Transactional Distance and Dialogue in Online Learning

Rick L. Shearer
Director World Campus Learning Design
The Pennsylvania State University

Dr. Moore’s (1980, 1993) theory of transactional distance stands as one of the primary theoretical underpinnings of the field of distance education. Like all theories it is important to continuously examine the premise of the theory and the underlying constructs to assure the theory remains valid as the field evolves. The theory of transactional distance as discussed by Moore (1993) encompasses “the universe of teacher-learner relationships that exist when learners and instructor are separated by space an/or time: (p. 22). In general the theory describes the relationship between three variables: dialogue, structure, and learner autonomy, and how these three variables interact to either increase transactional distance or diminish transactional distance.

Dialogue is a key variable in the theory and as discussed by Gorsky and Caspi (2005) the theory may actually be a tautology where dialogue alone determines transactional distance. At a macro level the theory implies that as dialogue increases, transactional distance decreases, and conversely, as structure increases, dialogue decreases, and transactional distance increases. In other words with increased dialogue students feel a greater sense of connectedness to the educational experience, and the chance of miscommunication of ideas is diminished.

Over the past two years a study was conducted by Shearer (2009) to look at what is meant by dialogue in online learning in relation to the theory of transactional distance. The study is based heavily on the philosophical works of Burbules (1993), and the work done by Moore (1980, 1983, 1993). Within the study an a priori classification scheme for dialogue was constructed based on Burbules’s work and the works by Henri (1992), Saba & Shearer (1994), and works of others who have developed classification schemes for CMC (Computer Mediated Communications). A form of content analysis was conducted to verify the proposed classification scheme for dialogue in online learning environments. This paper briefly reviews the key elements of the research literature review, methodology, and findings.

Transactional Distance

In general the theory of transactional distance looks at the interplay between dialogue, structure, and learner autonomy and how these three variables interact to either increase transactional distance, the feeling of connectedness and a measure of efficiency in diminishing miscommunication, or to decrease transactional distance. It is a theory that has both a psychological dimension of distance, in terms of connectedness, and one that describes the efficiency of the interactions in reducing miscommunications around the dialogue and the learning experience. In the theory it is implied that as dialogue increases, structure decreases and transactional distance decreases. Also it implies that as structure increases, dialogue decreases and transactional distance increases.

While a study by Saba & Shearer in 1994 helped support the premise of the theory around dialogue and structure, the impact of learner autonomy is less clear. As shown in Figure 1 it could be argued that if one has a high level of learner autonomy they do not need high levels of dialogue or structure to succeed in the educational environment. Thus, with a high level of learner autonomy one could have low structure and low dialogue and still have low transactional distance. However, there is much work that needs to be done to form well-defined conceptual definitions around these variables. As Dron (2005) emphasizes it is the fuzziness and constant evolution of the definitions of the key variables the leads to muddiness around understanding the theory. It was the intent of Shearer’s (2009) study to take an in-depth look at dialogue
in relation to the theory and to propose a valid conceptual definition for dialogue that could be used in future studies that examine the theory of transactional distance.

![Figure 1. The Three Dimensions of Transactional Distance](image)

The definitions for dialogue, structure, and autonomy within the theory presented by Moore were refined over 20 years from Moore’s early work in 1972 on independent learning to his later works on the theory in 1993. The following highlights some of the thinking by Moore on each variable.

**Dialogue**
In 1983 Moore described dialogue as “…the extent to which, in any educational programme, learner and educator are able to respond to each other. This is determined by the content or subject-matter which is studied, by the educational philosophy of the educator and learner, and by the environmental factors, the most important of which is the medium of communications.” (p. 157).

In a later work in 1993 Moore expands the definition to include learner-to-learner interactions and to include the idea of the creation of knowledge. Moore (1993) states, “A dialogue is purposeful, constructive and valued by each party. Each party in a dialogue is a respectful and active listener; each is a contributor, and builds on the contributions of the other party or parties…the direction of a dialogue in an educational relationship is towards the improved understanding of the student” (p. 24).

**Structure**
Moore in 1980 described structure as “…the extent to which the objectives, implementation procedures, and evaluation procedures of a teaching program are prepared, or can be adapted, to meet specific objectives, implementation plans, and evaluation methods of individual students. Structure is a measure of the educational program’s responsiveness to the learner’s individual needs.” (p. 21).

