



REVISITING THE TRANSACTIONAL DISTANCE THEORY: A QUALITATIVE STUDY OF TWO WEB-BASED DISTANCE LEARNING COURSES AT A CAMPUS-BASED UNIVERSITY

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Summary

This paper is concerned with the use of Moore's Theory of Transactional Distance as a way of understanding the factors contributing to students' learning experience. The paper presents an initial reflections based on a small-scale study of two post graduate level distance learning courses offered by a conventional university in the UK (University of Leicester). The objective of the research was to gain an in-depth insight into the characteristics of the three variables of distance education proposed by Moore (1972, 2013), namely 'structure', 'dialogue' and 'autonomy', and to identify associations are there among three variables.

Moore's Theory of Transactional Distance

Moore's theory of Transactional Distance (TTD) (Moore, 1973, 2013) is one the early theories of distance education (DE) which captures the essential features of distance education. It defines the field in pedagogical terms (Moore, 2013; p.67. *italics original*) and considers DE in terms of three variables (*structure, dialogue, and autonomy*) highlighting distance education as a distinct form of academic practice, not something that needs to be benchmarked against campus-based offerings. Drawing from Boyd and Apps (1980) idea of *transactional distance*, Moore drew our attention to a transactional distance (TD) that students experience when they learn at a distance; this TD is the sum result of the aforementioned three key variables of a course that interact with or influence one another. The TD is a "psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner" (Moore, 1980; p.3).

According to Moore (2013) *structure* is the level of specification on a range of aspects of a course, e.g., the lessons, the curriculum, learning objectives, the design of learning material and activities, teaching strategies, assessment methods, accommodation / responsiveness to learners' individual needs and preferences, advise on learning, assessment, sequence of following content. Dialogue is "a particular kind of interpersonal interaction, and it happens after a course is designed, ..., aimed at the latter's creation of knowledge". Autonomy is the ability for students to "develop personal learning plan, to find resources for them study in their work community environments, and to evaluate for themselves when progress was satisfactory" (*ibid.*; p.72).

The literature on transactional distance theory suggests that the theory has gained traction since its origin and served as a conceptual tool for many researchers to examine the practices of DE using a range of methods. Moore (2003) synthesise a large body of research carried out from 1998 – 2005 and 47 significant research projects published between 2006 – 2011.

Critiques of the TDT and the objectives of the research

While acknowledging the contribution of TDT to the field of distance education, Gorsky and Capsi (2005) offer a substantial critique of TDT. The space in this paper is limited to review these critiques, but the following sums up one of their main critiques: “Moore (1993) did not define any of the theory’s constructs operationally. This led some researchers to use operational definitions that differed meaningfully from the formal ones, thereby severely compromising construct validity. By Moore’s own definitions, dialogue is not the number of verbal interactions that occurred and transactional distance is not a perceived value of ‘closeness’” (ibid.; p.7). They add that “Very few researchers have carried out the empirical studies to test the validity of its key constructs and, especially the relationships among them”, and “Of the few they found, their validity was extremely limited” (ibid.; p.3).

Based on our reading of Moore’s TDT (2013) and research carried out using TDT as well as Gorsky and Capsi (2005) we also see issues of operationalising the three key variables of TDT (*structure*, *dialogue*, and *autonomy*) and understanding their relationship with one other. The variable *Structure* includes many aspects of a programme that need to be considered as individual components. The relationship between the *structure* and *dialogue* is also a difficult one to comprehend. Moore’s statements such as “With a high degree of structure and little or no dialogue, the transactional distance is high” (Moore, 2013; p.71. italics for emphasis) and “In a course with low structure and high dialogue, i.e., low transactional dialogue, ...” (ibid.; p.73) implies a causal, inverse relationship between the structure and the dialogue. But this doesn’t have to be the case.

We propose to investigate the three factors in the context of a number of DE programmes, first to gain an in-depth insight into the characteristics of these variables from the perspective of students’ experience, and second, to identify associations are there among three variables. The notion of structure covers many aspects this needs more granular level exploration. Although Moore’s original conceptualisation of *dialogue* was limited to learner – teacher dialogue, Moore himself and many other researchers (e.g., Best & Condeicao, 2017; Kassandrinou et al., 2014; Friesen & Kuskis, 2003; Bolliger & Halupa, 2018) have either reviewed or investigated more types of interactions. Therefore, the notion of dialogue needs to take an expansive view of it in order to grasp the full spectrum of dialogue. The authors that Gorsky and Capsi’s (2005; p.7) reviewed also “recommend that future research include interview and observational data”. Therefore, taking Moore’s TDT as a starting point, we were interested in carrying out a qualitative study to unpack these variables via following three questions:

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- How do the distance learners perceive the *structure* of their course? How does their perception of different elements of the structure contribute to their engagement in the course?
- What are the distance learners' perception of the *dialogue* that is available on the course? How does this perception contribute to their engagement in the course?
- How do the distance learners perceive the *autonomy* available on their course? How does this perception contribute to their engagement in the course?

