

How the transactional distance can be reduced between the teacher, the learner and the university?

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Table of Contents

1.0 Introduction.....	3
2.0 The Theory of Moore	3
2.1 Dialogue	3
2.2 Structure	4
2.3 Learner Autonomy.....	4
2.4 Summary of variables' relationship.....	4
3.0 Reducing Transactional Distance Theory	5
3.1 Transactional Distance Overcoming Method and Moore's Theory	5
3.2 Strategies for lessening transactional distance.....	6
3.3 The Process of Course Design	7
4.0 Conclusion	7
5.0 References.....	9

1.0 Introduction

Many studies have been conducted to describe distance education. For some researchers, it is a novel discipline and for others, it is related to traditional educational attempt. During the last two decades, similar to communication technologies development, various theories have been developed for seeking the precise definition for an accomplished framework for viewing distance education paradigm. Many theoreticians such as Moore (1972 and1993), Keegan (1986) and Garrison (1989) have contributed greatly to clarify the concept of distance education. However, to provide a detailed explanation would stray the topic somewhere else; therefore, the transactional distance would be discussed according to teacher, learner and university's perspective.

2.0 The Theory of Moore

Moore (1972) is known for his work for describing distance education and developing a theory about its functional mechanisms. This theory evolves from basic approaches related to the autonomy of learner and independent learning into interrelated multidimensional definitions, schemas and the known construct “Theory of Transactional Distance”. According to transactional distance theory, the deepest impact is not the temporal or physical distance that separates learner and instructor; instead, it is pedagogy. Moore (1993) stated that transactional distance is a communication and psychological space that should be minimized or crossed; hence, between the inputs of the instructor and learner, this space is a crucial misunderstanding. In a distance education programme, the transactional distance's degree is based on three core variables: structure, dialogue and learner autonomy. Moore (1993) defined them as:

2.1 Dialogue

Every party considers dialoguing a valuable, purposeful and constructive effort. Therefore, during a dialogue each party is an active and respectable listener; hence, everybody takes part, contributes and develops through the contribution of other stakeholders. For an educational relationship, the dialogue's direction is towards enhanced understanding of the students.

2.2 Structure

The educational objectives, evaluation methods and teaching strategies of the programme have some flexibility or rigidity and structure expresses them. Thence, it defines the scope and strength of an educational programme and it describes whether it could be responsive or it could accommodate the individual needs of each learner or not.

2.3 Learner Autonomy

It is the scope and range of learning/teaching association. Moreover, the teacher does not determine the goals, the evaluative decisions regarding the learning programmes and the learning experience and the learner do all that.

2.4 Summary of variables' relationship

An inverse proportion has been observed in transactional distance and dialogue because when one of them increases the other decreases. In accordance with Moore (1993)' statement, the extent's one major determinant is that whether dialogue between teacher and learner is helpful regarding overcoming transactional distance and to what extent it has been achieved.

Similarly, the extent of dialogue is decreased by the increased structure programme and it inversely increases the transactional distance's extent. Moore (1993) claimed that when learner teacher dialogue is non-existent along with a highly structured programme, the transactional distance between teacher and learner could be high. According to Moore (1993), the autonomy of learner and transactional distance are proportional directly. If the dialogue is low and the structure is high during a programme, the learner has to exercise more autonomy. Hence, the above-mentioned discussion suggests that for reducing the transactional distance between the stakeholders (teacher, learner and university) the dialogue is the best possible and feasible method.

Researchers have identified and described three types of dialogue: (1) discussion in class; (2) out of class and face-to-face interaction; and (3) electronic communication out of class. The occurrence's frequency helps for the measurement of dialogue. In addition, structure's two dimensions have been described and recognized. First, the organisation of course designing that is inclusive of requirements, deadlines, grading, choice of readings, objectives and attendance; second, course implementation of delivery that is inclusive pace,

learning activities and teaching methods. According to the perceptions of learners including the dimensions of 'extremely rigid' and 'extremely flexible' are all significant (Moore, 1993).

3.0 Reducing Transactional Distance Theory

Moore (1993) stated that a learner is influenced, if he/she is in a distance education environment. However, the transactional distance exists in all educational setups, even in the face-to-face learning environment it exists. Hence, transitional distance is not a geographical distance; instead, it is the extent of interaction between the learner and the teacher, the environment of learning and instructional methods between learners and teachers. Within the learner, autonomy exists to an extent and its level decides the degree of distance that a student could feel. For instance, learners that have low levels of autonomy are more dependent on the instructor regarding guidance through communication, structure of course and they show more dependency during the entire learning process; on the contrary, learners that have a high level of autonomy have a self-conceptualisation of being self-directed and they are independent emotionally (Chen, 2001).

