**Conceptual and Technical Framework of Distance Education**

**Historical Perspective of Conceptual frame work in DE**

It was Jerome Blumer whose work formed basis for the conceptual frame work in DE. Blumer (1969), defined elements of conceptual frame work as, **“ Human beings are active, living organisms. It is important to note that interaction is interaction between actors and not factors”.** Many of the researchers such as; Varasida & Chamberlain, Vrasidas & McIsaac taken this conceptualization as a set of concepts that can be used to think about distance education (Vrasidas & Chamberlain, 2002; Vrasidas & McIsaac,1999; Vrasidas, 2002). Dewey (1938) argued that education is based on the interaction of an individual’s external and internal conditions. Blumer conceptual framework also states the same as he is also advocate of the interaction theory.

The framework consists of the following categories: ***context*** (e.g., **institutional policies, teacher, and technology, content), structure, learner control, social presence, feedback, dialogue, and interaction.** Teacher and technology are the two most important components of context since they shape the structure of the learning environment in ways that will allow learners to construct knowledge and meaning alone and in collaboration with teachers and peers.

**Context**

The context of interaction in distance education consists, of institutional and departmental policies, technologies employed, the teacher, number of students enrolled in a program, and course content, among others.

**Policies and Curricula**

Policies and curricula will influence the teacher's selection of structure and the content of the course.

**The Content**

The content of an online course is an important component of the context of interaction, and it influences the structure of the course. Some content lends itself to certain kinds of interactions and instructional approaches (Eastmond & Ziegahn, 1995; Jorgenson, Joshi, & Monroe, 1996; Moore, 1991).

**Teacher’s Philosophy of teaching**

Teachers' philosophies of education and their epistemological beliefs will be reflected in their approach to teaching and structure of the course. What strategies they employ, how enthusiastic they are about the subject matter, the nature of the learning tasks they select and organize, and their attitude about the mediating technology will also have an impact on interaction (Anderson, Rourke, Garrison, & Archer, 2001; Berge, 1995; Goodyear, Salmon, Spector, 3).

**Interaction in Distance Education**

Four types of interaction were identified in distance education literature:

* Learner content
* Learner-teacher
* Learner-learner
* Learner-interface (Hillman st al., 1994; Moore, 1989).

**Learner-content interaction**

Learner-content interaction is the fundamental form of interaction on which all education is based. Learning will occur when learners interact with some content. Content is found, among other places, in books, objects from the environment, abstract ideas, problems to be solved, videotapes, computer programs, and websites.

**The learner-teacher interaction**

The learner-teacher interaction can take the form of the teacher delivering instruction, lecturing, and providing support, encouragement, and feedback to learners. The learner might be interacting with the instructor by asking questions, submitting homework, and discussing a problem. The learner-learner/peers interaction takes place when learners collaborate with peers on projects and discuss ideas.

For any of the three types of interaction to take place (learner-teacher, learner-content, learner-peers), the learner has to interact with the technology.

**Conclusion**

To conclude it may be inferred that the conceptual framework in DE is essential for the better outcomes of the learning at a distance. Following postulates can be concluded:

* The greater the distance, the more learner autonomy the learner has to exercise for learning to occur.
* As structure increases, dialogue decreases, and transactional distance increases.
* As dialogue increases, structure decreases, and transactional distance decreases.

The conceptual framework discussed in this assignment can be used to:

Describe and classify distance education programs.

* Help educators, policy makers, developers, and administrators better understand what influences students, teachers, and distance education programs.
* Study distance education programs and how the various categories included in the framework influence each other and student learning.
* Examine the importance of technology affordances for the design of successful online learning environments.
* Ask questions about possible relationships among constructs in distance education courses as well as hybrid courses offered via a variety of technologies.

**Historical Background of ODL**

Historical background of ODL can be categorized under pedagogy, technology and theory; however, it won’t be wrong to state that these categories have strong interventions among each other.

**Pedagogical Background of ODL**

Historically ODL has gone through three pedagogical approaches:

Cognitive-behaviorism

social-constructivism

connectivism.

Cognitive-Behaviorist (CB) models defined the first generation of individualized distance education. Besides enabling large numbers of learners to get education at lower costs than traditional education, it also provided a maximum access and student.

Social constructivist views, which hold that learning is a socially enacted process, promote the principality of the individual in learning.

Connectivist approach focuses on learning process as well as what has been learnt. At the present time, in which open and distance learning resources or environments have gained popularity, the quality of the information learnt and the importance of converting the information into knowledge process has made connectivist approach more important for ODL.According to Vygotsky (1978), behaviorist, constructivist and cognitive theories have been used for structuring and maintaining learning processes. These theories regard learning as an internal process whereas social constructivist theory explains learning and cognitive development as a social and collaborative activity. In his study, Vygotsky (1978) mentions two development levels: actual and potential developments. Actual development means the level which the learner reaches already and potential development means the level of learning which can be reached through the guidance of tutors or peer collaboration and potential development level is the stage at which planned learning occurs. Another point is that for a cognitive structuring to occur during the learning process, collaboration with others is important. As Shunk (2000) states reciprocal teaching, peer collaboration, cognitive apprenticeships, problem-based instruction, web quests, anchored instruction and other methods that involve learning with others are included in social constructivist approaches.

**Technological Background of ODL**

Three generations:

Correspondence

Telecommunications

Computer

Media, Conferencing and Web 2.0. When we look at the common criteria of these categorization we can see that the type of interaction (one-way or two-way) and role of the participants (active or passive) plays an important role. While analyzing today's and future distance learning technologies, it is crucial to consider ''integrated telecommunication systems rather than simply video versus audio, versus data systems''.

**Theoretical Background ofODL**

Distance education theories classified into three groups:

Theories of independence and autonomy

Theories of industrialization of teaching

Theories of interaction and communication

***Theory of Independence and Autonomy***

Theory of independence and autonomy, highlights that the core of ODL is learner independency. The characteristics of independent study systems such as separation and time, the earlier definitions of ODL can be said to be built on this theory. As Gunawardena and McIsaac(2003) states Wedemeyer's vision of independent study was consistent with self-directed learning and self regulation.

***Theory of Industrialization***

Distance education was as an industrialized form of teaching and learning with the industrial production of goods. From this aspect, Peters (1988) proposed a new terminology, which heavily highlights the concepts from industrialization for the analysis of distance education: Rationalization, Division of Labor, Mechanization, Assembly Line, Mass Production, Preparatory Work, Planning, Organization, and Scientific control methods, Formalization, Standardization, Change of Function, Objectification, Concentration and Centralization. As Simonson et al. (2006) states, division of labor is the key element of distance education and with the help of ''mechanization'' and ''automation'', teaching process in Peters' theory has been updated.

***Theory of Interaction and Communication***

Theory of distance education, “guided didactic conversation”, falls into the general category of communication theory (Schlosser & Simonson 2009, p.43). As Simonson et al. (2006) justifies, at first Holmberg proposed seven background assumptions and in 1995 these assumptions were extended.

**Accordingly, the theory consists of eight parts:**

1. Distance education serves individual learners who cannot or do not want to make use of face-to-face teaching.
2. Distance education promotes students’ freedom of choice and independence.
3. Society benefits from distance education.
4. Distance education is an instrument for recurrent and lifelong learning and for free access to learning opportunities and equity.
5. Distance education may inspire meta cognitive approaches.
6. Distance education is based on deep learning as an individual activity
7. Distance education is open to behaviorist, cognitive, constructivist and other modes of learning.
8. Personal relations, study pleasure and empathy between students and those supporting them are central to learning in distance education.