# Practice of Connectivism As Learning Theory: Enhancing Learning Process Through Social Networking Site (Facebook)

# Öğrenme Teorisi Olarak Bağlantıcılık Uygulaması: Öğrenme Sürecinin Sosyal Ağ Üzerinden Geliştirilmesi (Facebook)

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#### Abstract

The impact of the digital age within learning and social interaction has been growing rapidly. The realm of digital age and computer mediated communication requires reconsidering instruction based on collaborative interactive learning process and socio-contextual experience for learning. Social networking sites such as facebook can help create group space for digital dialogue to inform, question and challenge within a frame of connectivism as learning theory within the digital age. The aim of this study is to elaborate the practice of connectivism as learning theory in terms of internship course. Facebook group space provided social learning platform for dialogue and negotiation beside the classroom learning and teaching process in this study. The 35 internship students provided self-reports within a frame of this qualitative research. This showed how principles of theory practiced and how this theory and facebook group space contribute learning, selfleadership, decision making and reflection skills. As the research reflects a practice of new theory based on action research, learning is not individualistic attempt in the digital age as regards the debate on learning in digital age within a frame of connectivism.

**Keywords**: Connectivism, digital age, interaction, online-social learning, self-leadership

#### Özet

Sosyal etkiletişimin önemi, digital çağ ile birlikte öğrenmenin etkisini de giderek artırmaktadır. Digital dünyada, digital vatandaş olmanın etkileri araştırma konularında önemli yer almaktadır. Digital çağ ve bilgisayar temelli iletişim,

\* Assoc. Prof. Dr., Faculty of Education, Near East University, <u>fahaltinay@gmail.com</u> \*\* Assoc. Prof. Dr., Faculty of Education, Near East University, zehaltinay@gmail.com \*\*\*MBA, School of Tourism & Hotel Management, Near East University, nmenemenci@hotmail.com işbirliğine bağlı öğrenmenin ve tecrübe temelli öğrenmenin yeniden düşünülmesine olanak sağlamıştır. Bu bağlamda, sosyal ağların kullanımı, diyalog geliştirme için grup oluşturulmasında, haberdar olma, sorma ve eleştirisel bakma gib birçok faktörü biraraya getirmesi açısından, bağlantısal öğrenme kuramı kapsamındadır. Bu araştırmanın amacı, bağlantısal öğrenme kuramının uygulamadaki yerini ortaya koymaktır. Diyalog ve görüşme için facebook gruplarının çevrimiçi sosyal öğrenme ortamının sağlanılmasını dikkate alan bu çalışmada 35 stajer öğrencinin kişisel görüş raporları ile bu teorinin ne kadar etkili kullanıldığını elde etmektedir. Bu bağlamda, öğrenme, kişisel liderlik, karar alma ve yansıtma becerileri de değerlendirilmiştir. Eylem çalışması temelli bu çalışmada, öğrenmenin bireysel öğrenme temelli olmadığını ve digital çağda öğrenmenin bağlantısal öğrenme kuramının temellerini taşıdığını görmekteyiz.

**Anahtar Sözcükler**: Bağlantıcılık, dijital çağ, etkileşim, çevrimiçi-sosyal öğrenme, kişisel liderlik

#### Introduction

The networked world facilitates exchange of information through sharing. It provides access of construction knowledge through learning how to learn by experiences. It is significant to explore knowledge within digital age with the integration of technology in teaching, learning context. This situation makes the development of connectivism, a learning theory that it emphasizes where and how knowledge is constructed in a digital context. In this respect, connectivism puts forward to consider pedagogical reasoning and action while teaching course content based on the integration of digital technologies. The support of technology within teaching, learning contexts makes the roots of connectivism that shows technology becomes a bridge for learning, teaching and context (Starkey, 2010).

Connectivism is considered as a learning theory that focuses on complexity thinking, network and self-organizing theories. It underlines the notion of learning, connecting information sets within digital technology. The basic idea of connectivism is continual expansion of knowledge that new interpretations and understandings are created. This theory put forwards that it focuses on constructing meaning by individual learners (Siemens, 2005).