Research context and methods

This research was carried out on two distance post graduate programmes at Leicester University: International Education (a 2-year masters programme) and a Learning Technologies (an 8-month post graduate certificate programme). Our familiarity with these two courses was the main reason for this choice. The participants of the masters programme are located around the world (see Figure 1) while those on the PGC programme are mainly from the UK.



Figure 1. Locations of study (Masters programme, 2017 / 18 Academic year, n = 60)

After receiving ethics approval from the University (Ref: 18011) an invitation email was sent to 70 current students and four graduates of the masters programme, and 16 recent graduates of the post graduate certificate (PGC) programme. 16 students from the masters and two from the PGC programme volunteered for the research and they were interviewed (15 via Skype; 2 face to face, and 1 email). Participants from the Masters programme were in different stages of the programme. Interviews lasted between 40–60 minutes and were digitally recorded and transcribed for thematic analysis. Interview questions to explore the three variables were developed based on sources such as Moore (1993, 2013), Bolliger and Halupa (2018) and

Kassandrinou et al. (2014). The full interview schedule will be shared at the conference presentation.

Preliminary insights from data analysis

The analysis of interview data is presented according to three variables: *Structure*, *Dialogue*, and *Autonomy*. Illustrative quotes from interviews are used to highlight the themes presented in the analysis.

Structure / structural aspects of the programmes

The way in which our respondents reflected on the various structure-related aspects of the course can be summed up as: (a) the week-by-week division / arrangement of themes, (b) the structure in which material are presented in each week, (c) the approach to learning (pedagogy), (d) link between assessment, feedback and learning, (e) types of media and learning activities, and (f) links between course content and activities and professional interests. Due to the limitation of the space, the first 5 will be reviewed here.

All the interview participants were unanimous in saying that how the division of themes in each module and the weekly structure in which content and activities are presented have been helpful for their positive engagement in the course.

This prescribed nature of the course was helpful for the course participants who have

“very busy life”

and not having

“too much time to deviate from required activities of the course”

“Weekly sessions are clear in terms of what you need to achieve, and expectation were realistic and aligned well with the work – study balance.”

Views expressed by others include comments such as:

“I am in control of my learning. Each week built on the previous week”

“if I didn’t have a prescribed structure I would have done a binge study days and left for a month”

“I will be floating around if not for this structure. It is not spoon feeding, but giving direction.”

The link between assessments, feedback and learning was another factor identified as contributing to their sense of engagement with the course. The variety of assessments on the two programmes (media-based assignments as formative assignments and written essays as summative assessments) have been engaging for them.

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Participants also commented on the pedagogical approach that underpins their learning. On both courses that we have investigated, the presentation of content can be considered as promoting what Laurillard (2012) refers to as “acquisition-oriented learning”. Learning in both courses is primarily around reading text, watching videos, taking notes, and to a limited extent, engaging in collaborative activities (more on this under *Dialogue*). Our interview participants were in general happy with this type of learning. One participant commented that “That works for me. I like to gather information from range of sources. Good to go back to read good academic text”. However, participants also pointed out the challenges of learning in this way, which will be discussed under the category *Dialogue*.

The course content in both programmes in each week consist of a short introductory video, text, further short videos to explain concepts, links to recommended reading activities, reflective activities for participants to carryout. This variety of media and learning activities has been a useful structural element for participants’ positive engagement in the course. One participant commented that “I like reading but if I haven’t got long it is good to sit and listen to something and watch a quick videos about it. ... So having a range of approaches and material were”.

Dialogue

As argued early in the paper, we wanted to take a broader view of the notion of *dialogue*, not only something that happens between the teacher and the student. The majority of participants felt that the dialogic element / dimension of the two programmes were minimum or limited and that to some extent this has an effect on their learning and study experience. Participants identified a range of reasons as well as the point in the course where they felt the dialogue is important. For one participant it was a time leading to assignments: “Often I have small questions, ideas ... it would be nice to bounce ideas informally. That is when I notice the distance most. Often when I start an assignment, I am not confident of the direction I need to take. Sometimes it would be good to talk to someone informally about how the assignment is going”. Another reason for wanting a dialogic relationship with others was related the underlying pedagogy of the course, i.e., self-study nature and acquisition-oriented learning. Some participants felt that often they have questions based on their reading, watching videos and learning activities and “the lack of opportunities to ask questions regarding the things that you read” is not a positive experience

Participants identified how they currently engage in a dialogue with others: (a) formal interactions with the tutor, (b) working with an assignment partner, (c) wiki pages, (d) blogs, (e) interaction with own professional communities. (f) weekly communications from the module leader, (g) voice-based assignments, and (h) virtual attendance at seminars conducted at the university. Due to the limitation of the space, the first 5 will be reviewed here.

