodology

As dictated by the research objectives, a quantitative research methodology using the survey questionnaire was deployed. Accordingly, the questions and statements in the questionnaire were grouped into three sections. The first section listed questions on the tutor roles, the second section on their competencies and the last section on the demographic factors of the students. These students were requested to rate the importance of various roles and competencies performed by their tutors using a 5-point Likert scale.

The sample for this research was 212 students who are now studying in learning centres provided by the Center for External Education or *Pusat Pendidikan Luar* (PPL), Universiti Putra Malaysia (UPM) in the states of Sabah and Sarawak. The respondents were selected through systematic sampling from the list provided by PPL, UPM. A total of 136 (64.15%) responses was received from these learning centres. However, after rejecting incomplete responses, the total number of respondents obtained was 128, with the response rate of 60.38%. For data analysis, non-parametric statistics, including the means, standard deviation, frequency distribution, T-Test, ANOVA and Pearson Product-Moment Correlation, were deployed.

Findings and Discussion

The discussion on the findings of this study was divided into several sections. These were the demographic factors of the respondents, their perceptions of the roles and competencies of their tutors, the relationship between selected demographic factors and the roles and competencies of the tutors and the required and acquired competencies of these tutors.

The Demographic Factors of Respondents

The demographic factors of the respondents are summarised in Table 1. The results indicated that there were slightly more females (57.00%) than males (43.00%) and more respondents in their thirties (61.70%) compared to those in their twenties (24.20%) or forties (14.10%); the majority (73.40%) of them were married.

Table 1 Demographic factors of the respondents

Demographic factors	Frequency (*n*=128)	Percentage (%)
Gender		
Male	55	43.00
Female	73	57.00
Age		
20 – 29	31	24.20
30 – 39	79	61.70
40 – 49	18	14.10
Mean: 31.3		
SD: 5.4		
Personal Status		
Married	94	73.40
Single	34	26.60

The findings are similar to those indicated in the research done by Garland and Martin (2005) and Sikora (2002), where more females than males are likely to participate in distance education. The findings indicated that students are relatively young with an average age of 33.34 years old. The results showed that personal characteristics, such as age and marital status, are associated with a higher rate of participation in distance education; these results support the findings of a previous study by Sikora (2002).

The findings of the study also showed that distance is not a barrier for those who wish to study in distance education programmes (Table 2). This is because formal higher education is not easily available for working adults in Sabah and Sarawak and thus, they have to rely on distance education for further studies (Santhi et al., 2005).

Table 2 Distance between respondents' residences and learning centres

Learning centre	Distance (in km)					Total
	1–50	51–100	101–150	151–200	>200	(*n*=128)
Kuching	37	1	0	0	0	38
Sibu	10	2	1	10	4	27
Bintulu	4	0	0	0	0	4
Miri	0	0	1	0	3	4
Kota Kinabalu 1	3	7	9	4	1	24
Kota Kinabalu 2	3	1	0	1	0	5
Sandakan	0	5	2	0	0	7
Tawau	16	0	3	0	0	19
Total	**73**	**16**	**16**	**15**	**8**	**128**

When respondents were asked about the level of their interaction with the tutors, a significant proportion (42.20%) said they were sometimes in contact, about a quarter (24.20%) indicated that they had frequent contact while a small proportion (13.30%) had very little contact. Only about a fifth (20.30%) of them commented negatively about making contact with the tutors. The results of this study indicated that the supervision provided by the distance education tutors is still essential to the learners. Interaction is an essential characteristic of success for those undertaking distance education courses.

When asked about their experiences with internet tools, a majority (75.80%) of the respondents indicated that they had an intermediate level of experience. Only a small proportion (8.60%) had an advance level of experience while a slightly higher proportion (15.60%) said that they were beginners in using internet tools. The internet tools included applications such as e-mail, newsgroup and others.

Roles and Competencies of Tutors

What are the roles and competencies of distance education tutors as perceived by the students? This section provides the analysis of the responses to the question.