Indeed, behaviorism, cognitivism, and constructivism are the three broad learning theories which support and utilize the learning and learning context. However, they were sufficient for instructional environments until we meet with digital age and ICT (Information communication technology)integrated instruction. With the impact of digital age, and ICT-integrated instruction, higher education programmes and instruction reorganised to question how to learn, how to think and how to create knowledge, develop competence and skills. Nowadays, there is significant need to approach learning principles and process which should be reflective based on social interaction, dialogue and inquiry.

The ability to synthesize and recognize connections and patterns is a valuable skill in digital age. As the theory of connectivism is the integration of principles including chaos, network, and complexity and self-organization in

digital age, creation of knowledge relies on pattern of relationships and learning through new connections and patterns. Further to this, it focuses on the inclusion of technology which technology has role for diffusion of cognition and knowledge.

In fact, other theories stay partial with underlying the importance of context and complexity for learning, connectivism considers chaos, complexity and context for continual learning and knowledge creation based on a self-discipline and organization. According to Downes (2005), connective knowledge networks require four traits which are diversity (different points of view), autonomy (self-organization), interactivity (interaction) and openness (readiness for interaction). As regards connective knowledge network and learning platform, there is significant need to integrate the principles of connectivism in higher education programme and courses which ICT is the mediation tool for learning. In this respect, the principles of the connectivism as it is approached in this study for internship course in the School of the Tourism Hospitality Management were practiced as listed below:

- Learning and knowledge rests in diversity of opinions.
- Learning is a process of connecting specialized nodes or information sources.
- Learning may reside in non-human appliances.
- Capacity to know more is more critical than what is currently known
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas, and concepts is a core skill.
- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
- Decision-making is itself a learning process.
- Chaos, network, complexity, self-organization are significant for learning.

Technology is a transformation opportunity of course contents within the digital age. Integration of technology to the teaching, learning is represented by the connectivism that sharing experiences, knowledge within digital platform enriches skills of learners by the support of social networking sites (Gilbert, 2005). In this respect, social networking site (facebook group) fosters learning platform within internship course as part of the research study based on a frame of connectivism.

Learning by individualistic responsibility through digital technology is intensified need to consider how do online learning and social platform enhance learning and to what extend does connectivist theory support skills development and learning of learners. In this research study, the impact of digital age in teaching, learning contexts is crucial in order to examine the practice of connectivism as learning theory by the support of social networking site (facebook) in terms of internship course.

Indeed, internship course is the experiential learning process that students supports knowledge creation and develop competence and skills through practice and living experience within the sector. The internship course is very significant for the undergraduate students which they gained future experience of work for the success. Within this research study, the importance of experiential learning process for future success, the role of dialogue and interaction for the experience and social learning are highlighted. As regards the principles of digital age, social networking sites provides platform for interaction, connectivity and access that foster interaction and socially negotiated experience as a base for the social learning. In this respect, living collaborative thinking, argumentation and reflection in order to achieve interconnected knowledge and experience become important. As connectivism theory based course significantly focus on openness, diversity, interaction and autonomy, those principles have been practiced within the course to reveal the perceptions and experiences of the students who enrolled internship course in School of Tourism and Hospitality Management. Although the literature paid attention to impact of social interaction (Fernandez, B., 2006), experience (Pankhurst, 2010), mediation (Vogel, 2004) for learning, they stay partial. In this respect, this study puts forward to reveal the evaluations of students about the practice of connectivism for their learning and experience with the support of social networking site (facebook) as regards the openness, diversity, interaction and autonomy principles. Further to this, the study aims to reveal how online social networking sites (facebook, vb.) are relevant for different fields and courses such as tourism field and internship course. Therefore, the following research questions were handled with inductive process:

- 1. How do students perceive the impact of online platform for learning?
- 2. How do students perceive the impact of practice on their learning process?
- 3. To what extend do students develop competence and skills during this course?