In addition, Moore also agreed that different concepts of learning and teaching are applicable in an online environment. However, he notified one problem that if between student and the teacher the distance and the student are exceptional then there is a requirement of alternative teaching methods and traditional expository teaching can be significantly transformed (Kanuka, Collet and Caswell, 2002). Furthermore, the theory of Moore does not consider the distance as a geographic phenomenon but it hypothesizes it as pedagogical distance. Hence, that is the distance of perspectives, point of views and understandings and this may create potential misunderstandings' psychological space or communication gap (Chen, 2001). Furthermore, he suggested that owing to the occurrence of planned, effective and deliberate learning, this distance must be overcome.

3.1 Transactional Distance Overcoming Method and Moore's Theory

If Moore's given variables dialogue, structure and learner autonomy is measured effectively and precisely then the reduction in distance is possible. Therefore, for communicating the variable's magnitude and allowing their inferences and effects regarding their association to be studied, trusted and valid measurement techniques ought to be

implemented. Moore's theory clarifies that rich learning environments provide combined guidance and directions for both dialogue and course design; thus, they have a transactional distance of low level. On the contrary, when learners make their own decisions and have less communication through dialogue and learners are using their own devices then the transactional distance is high. Nevertheless, the learner's level of autonomy is important in the above-mentioned scenarios. For instance, the preference of more dependent learners would be programmes inclusive of different degrees of structures and more dialogue comprising of relationships' closeness of the learner and the instructor; on the contrary, as autonomous learner students with high competency would be highly comfortable with little structured dialogic programmes (Muller, 2003). Thereby, the students would desire less structure if their relationships with the instructors were close. Muller further states that nowadays, many online courses and degrees are being offered by many institutions and universities and almost all of them have a significant transactional distance; therefore, to overcome the issues related to transactional distance should be minimized by employing alternative teaching strategies. In addition, the learning experiences can be enhanced potentially by implementing, in the specific educational environment, useful tools and methods.

3.2 Strategies for lessening transactional distance

During 1995 and 1999, the Apaja Internet Service and HEVI (Helsinki Virtual Open University) conducted a factor analysis study. This study exhibited disadvantages of virtual environment learning. This study identified that students' interaction with other students is not possible in a virtual environment and this is the most crucial factor (Tirri and Nevgi, 2000). Apart from this factor, other detrimental factors are difficulties with the whole environment, communication difficulties and lack of personal guidance (this is the structural component of the transactional distance theory). Nevertheless, according to Hirumi and Bermudez (1996) and Sandoe (2005), the distance courses can be transformed into more interactive as compare to traditional courses if the design of the instruction is appropriate. Furthermore, by implementing timely feedback system that could help in understanding the requirements of the students that could be personal and related to course, distance learning can be improved; thus, the transactional distance can be minimized at the lowest level. Besides, the study of Malone et al (1997) highlighted that both the universities/institutions and students have a joint responsibility,

for the improvement, if the course is offered in the virtual environment. The responsibility of students is to ask for more clarifications and to provide timely feedback if required and the responsibility of the university/institution is to change the design of the courses along with the transformation of teaching strategies by increasing maximum interaction and by realizing the advantages of technology.

3.3 The Process of Course Design

For determining the structure variable components that are required for a course, the process of instructional course design is significantly important. There exist various Instructional System Design (ISD); however, most of them are related to the generic ADDIE (Analysis, Design, Development, Implementation and Evaluation) Model. The subsequent step is fed by each step. Without mentioning the study of Dick, Carey and Carey (2006), the discussion about instructional design seems incomplete. According to them, every component is highly important for the success of the learner and it is facilitated by the systematic process of instruction. The variables of the design process are related to the variables of the transactional distance theory. For the occurrence of the learning, the instructional system works. Moreover, in any learning environment, some components exist in any form and capacity. These components of the system are course materials, the content, the instructor and the learner. Logically, technology has provided the solutions for overcoming the issues related to the geographical distance between the learner and the instructor. For the improvement of the designing process related to transactional learning, Dick, Carey and Carey (2006) two questions 'What is' and 'What should be' must be answered. In online environment 'what is' suggests the review of different available tools for facilitating the instructions. However, 'what should be' is related to equipment such as resources, hardware and software for all the stakeholders.

4.0 Conclusion

Though many critics do not consider Moore's theory highly important, yet it reveals that transactional distance is not a geographical factor; instead, it is the gap of communication, dialogue, the inefficiency of structure and levels of students' autonomy. In addition, the theory justifies the importance of dialogue with the transactional educational environment. Malone et al (1997) rightfully recognized that transactional distance could be improved if the learners and

instructors take joint responsibility. Similarly, the offered solution of Dick, Carey and Carey (2006) that proposes the transformation of designing process is very practical and effective. Therefore, nowadays, universities and other higher education institutions are using web-based instruction and responding rapidly to increasing distance education programmes and opportunities.

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