Roles of distance education tutors

Based on the analysis of the data, the research findings indicated that the "social role" is the most important role a distance education tutor should perform (mean = 28.16), followed by the "technical role" (mean = 27.86), the "pedagogical role" (mean = 27.82), and finally, the "managerial role" (mean = 27.5). See Table 3.

Table 3 Importance of roles of distance education tutors

Rank	Roles of Distance Education Tutors	Means (n=128)	SD
1	Social Role	28.16	4.546
2	Technical Role	27.86	4.791
3	Pedagogical Role	27.82	4.694
4	Managerial Role	27.53	4.863

The distance education students perceived that it is important for their tutors to perform the social role effectively because the expertise in human interaction will help the tutors to deal satisfactorily with all kind of situations. Furthermore, effective communication between students and tutors will assist, support and motivate the former in their studies.

Although the students perceived that the most important role played by the tutors is the social role, equal attention should also be given to their pedagogical, managerial and technical roles. The results indicated that the tutors should perform multi-functional roles. Therefore, it is important for the tutors to equip themselves with the entire range of competencies required by them when they facilitate the teaching of distance education courses. Seven elements were listed for each of the pedagogical, social, managerial and technical roles listed in the questionnaire. The rank order was established based on the average of the means received from the scores for each role and competency. Of the top ten roles, three each were

related to the social and managerial roles, two were related to the pedagogical roles and two to the technical roles. From the ranking, two social roles were ranked at the top among all the roles performed by the tutors. Human interaction is always considered the most essential element in a distance education programme. This finding supported those of previous studies, where increased interaction in distance education courses is associated with higher achievement and student satisfaction (Roblyer & Wiencke, 2003; Moore & Kearsley, 1996).

Competencies of tutors

Regarding the competencies of the tutors, Table 4 shows that students perceived the "managerial competencies" as their top choice (mean = 31.42), followed by the "pedagogical competencies" (mean = 31.31), "social competencies" (mean = 31.11) and "technical competencies" (mean = 30.78). The slight difference in the mean score showed for the top three competencies indicated that these three competencies are equally important for a tutor who facilitates teaching via distance education.

Table 4 Level of competencies of distance education tutors

Rank	Competencies of Distance Education Tutors	Means (n=128)	Total SD
1	Managerial Competencies	31.42	3.993
2	Pedagogical Competencies	31.31	3.621
3	Social Competencies	31.11	3.949
4	Technical Competencies	30.78	4.566

Twenty-eight competencies were listed for students to rate their importance, seven each for the managerial, pedagogical, social and technical roles. The rankings showed that of the top ten competencies, four were related to managerial competencies, three to pedagogical competencies, two to technical competencies and only one to social competencies. See Table 5.

The findings showed that all the top three competencies had the same means, which is 4.58. They were managerial competencies on "teaching language proficiency" and "feedback skills" and pedagogical competencies on "content knowledge". All these three competencies were

in the top list because they constitute the main elements in distance education courses. The findings of this study were supported by those of previous studies (Smith, 2005; William, 2003; Thach & Murphy, 1995; Thach, 1994). In this study, the results showed that technical competencies are not very important to distance education students who study in Sabah and Sarawak when compared to other competencies. The rankings of all competencies are given in Table 5.