# Methodology

## **Research Design and Approach**

The methodological framework of this research study relies on understanding meanings and experiences of learners within networked digital context by their individualistic learning process (Denzin & Lincoln, 2003). In this respect, the research study has the notion of qualitative research design (Cresswell, 2003). Qualitative inquiry requires comprehensive look into perspective, soft data to highlight meaning, situation and socially constructed common understanding within inductive process. This inquiry is a reflective process to explore how experiences and socially constructed meanings occur (Creswell, 2003). In this respect, implementing this inquiry for exploring the practice of connectivism with the support of social networking site (facebook) through experiences and perceptions of students within internship course is very significant.

Action research was employed in this research study that skills development of learners through online social platforms and digitally integrated learning, teaching context were created. As action research is a supportive tool to make changes for the development of learners, researchers as course instructors created an environment as a facilitator for skills development of learners (Mills, 2003) within inductive process. Action research requires change and development for learning in this study which course design was created based on connectivism and social networking site (facebook group) supports dialoque, negotiation and interaction for learning. Based on learning cycle of the action research, systematic inquiry was implemented to practice novel learning environment. It is evaluative tool that provides improving professional practice through diversified activities based on chaos, complexity and contextual patterns as regards the connectivism.

## **Context and Participants**

The participants of the research study included thirty five students which aimed to enhance skills development of students as learners within digitally enhanced learning context. This research was conducted one semester which took 16 weeks. Social networking site such as facebook was used as a support for conducting connectivism theory and students voluntarily participated in the study and the data were collected through purposive sampling.

## **Data Collection and Analysis**

Qualitative data were used in this research study and self reports were employed (Denzin & Lincoln, 2003). Self-reports are the documentation of reflection, understanding and experiences within inductive process. In this respect, self-reports were used as right choice of data collection technique to explore and analyze the perceptions, experiences and reflection of the participants from action learning process. Data collection and analysis processes of this research were based understanding meanings and experiences of learners within networked digital context by their individualistic learning process. Content - thematic - analysis was used to interpret self reports by considering the key themes. These key themes were categorized as understanding on leadership, advantages of connectivism, skills, self-leadership by the support of facebook, the importance of practice. In data analysis, matrix strategy was used to interpret findings for the cross-examination and verification of the data.

# **Research Findings**

In this study, 35 internship students from School of Tourism and Hospitality Management voluntarily involved the practice connectivist theory in learning process. In addition, facebook group space has been constructed to activate dialogue and interaction as significant principle of the connectivity theory. With the involvement of course tutor, collaborative thinking and dialogue has been practiced to foster the theory in the practice. As regards the outcome about the practice of connectivism with the support of online social networking site (facebook), the self-reports of students revealed large amount of qualitative data and provided credible results to confirm that almost all students developed dialogue and interaction thus they learn more from others and others' experiences, enhance self-leadership, decision making and reflection skills. However, a few students (5 out of 35) yielded that they are satisfied with classroom learning model. Although the minority of the group revealed the question on the effectiveness of new practice, in-depth examination can be done for the impact of cultural and contextual factors, learning styles of students for diversity as these are the limitations of this study that needs to be considered in detail and may be investigated in-depth.

## Perceptions of Students on Online Learning and Leadership

Online social learning platform fosters learning and construction of knowledge based on dialoque, negotiation, interaction with others. In this respect, it is significant how students perceive the impact of online social networking for their learning. Almost all students reported that online social learning platform (facebook group) fosters their learning and enhance communication, self-organization and leadership skill during internship course. Significantly, 30 students reported that they satisfied with online discussion and negotiation which enhance their learning and increase multiple perspectives. However, 5 students reported that they need classroom teaching mode for learning. Further to this, almost all students reported that learning is not individualistic attempt where it needs self-discipline. Indeed, almost all students reported that they have developed leadership skill as they explored the nature of learners as leaders within online platform in many ways;

- Careful consideration for issues
- Well organized
- Original attempts and thinking
- Creative
- Self confident
- Entrepreneurship, initiative
- Social abilities
- Being different from others
- Persuasive
- Control mechanism
- Discipline and stability
- Motivator

