



Negotiations on Subjective Interactions between Teaching and Learning in Remote Education

RUIQILIU ^a

a. Erdem University Ulaanbaatar, Mongolia

Abstract: With the development of science and technology, the gradually developed self-media and various learning platforms provide people with a variety of learning methods and ways to contact other cultures and exchange ideas, which makes people's lives more convenient. On the one hand, online learning makes learners lack opportunities for offline interaction and real-time communication and thus lack self-motivation. Remote education has gradually become a common way of learning, especially after the outbreak of the new crown epidemic, distance education has become an important way for many learners to acquire knowledge. If technology and culture are regarded as two subjects in a complex system or two interactive symbols, there are many conceivable research points for the research on teaching and learning in distance education.

Keywords: Remote education; technology; teaching; behavioral science; complex system

1. Literature review

In the former study, remote education has been explored mainly in the significance dimension and its ethics in various areas, but the learning and studying interactions knowledge, and cognition aspects are barely researched.

Behaviorism, cognitivism, and connectionism are the three main theories of distance education research in today's digital learning era. As an important representative of behaviorism learning theory, Skinner believes that knowledge is linked to skills, organized accumulation, and organized links between basic psychological units and various behavioral units. The learning process is the shaping process that strengthens this connection so that knowledge can be transferred. Cognitivism believes that learners store and organize various data through the cognitive process, Buckner (2015) proposed that people are dealing mainly with biological processes, which may constitute natural kinds even while their functional roles vary when used in organisms that need to meet rather different environmental challenges.

Connectionism was first proposed by Brownie, and further developed by Simmons. Simmons' research considers learning trends, technology and network usage for learning, and knowledge half-life. There have been many studies on distance education from the perspective of connectivism. This paper will focus on exploring the interaction mode between culture and technology and put forward some ideas.

As Matthew Flustered, a professor at the University of Winnipeg in Canada, said, on social platforms, each subject participating in the platform does not have or set a free self-awareness like some schools of idealism in Germany. Algorithmic Desire is an extraordinarily rich, erudite, and theoretically dazzling analysis of late capitalism as metaphorized by Twitter and its confederates (2021). Self-awareness and its boundary between the internet conveyed digital world, also, on social platforms, the change of self can be seen when forming a knowledge structure, it also contributes to the study of social interaction in terms of theoretical performance' (Johnson, 2015).

Subjective interactions, however, provide a new perspective on the research of self-awareness and the learning process. The process of the interaction is hard to observe. On the contrary, on those social interfaces, people first turn themselves into a commodified "self", as Frisfelder said (Frisfelder, 2021): "A model can be used as a metaphor to understand the many activities that people are now engaged in on social media. "Self" is a representative of alienation. Frisfeld refers to that once people enter the smart social media platform, they do

[Received] 09 July 2023; Accepted 20 Sep 2023; Published (online) 22 Sep 2023]

Finesse Publishing stays neutral regard to jurisdictional claims published maps



Attribution 4.0 International (CC BY 4.0)

Corresponding email: liuruiqr@tcd.ie (Ruiqiliu)

DOI: 10.61363/jsse.v2i2.83

not present themselves spiritually or consciously, but a materialized or alienated self-form appears. Self-alienation can also be reflected in the interaction between teaching and learning in distance education. When students take classes online, the students' self-alienation also forms. Compared with offline interaction, and online teacher-student communication, The mode of communication between students is different. The lack of physical scenes in the online environment will affect students' learning initiative. In addition, if a medium language is used for teaching, the sphere of influence of the language needs to be considered. In European and American countries, the diverse ethnic language and cultural environment causes differences in learners' acceptance. From the perspective of pedagogy, how to deal with this difference not only requires teachers to have relevant awareness but also requires teachers and students to cooperate to solve or weaken such problems. If society is regarded as a complex system, and the lecturer and the learner are the main body of the interaction, the interaction between them can be regarded as the main body participating in the activities of the system and trying to establish an analysis network. Lan Jiang, a scholar at Nanjing University, put forward the information body and intelligence connectionism in digital ecology (Lan Jiang, 2018) . He believes that a new path can be formed in the interaction between artificial intelligence and human beings, integrating the existence of human beings, the digitization of things, and the behavior of artificial intelligence Think about the relationship between entities on a new interface, that is, digital ecology. The proposal of digital ecology theory can be used as an inspiration for distance education research. If distance education is regarded as a learning ecology, the action of education and learning itself can be regarded as the main body of interaction.