Table 5 Ranking order of the competencies of distance education tutors

Rank	Skills and Knowledge	Role	Mean	SD (n=128)
1	Teaching language proficiency	Managerial	4.6	0.623
2	Feedback skills	Managerial	4.6	0.635
3	Content knowledge	Pedagogical	4.6	0.647
4	Knowledge of distance education	Pedagogical	4.6	0.649
5	Facilitation (discussion) skills	Social	4.6	0.612
6	Teaching strategies/models	Managerial	4.5	0.675
7	Select appropriate media according to intended learning outcomes	Technical	4.5	0.720
8	Evaluation skills	Pedagogical	4.5	0.640
9	Data and information analysis skills	Technical	4.5	0.710
10	Strategic planning skills	Managerial	4.5	0.687
11	Presentation skills	Managerial	4.5	0.710
12	General education theory	Pedagogical	4.5	0.651
13	Collaboration/teamwork skills	Social	4.5	0.709
14	Interpersonal communication skills	Social	4.5	0.674
15	Questioning skills	Social	4.4	0.673
16	Adult learning theory	Pedagogical	4.4	0.684
17	Critical thinking skills	Pedagogical	4.44	0.707
18	Modelling of attitudes/skills	Social	4.43	0.695
19	Sense of humour	Social	4.42	0.749
20	Software skills (Microsoft Words, Excel, Power Point, etc.)	Technical	4.42	0.780
21	Computer network skills (e-mail, search engine)	Technical	4.41	0.758
22	Skills with internet tools for instruction	Technical	4.38	0.775
23	Writing skills	Managerial	4.37	0.676
24	Organisational skills	Managerial	4.37	0.721
25	Negotiation skills	Social	4.35	0.769
26	Handling teaching media (Examples: OHP, AV, white board)	Technical	4.34	0.818
27	Library research skills	Pedagogical	4.32	0.793
28	Computer hardware skills	Technical	4.19	0.801

Relationship between Selected Demographic Factors and Roles and Competencies of Tutors

The statistical relationship between selected variables and the roles and competencies of the tutors was determined using the Analysis of Variance (ANOVA) and Product-Moment Correlation. The analyses were conducted to test whether there was a significant relationship between the selected variables and the roles and competencies of the tutors.

Relationship between selected variables and roles of tutors

The ANOVA test showed that there were significant differences, $F = 2.959$, $p = 0.040$, in the managerial role selection among the students who lived between 51 – 100 km from their learning centre and those who lived further away, that is, more than 200 km from their centres. The results showed that these two groups of students had emphasised the managerial role more often than the other groups of students. The distance between the students' residences and their learning centres brought different perceptions on the roles selected by them. Besides that, the ANOVA test also indicated that there were significant differences in the social role ($F = 3.286$, $p = 0.041$) and the managerial role ($F = 3.228$, $p = 0.043$), for students who were beginners and students who had an intermediate level of experience with the internet tools.

The result from the ANOVA test also showed that there were significant differences, $F = 2.516$, $p = 0.045$, in the managerial role selected among students who had some interactions and very frequent interactions with their distance education tutors outside the tutorial sessions. For other selected variables, the results indicated that there was no significant difference in perception towards the roles of the tutors among students from various demographic backgrounds.

To determine whether there is any significant relationship between the roles played by the distance education tutors and their students' level of interaction with them, the Pearson Product-Moment Correlation test was used. The result showed that there is positive relationship between the students' level of interaction with their tutors outside the tutorial session and social roles ($r = 0.190$, $p = 0.031$) and also the managerial roles played by the tutors ($r = 0.190$, $p = 0.032$). In other words, when the

students' level of interaction with their tutors outside the tutorial session is high, the students perceive that it is important for their tutors to perform well in these two roles.

The findings indicated that students perceive that a tutor should perform multi-functional roles. However, all these roles are unlikely to have equal importance in any specific instance of distance education instruction, but will depend on the situation and environment. The findings were supported by previous studies conducted by Goodyear et al. (2001). Therefore, it is important for the tutors to equip themselves with a range of competency combinations from a number of different domains to ensure that they can perform well in the roles assigned to them.

Relationship between selected variables and competencies of tutors

The T-test was conducted to see whether there is a significant difference between the respondents' demographic factors in relation to their perception regarding the importance of the competencies of the tutors. The results (Table 6) showed that there is a significant difference between the students' gender and their perception towards the importance of these competencies. These findings indicated that compared to male students, female students perceive their tutors' pedagogical competencies, managerial competencies and technical competencies as highly important to them. Where social competencies are concerned, the test showed that the value of $p = 0.051$ was bigger than alpha = 0.05, meaning that, there is no significant difference in perception towards the importance of the tutors' social competencies between males and females.