All participants pointed out that their interaction with the tutor has been a positive aspect of the course. On our two programmes, students have a personal tutor with whom they can communicate via Skype, Facetime (or other online tools), email or phone. Students have used

their tutors to seek clarifications (“When I am not sure about something”), advice on literature (“struggling to find a books they might know about”), writing essays (“restructuring the essay to meet the academic writing level”), and receiving directions. However, participants also indicated that they wanted more instantaneous and frequent contacts with their tutors.

Participants also pointed out the positive experience of working with an assignment partner for their first assignment in which students on the Masters programme worked as a pair or a set of three to produce a collaborative piece of written work of 1,500–2,000 words. Each student would work with another student who is based in a different country or a different educational context. As the first assignment this can be a challenging task, dealing with technological issues, managing personal work, time differences, and different educational backgrounds. However, all the respondents, except two stressed that they have developed a positive dialogic relationship with their assignment partners. Comments such as the following highlight these positive experiences:

“It was very helpful for me to upskill myself ... working along someone else and supporting and guiding was very helpful. She is now a close friend and I saw her during summer and I’ve now build that link and we are keeping in touch”

“Collaboration worked very well. Even if we lived in opposite sides of the world, she lived Japan] and I live here [Nethrlands] ... We have similar passion about special education. And comparison of east and the west.”

The participants also commented on the use of the Wiki on the Research Methods module in which students are expected to write wiki entries reflecting on their development of a small-scale research project over a period of 8–10 weeks. Participant thought that this more *formalised* approach to collaboration was

“very useful being able to see what topics others have chosen for their research, how they have formed research questions, ...[to] consider other approaches ...”

“Even if I hadn’t posted any yet, ... reading others posting and I can improve my ideas...”

The analysis of the use of Blogs (Figure 2) on the PGC programme revealed the social value in fostering dialogue and collaborative learning. These showed the students’ voluntary use of blogs to form a learning community. For example, S1 received 11 comments from S2, and five of which S1 commented back on S2’s comments. For one of the blog activities, students were required to conduct resource audit to design a course, S1 provided examples of technology enhanced learning activities that she has done in the past with uses of tools. S2 posted questions to seek for elaboration from S1 regarding the editing system for creating different learning activities and how to measure the impact of engagement among pageviews. S1

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answered this question and elicited S2's interest in her course, in a later blog comments, S2 provided some formative feedback for possible improvement for her designed course. These blogs also show blogging have the potential to improve dialogic activity by allowing students to be exposed to alternative perspectives.

All the participants interviewed mentioned that they have regular interactions with own professional communities in which they can either discuss course related aspects and / or apply their learning into the professional practice. One participant mentioned that:

“We sit around a table and have a coffee and say oh I was reading this and share articles ... and we share those ideas as a wider professional circle”.

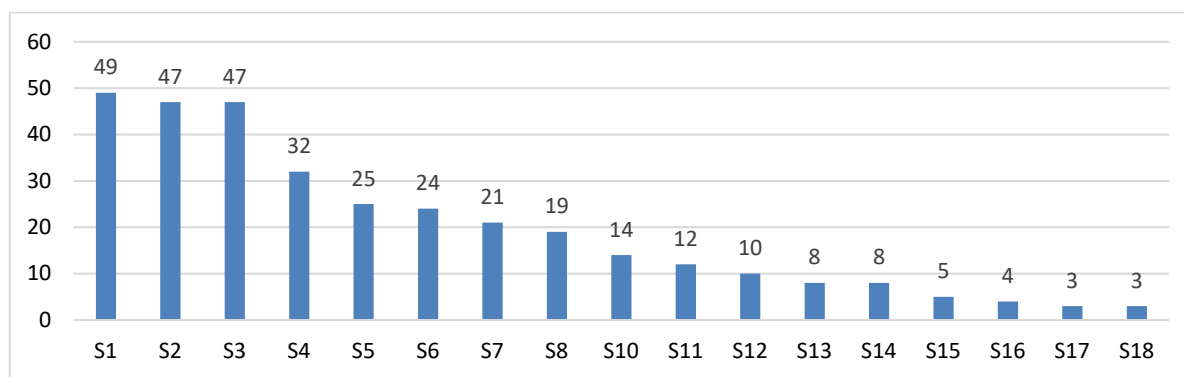


Figure 2. The number of blog entries created by students (n=18) over 8 months

Autonomy

Interviewee participants highlighted a number of ways they feel that they have autonomy in the course: (a) personalising the study timetable, (b) personalising the assignments, (c) tailoring learning to personal, professional and local contexts.