Goffman's drama theory means that people will have performance elements in their life interactions, trying to create images in the minds of others. This theory is developed from symbolic interaction theory. Although it has too formal limitations, its theory affirms the constraints of social structure on people. From another perspective, the foundation of educational research in the digital age is indeed established under a specific social structure framework, and a further description of the framework theory will contribute to the research. In addition to behaviorism, cognitivism, and connectionism, there are other theories that can be used to explain the author's educational views on the issues that have been raised so far. This article does not propose a problem to be solved but only proposes theoretical assumptions. In the case of excluding external influences (such as a pandemic), from the perspective of behavioral purposes, choosing distance teaching is not only a way to achieve learning goals at a low price. Participating in distance teaching itself may tend to break away from offline convenience. Propensity. In the case of the same resources, the most important characteristics of the media itself can be summarized as follows: according to the inherent formal characteristics of each technological media, find the most combined content with it.

2. The Interaction Between Culture and Technology

Culture itself is the projection of social consciousness and has an important influence on society. Different cultural backgrounds have different values, which will produce different interactions. After the birth of distance education, a series of new social integration problems also emerged.

On the distance learning platform, the cultural symbols used in the interaction between people will also undergo a certain transformation. If we focus on technology, the improvement of technology will bring about a new effect, that is, the change of the subjectivity in the system. The concept of people's "self-identity" is fluid. As the social environment changes, the boundaries of the self will be affected. For example, before the widespread use of computers and smartphones, the "self" mainly existed in real life. In interaction, telephone, and pen-and-paper communication, with the popularization of remote communication methods, when people freely express their opinions and learn knowledge on the Internet, they will have a new "identity" or "self". Although the self in the sense of science and technology has a virtual component, its parts are imagined or marked out, but its influence cannot be ignored. The self at the level of science and technology is likely to be a new ethical issue in the academic world in the future. For example, artificial intelligence is highly developed, and related technologies are heavily involved in education. Although it cannot replace the role of teachers, it will weaken the existence of people's self. From the cultural dimension, the use of technological means will affect the boundaries of the body, which is an inevitable effect. However, scholars can study this effect from many novel angles, which may lead to new theories.

For example, in the discussion of the concept of knowledge "node" in connectivism, whether a knowledge point can be well acquired depends on its current connection status. It can be made better learned if it has many potential connection nodes.



Social science research aims to find the connection between things and explore the methodology of practice. In this issue, if teaching and learning are regarded as two variables, and the relationship between them is explored when facing and dealing with the problem of "alienation", various solutions may be derived.

In the digital age, the possibilities of human creativity are constantly expanding. In distance learning, creativity is sometimes limited, unlike other things, because people's creative spirit is relatively out of step with objective cultural developments, and people are doomed to walk in a world controlled by themselves. On the road, such as technological dependence, such as the fact that the public lacks understanding of the target culture.

According to sociologist Simmel (1903), there is an inherent opposition between object culture and subject culture. After the Industrial Revolution, although people maintained the ability to update objective culture, from the perspective of historical development, the suppression effect of objective culture on subject culture became more and more obvious, and a huge gap formed between people's mental progress and technological development. The development of objective culture will essentially interact with subjective culture, but this influence is very tearing. For example, with the continuous advancement of science and technology, people's lives are becoming more and more convenient, but people's thinking is still at a level like that of ancient people. With the change in society, a culture of objects is oppressing the spiritual culture of the subject, and the phenomenon of materialization is becoming more and more common, causing a sense of tearing. Overly specialized learning and sophisticated social division of labor will strengthen people's sense of tearing, which is also a kind of alienation. It is also for this reason that there are fewer and fewer intellectuals in the traditional sense. Therefore, in distance education, professional learning is indispensable, but learners need to realize the importance of cultivating their own macro-control ability focusing on improving their comprehensive quality, and not being oppressed by object culture.