**Autonomy**
In 1984 Moore described autonomy as “…the extent to which in the learning-teaching relationship, it is the learner rather than the teacher who determines the goals, the learning procedures and resources, and the evaluation decisions of the learning programme.” (p. 85).
Study Methodology

It was the intent of Shearer’s (2009) study to provide a valid conceptual definition of dialogue based upon the works of Moore and Burbules, and to present a proposed classification scheme for dialogue in online learning environments that was tested through content analysis for inclusiveness. The study’s methodology was exploratory and used a form of ethnographic techniques. Through a review of the works of Moore (1980, 1983, 1993) and Burbules (1993), a conceptual definition of dialogue emerged that the classification scheme was then built upon. The a priori classification scheme was first based on the philosophical writings of Burbules and then informed by the works of Henri (1992), Saba & Shearer (1994), and other key works. The resulting a priori classification scheme had three main categories for dialogic intent: Dialogue towards Understanding, Dialogue towards Conversation, and Passive/Silent. Each of these main categories was informed by dialogic qualifiers (dialogic forms, dialogic moves, and dialogic outcomes) drawn from Burbules’s work.

Using the conceptual definition of dialogue, the a priori classification scheme was tested through a form of content analysis that examined the written speech acts that occurred in discussion forums in an ADTED course at The Pennsylvania State University in spring of 2009. The classification scheme was tested for inclusiveness, as discussed by Flanders (1964, 1970), to assure all written speech acts could be coded. Also, the test of the classification scheme used speech act analysis, as discussed by Searle (1969), where the unit of analysis was the entire written speech act by an individual, where it was the perceived implied intent of the message that was recorded.

The test of the a priori classification scheme lead to the inclusion of additional dialogic qualifiers, to help classify written speech acts, and lead to the discussion of whether some of the dialogic qualifiers should be removed as they were not used in classification of the written speech acts.

Findings

The study resulted in two key results. A valid conceptual definition of dialogue in online asynchronous learning environments in support of the theory of transactional distance, and a tested classification scheme for dialogue in online learning.

Conceptual Definition of Dialogue

Dialogue is an educational exchange that involves two or more interlocutors. It is marked by a climate of open participation, and is an interaction or series of interactions that are positive. These interactions are purposeful, constructive, and valued by each party and lead to improved understanding of the students. Dialogic interactions are a series of alternating statements (including questions, responses, redirections, and building statements) that are continuous and developmental, and where the interactions persist in the face of disagreement, confusion and misunderstanding. The direction of dialogue in an educational exchange or transaction is guided by a spirit of discovery and is towards improved knowledge, insight, or sensitivity of the students.
### Classification Scheme of Dialogue for Online Learning

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interactional Unit</th>
<th>Primary Dialogic Category</th>
<th>Dialogic Qualifiers</th>
<th>Dialogic Intent</th>
<th>Dialogic Form</th>
<th>Dialogic Move</th>
<th>Dialogic Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogue towards Understanding</td>
<td></td>
<td></td>
<td></td>
<td>Dialogic Intent</td>
<td>Inquiry – Indirect/Active</td>
<td>Questions</td>
<td>Agreement Non-Agreement Common Little Understanding Irreconcilable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dialogic Form</td>
<td>Debate – Indirect/Active</td>
<td>Responses</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Instruction – Direct/Indirect</td>
<td>Building</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gestalt</td>
<td>Redirecting Examples</td>
<td></td>
</tr>
<tr>
<td>Dialogue towards Conversation</td>
<td></td>
<td></td>
<td></td>
<td>Dialogic Intent</td>
<td>Conversation</td>
<td>Regulatory</td>
<td>Understanding of assignments, activities, etc</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dialogic Form</td>
<td></td>
<td>Classroom Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Learning Activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>– Formatting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Structuring –</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Organizer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Structuring -</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Guidance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Social Presence</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Close off Dialogue</td>
<td></td>
</tr>
</tbody>
</table>

#### Next Steps

As this study was exploratory and designed to expand the understanding of the theory of transactional distance and one of its key variables, dialogue, there is considerable work that remains. First it needs to be recognized that the classification of speech acts for this study were through the lens of the principal researcher and the classification scheme needs to be tested further with other raters and reviewed for inter-rater reliability. Also, the classification scheme needs to be tested with varying levels of courses, both undergraduate and graduate and with various disciplines. The other key variables of the theory of transactional distance also need to be examined in-depth to arrive at accepted conceptual definitions that can then be used to further test the premise of the theory. The study by Shearer (2009) is just a starting point for the in-depth review of Moore’s theory of transactional distance.
References


About the Presenter

**Dr. Shearer** has been involved in the field of distance education for over 25 years. In his administrative and instructional design roles he has developed distance education courses for computer based instruction, educational television, traditional print correspondence courses, two-way interactive video, and the internet. Dr. Shearer has worked for both private and public institutions of higher education and has consulted on distance education projects with community colleges, and public school systems. His research interests include systems dynamic modeling of distance education processes, learner control in distance education, content/interaction analysis, and current policy issues surrounding accreditation and copyright law.

Rick Shearer  
Director, World Campus Learning Design  
The Pennsylvania State University  
225H Outreach Building  
100 Innovation Blvd  
University Park, PA 16802  
Phone: 814-865-0642  
Email: rxs57@psu.edu