Table 6 Results of T-test analysis on selected variables and competencies of tutors

Variable		n (128)	Mean	Std. Deviation	t	p
Pedagogical competencies						
Gender:	Male	55	30.38	3.639	−2.579	0.011
	Female	73	32.01	3.470		
Social competencies						
Gender:	Male	55	30.33	3.897	−1.967	0.051
	Female	73	31.70	3.911		
Managerial competencies						
Gender:	Male	55	30.36	4.377	−2.664	0.009
	Female	73	32.22	3.501		
Technical competencies						
Gender:	Male	55	29.65	4.922	−2.471	0.015
	Female	73	31.63	4.111		

For other variables, the tests were conducted using ANOVA. The result showed there is no significant difference between most of the variables selected and the competencies of the tutors. However, the results indicated that there is a significant difference between the distance of the students' residences vis-a-vis their learning centres and the social competencies of their tutors. The results showed that students who lived less than 100 km away and those who lived more than 200 km away selected social competencies as important competencies when compared to other groups of students. The students' experience with internet tools also showed that there are significant differences in the selection of managerial competencies ($F = 3.656$, $p = 0.029$) and technical competencies ($F = 4.651$, $p = 0.011$) among the students. Students who are beginners and those with an intermediate level of experience with internet tools perceive that it is important for the tutors to equip themselves with these competencies.

To determine whether there is any significant relationship between tutors' competencies and the students' level of interaction with these tutors, the Pearson Product Moment Correlation test was used. The results showed that there is a slight positive relationship outside the tutorial session and social competencies ($r = 0.175$, $p = 0.048$) as well as managerial competencies ($r = 0.192$, $p = 0.030$) at 0.05 level of significance. The

results also showed that there is a low correlation between the students' level of interaction with tutors and technical competencies (r = 0.213, p = 0.016). The findings indicated that when the students' level of interaction with their tutors is high, the students perceive that the tutors would be competent in social, managerial and technical competencies.

The findings showed that all competencies are essential to tutors to facilitate in the teaching of distance education programmes. The competencies provide tutors with opportunities to help the development of the students, get feedback from them, plan for effective learning and guide them in their learning process.

Tutors' Required and Acquired Competencies

The analysis of data showed that gaps exist between the competencies required and acquired by tutors. The findings indicated that biggest gap exists in "pedagogical competencies", followed by "technical competencies", "managerial competencies", and the smallest gap is in "social competencies" (Figure 1).

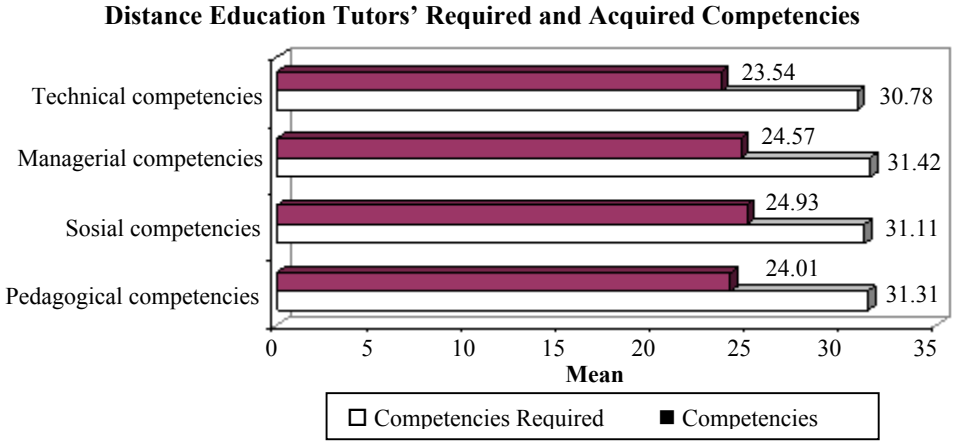

Figure 1 The required and acquired competencies of distance education tutors

The competencies presented by tutors were generally in the category of a moderate level of competency (Table 7). In this category, about 34.38% fell into the category of a "moderate to high" level of competency, 26.56% fell into the "moderate" level and 6.25% fell into the "moderate to low" level of competency. Only 32.03% were categorised in the high level of competency. As competence is related to ability, it is important for tutors to keep up with the rapidly changing environment in distance education and always make effort to acquire necessary competencies. A high level of competency on the part of the tutors has a direct relationship with the success of a distance education programme facilitated by them.