3. Research methods

From the data point of view, on March 1, 2021, the Ministry of Education released the 2021 national education statistics, which consist of five parts: preschool education, compulsory education, high school education, higher education, and special education. Among them, the total number of students in higher education is 44.3 million. In 2021, 2.8392 million students will be enrolled in online undergraduate programs, with a total of 8.739 million students. This paper mainly adopts the qualitative research method of content analysis. The advantage of using the content analysis research method is to focus on the research topic and to constantly introspect. Qualitative research can give full play to the subjective advantages and make up for the shortcomings of quantitative research. The topic of my interview is the impact of teaching interaction in online higher education on students during the pandemic. My interview (10 interviewees as a sample, age around 20-29, college students and graduate students), it is mainly composed of college students who have completed their studies at home and abroad through distance education during the pandemic. My interview questions include how I view distance education, whether I think distance education will weaken the learning effect, etc., and diverge according to my personal situation. The interview time is allocated to each interviewee for about half an hour. During the pandemic, universities at home and abroad mainly used remote conferences such as ZOOM platforms to teach, which constituted a test for students' own learning abilities. Among the students I interviewed, eight students answered that distance teaching has reduced the pressure brought by classroom lectures and exams to a certain extent, but it has also relatively weakened the learning effect. Almost every student's point of view is that the effect of offline teaching is better. The other two students think that for them, distance education does not have any influence on the absorption effect, but it does not have the physical sense of offline classes and lacks a positive social experience. Online higher education is a special experience, not only the online teaching method but also the experience of the teaching interaction effect of home learning. In terms of knowledge learning, 5 students think that if it is conceptual knowledge, the effect will not be greatly affected, but if it is knowledge with certain mobility, such as knowledge that needs to be acquired through a lot of reading, practice, and experiments, online teaching The teaching effect is low. But inevitably, online teaching does have such problems. Four of the respondents conducted distance learning while studying abroad. The content of each interviewee's answer included that remote teaching gave them a virtual experience of studying abroad without going abroad, and the expected difference was relatively large compared with the real experience. According to the classification of students' answers, distance education has the problems of lack of social experience and low interaction efficiency of some courses. In addition, a focus group discussion was conducted with 6 college students based on the idea of teaching interaction, and a structured interview outline was listed.

1. Do you think distance learning will weaken the teaching effect of theory courses?
2. Do you personally like the distance education mode, and do you tend to choose distance education to acquire knowledge?
3. Do your friends and family members like distance education?
4. Compared with offline education, what are the common problems of distance education?
5. Suppose you are a teacher in a distance education class, how would you improve the inherent problems of distance education? The results of the discussion can be summarized as follows: the team members believe that distance learning will affect the degree of acceptance to a certain extent, and it often stays at a shallow level of conceptualization, thus weakening the teaching effect. Half of the group members tend to choose distance education, and there are generally family and friends around who choose distance education. Compared with offline education, distance education has problems such as poor teaching interaction effect, low understanding of people around, low interest and enthusiasm, and an unfair scoring system. From the narratives of the group members, we can perceive their attitudes towards the topic. Narratives themselves also play a very important role in social science research and can be used as a means of educational research. David Kaplan once said that people use narratives to shape technology itself, and the impact of narratives is subtle. Unknowingly, people's narratives can change the platform itself, thereby affecting its function. This is the interrelationship of narratives.

Affecting factors	Weaken the teaching effect	No support from family	Subjective non-realistic feelings	Language Interaction insufficient	Less communication
Number	5	4	8	3	6
Percentile	1/2	2/5	4/5	3/10	3/5

4. Technology, the construction of the relationship between teaching and learning

Just like the discussion of the concept of "node" in connectionism, whether a piece of knowledge can be well consolidated depends on the connection status it currently has. If it has many potential nodes, then it can be extended more widely.

Trying to model these nodes is like trying to establish a connection like a mind map or a knowledge outline. Although there is no fixed model, this attempt is very necessary.

Research on nodes can also promote educational research to a deeper level. From this perspective, based on the original theories, distance education research still has a long way to go.