Although the course is structured as weekly work-packages the participants felt that they can personalise their own study timetable around their own work pattern. One participant highlighted this as follows:

“The whole module is there so I can do a forward plan. I put my own timetable scheduled in. I scheduled in when I would be able to carry out the tasks that were required. Here are my time to do the reading, the tasks and carry out the assignments. I like to send [the tutor] a time-line to say ‘this is when I send you my first draft, second draft and this is when I like you to send me back the comments’. That was really good.”

Most participants pointed out that their assignments gave them a sense of autonomy in the course. The following quote summarises one participants experience with her assignment:

“The essay that I wrote was mine! Because I had to look for it [the topic]. I had to develop it, it was really hard to start with, try to find an essay question. I

was like ‘Hah, they haven’t given me any topic! I had to think of it all for myself’ but talking to few people in the school [and thinking for myself], I really enjoyed finishing that essay ... I am really proud of this. I like where it has taken. I have given it to few people to read. They said ‘oh, interesting’.

Another participant pointed out that

“Although the learning itself is very structured in terms of topics, when it comes to assignments I feel that I have the autonomy. That I am in control.”

Participants also very positive about their ability to tailor their learning to personal, professional and local contexts. One participant mentioned that

“I like the sense of autonomy. That is because the course is supporting the job that I am doing. ... to apply with my children in my class.”

Another participant stressed that she is able to carry out her studies according to where her “my passion lies”. For another participant the course gives

“a choice of reading ... and you can make this course what you want.”

Initial reflections and further work

We initiated this research with a view to gain an in-depth understanding of the three variables – structure, dialogue, and autonomy – that Moore has identified in 1972 as essential features of distance education. Our preliminary analysis of interview data from a small number of course participants from two post graduate distance learning programmes shows how students view their learning experience according to the three variables. These insights can be represented as an emerging model (Figure 3) of the constituent parts of each variable and their influence on one another.

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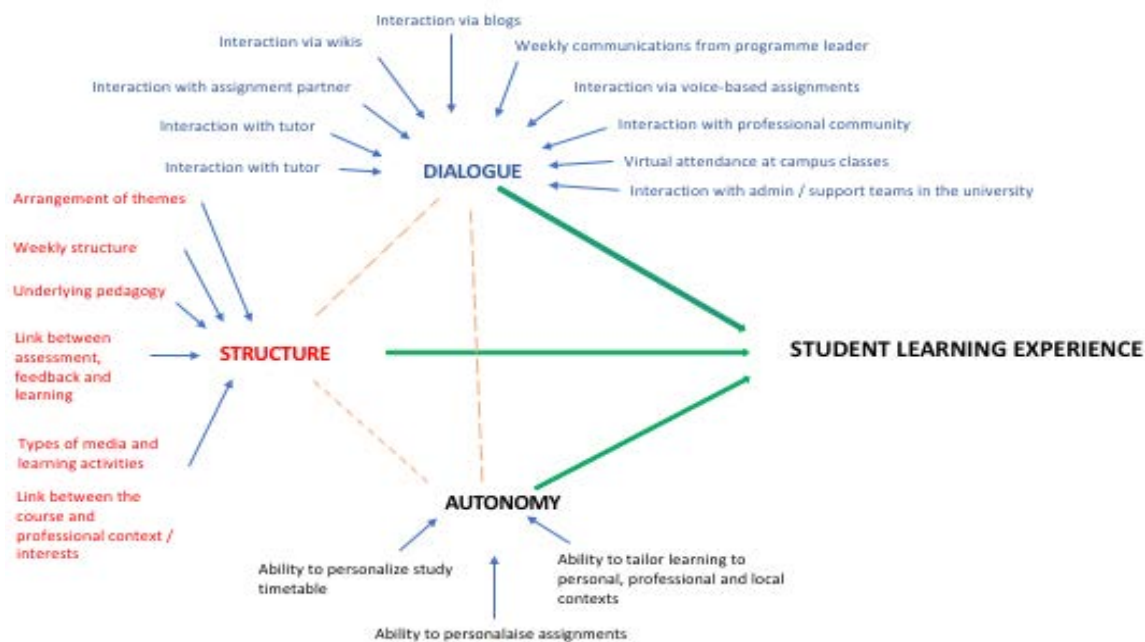


Figure 3. An emerging model depicting factors underlying learning experience at a distance

It is important to recognise that our sample was small and that the data were collected from only two post-graduate courses with particular approach to design and delivery of those course. Therefore, it is too early to make any generalisations based on this set of data. We plan to collect more data using two more courses in the near future while improving the qualitative instrument that we have used in this research. We hope that this will enable us to develop further insights into how we might improve the student learning experience by addressing each of the factor that contributes to *structure*, *dialogue* and *autonomy*.

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