Table 7 Level of competencies acquired by the distance education tutors

Level of competencies	Frequency (n=128)	Percentage (%)
Low (1.00–2.33)	**1**	**0.78**
Low-Low competency	0	0.00
Low-Moderate competency	0	0.00
Low-High competency	1	0.78
Moderate (2.34–3.67)	**86**	**67.19**
Moderate-Low competency	8	6.25
Moderate-Moderate competency	34	26.56
Moderate-High competency	44	34.38
High (3.68–5.00)	**41**	**32.03**
High-Low competency	28	21.88
High-Moderate competency	8	6.25
High-High competency	5	3.90

Conclusion and Recommendations

The findings of this study identified the emerging roles and competencies preformed by distance education tutors in facilitating distance education courses. The conclusions of this study were as follows:

- The result showed that the social role is the most important role for the distance education tutors. While the social role is very important, the technical, pedagogical and managerial roles are also seen as equally important. Of the ten most important roles identified, three

each are related to the social and managerial roles and two to the pedagogical roles.

- In the case of the competencies of the tutors, the research findings indicated that managerial, pedagogical and social competencies are equally important for tutors when facilitating distance education. The top ten competencies identified consists of four managerial competencies, three pedagogical competencies, two technical competencies and one social competencies. The findings also indicated that tutors play multi-functional roles at the same time. Thus, tutors should equip themselves with a range of competencies to ensure that they are competent enough in facilitating quality distance education programmes.

- The results also showed that most of the tutors have only moderate levels of competencies. There are gaps between their required and acquired competencies in the four areas of pedagogical, technical, managerial and social competencies.

- The findings indicated that there is a significant relationship between the respondents' gender, distance between their residences and the learning centres, their level of experience with internet tools, the level of interaction with tutors outside the tutorial sessions vis-a-vis the roles and competencies of tutors. Thus, it is essential for tutors to take these factors into consideration when facilitating distance education programmes.

By identifying these tutors' roles and competencies, the research provides valuable information to distance education institutions and the practitioners of distance education.

Moving from traditional methods of teaching to distance education instruction often creates dramatic shifts in perspective for distance education tutors and the students. The roles and competencies established by the distance education tutors will continue to change in response to shifts in technology as well as political and institutional factors such as government policies and the quality of education.

As a result of this research, the following recommendations are made:

- To facilitate teaching via distance education effectively, tutors should make an effort to acquire expertise in the roles and competencies identified in this research; all the roles and competencies identified are based on previous research conducted by experts in the field and on the responses of student who are currently studying in distance education programmes.

- Since some of the demographic factors influence students in their decision making, the distance education tutors should develop different methods and strategies to maximise the achievement of the students when facilitating the learning process. They should study the background and past experiences of their students in order to understand and take into account the different needs and priorities of different groups of students.

- As interaction in distance education is an essential characteristic of successful distance education courses, tutors should put more effort into increasing this interaction between students-tutors by using various types of instructional design methods in order to reduce any transactional distance that may occur.

- Training should be provided to tutors. Distance education institutions can utilise knowledge on their desired roles and competencies to develop training programmes. The institutions should tailor the specific competencies according to the environment and needs of the institution and their students.

- Distance education institutions should consider the roles and competencies identified as a guide in the selection of tutors.

- Less experienced tutors must have the support of more experienced tutors who are competent to advise them, as well as institutional, administrative and technical support.

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