To sum up, the concept of nodes is somewhat imprecise, but it is of great research value.

The mediation of technology has played a large role in the process of constructing the interaction between teaching and learning, including mediation and neutralization in other fields discussed by many philosophers today, mediation, virtue, and responsibility (mediation, authenticity, responsibility) are three dimensions that need to be considered.

The platform itself has a mediating effect on identity and interaction, which will affect reality and the responsibility of individuals and groups.

The occurrence of major events in history shows that technology has changed people's cognitive understanding, including where we are and where we are going (W. Reijers & M. Coeckelbergh), just like Simmel created The concept of "tool-making beings" is that people are the product of tools, and people's education and development must come into contact with tools. Therefore, in the construction of the relationship between science and technology, teaching and learning, the three influence each other. Under the framework of the teaching interaction concept, there is still a lot of room for research on the interaction between the three.

5. Conclusion

In the field of distance education, the interaction between teaching and learning has been a widely discussed topic as a basic assumption. Social science research is an academic and practical attempt to find the connection between things. If teaching and learning are regarded as two variables, discuss their relationship and promote learning progress. This is the meaning of humanistic care. Distance education will continue to play an important role in the current era and has great theoretical research value in the field of education. Its own shortcomings are difficult to completely change, but they can be reconciled through continuous improvement. There is no systematic management of distance online education, and students' learning efficiency is also uneven, which



also tests students' independent learning to a certain extent. Distance online education teaching has poor interactivity. Since the education and teaching process realized through the Internet does not require teachers and students to be strictly asynchronous in time and space, this objectively results in poor teaching interactivity. Online education has higher requirements on students' learning autonomy and self-learning ability. At the same time, educational resources have also been fully utilized and shared. Through remote transmission, the teaching ability of the same educational resources has been amplified in space and time. At different times, more students in different regions and locations can learn. Courses taught by the same teacher thus meet the educational needs of more students.

Assumptions are a key part of theory development. On this basis, it is hoped that other scholars can establish more relevant assumptions, thereby creating more theories that can benefit society.

6. References

- Siemens, G. (2015). "Connectivism: A learning Theory for the Digital Age".
- Goffman, E. (1967). *Interactional Ritual: Essays on Face-to-Face Behavior*. Double Day.
- Matthew Flisfeder. *Algorithmic Desire: Toward a New Structuralist Theory of Social Media*. Northwestern University Press, 2021, p.145.
- Brey, P. (2012). Anticipatory Ethics for Emerging Technologies. *NanoEthics*, 6(1), 1-13.
<https://doi.org/10.1007/s11569-012-0141-7>.
- Coeckelbergh, M. (2012). Care Robots, Virtual Virtue, and the Best Possible Life. In P. Brey, A. Briggler, & E. Spence (Eds.), *The Good Life in a Technological Age*. New York: Routledge.
- Ess, C. (2009). *Digital Media Ethics*. Cambridge: Polity Press.
- Feenberg, A. (1999). *Questioning Technology*. New York: Routledge.
- Friedman, B., & Kahn, P. (2002). Value Sensitive Design: Theory and Methods. University of Washington CSE Technical Report, December, pp. 1-8.
<https://doi.org/10.1016/j.neuropharm.2007.08.009>.
- Godin, Benoît. (2014). Invention, Diffusion and Linear Models of Innovation: The Contribution of Anthropology to a Conceptual Framework. *Journal of Innovation Economics & Management*, 3(15), 11-37.
- Graeber, D. (1996). Beads and Money: Notes Toward a Theory of Wealth and Power. *American Ethnologist*, 23(1), 4-24.
- Hausser, J., Tellis, G. J., & Griffin, A. (2006). Research on Innovation: A Review and Agenda for Marketing Science. *Marketing Science*, 25(6), 687-717.
<https://doi.org/10.1287/mksc.1050.0144>.
- Ihde, D. (1979). *Technics and Praxis* (Vol. 33). Dordrecht: D. Reidel Publishing Com
- Flisfeder, M. (2021) *Algorithmic Desire: Toward a New Structuralist Theory of Social Media*