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- Creator of vision and mission
- Entrepreneur of creating new ideas

#### The Contributions of Connectivist Learning Environment

Almost all students reported their experiences and perceptions as regards the contributions of connectivist learning environment for their learning and skills development. The reflections through self-report confirmed that facebook space revealed how connectivism supports learning and the skills development of students based on particular principles of connectivism and activities of the internship course. In this respect, students reflect consensus on that dialogue, negotiation and complexity of discussion questions in online context within a framework of connectivist theory help them construct knowledge and develop leadership, negotiation and reflection skills within self-discipline. Almost all of them were satisfied with the practice of the course and its activities. Significantly, students 2, 7, 9, 24 underlined that this course requires inquiry, auestion and knowledge sharing which enhances learning and peer evaluated and reflected skills development process. In this respect, students practiced the principles which are learning and knowledge rests in diversity of opinions; process of connecting specialized nodes or information sources; reside in nonhuman appliances; capacity to know more is more critical than what is currently maintaining connections is needed to facilitate continual learning; known: ability to see connections between fields, ideas, and concepts is a core skill; currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities; decision-making is itself a learning process; chaos, network, complexity, self-organization are significant for learning through discussions and collaboration with pers within online environment. The categorized perceptions and experiences of students on the practice of connectivist learning environment as experiential learning occurs stated in following:

- performance development
- saving time with self-discipline
- learning with self-organization
- learning without attending physically
- learning with a comfort
- practical learning context
- sharing knowledge
- expressing ideas
- reaching out knowledge creation
- learning from complex questions and discussions
- reaching out information
- best activities and ways to learn
- tangible learning
- learning by doing

Further to this, almost all students reported on action learning process and skills development as regards the connectivist learning and experiential environments. Almost all students confirmed that action learning process in internship course propose learning from experience, learning from others in online context inline with connectivist theory and its principles. The overall evaluation of students on action learning process and skills development are;

- self-responsible
- punctual
- independent
- ability to apply knowledge in different fields
- sensitive to culture and art
- considering variety in learning
- empathic
- self confident
- life long learner
- self-motivator
- reflective
- open to new ideas
- open and encourage for ideas
- team builder
- researcher
- interpreter
- analyzer
- ability to organize and construct knowledge efficiently
- in-depth understanding of experience on future work
- leadership
- negotiation
- communication
- intellectual flexibility

## **Discussion and Conclusion**

This study yielded the contributions of connectivist learning and experiential learning environment. Engaging students in experiential learning with internship course and connecitivist learning environment in online context provides positive impacts on awareness, reflection, leadership during self-organization of learning. This study showed that the practice of connectivist theory with the discussion platform in online context supported intellectual flexibility, reconstruction of meanings and patterns from the complexity. Engaging students in a real life experience with internship (working in the sector), discussions and negotiation of internship process with peers in online context help students problem solving. Further to this, online social learning fosters collaborative discourse for internalization. Facebook group plays a vital role for collaborative and self learning environments.

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As regards the outcome of the practice of connectivist learning environment with the support of online social networking site (facebook), the self-reports of students revealed large amount of gualitative data and provided credible results to confirm that almost all students developed dialogue and interaction thus they learn more from others with a self discipline. In this respect, students enhance self-leadership, decision making and reflection skills with the support of facebook group within the framework of connectivist learning environment. While students enrolled the facebook discussion boards for their internships course, they actively reflected their perceptions on leadership, contributions on connectivism, importance of practice for their learning and skills development. As connectivism refers learning through the web based information process (Lee, Miller, Newnham, 2008), in this study, most of the students underlined that they learnt through peer discussion and self-discipline. A few students (5 out of 35) yielded that they are satisfied with classroom learning model. In this research study, connectivism takes account of centrality of learning by enabling personal networks, interactivity and experiential tasks that instructors become mediator for supporting the construction of knowledge (van Weert, 2006). Although the study yielded positive results as regards the research focus, longitudinal studies can be considered. In further studies, in-depth analysis by multiple methods for data collection can be conducted.

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