Executive Summary: Interaction in Distance Learning Settings
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Interaction is considered a requirement for "quality" and "effectiveness" of DL[1], although an ill-defined one. Without standard metrics, interaction has nevertheless become a primary consideration for review by accrediting bodies[2]. Until we see a clear research agenda by an institution such as PEW or Sloan-C, it is unlikely that the particulars will be sorted out any time soon. The following conclusions therefore comprise a summary based on incomplete research. More certain is the sustained interest in interaction reflected in national conference proceedings and DL applied journals. Documentation of interaction is slowly emerging[3], but strategy to promote interaction remains the dominant theme.

Interaction among peers is established as a high-learning strategy by research[4]; most students doubt that and often complain of "group projects." This paradox may reflect the complexity of the issue. For example, peer tutoring (peer-to-peer learning) has been highly touted among undergraduates, less so among graduate students. Beyond the question of level of education, context of education may also be a factor: peer-to-peer interaction may not be critical to learning in all settings[5]. Similarly, instructors' summarizing of online discussions may not produce effective learning in constructivist settings[6]. In short, too many types of interaction and too many types of educational contexts are being discussed, with little acknowledgment of the diversity of processes and settings in DL today.

Interaction between student and instructor is highly valued by students and is identified by them as the preferred method for clarifying course assignments[7]. This purpose of interaction is the most tedious for instructors and one of the first tasks to be unbundled. Unbundling is a growing trend[8] in DL but, as perhaps in the case of interaction, may backfire in certain uses. **Interaction between student and teaching assistant** is valued by some students, but ranks below interaction with instructor.

When given choice in group formation for working with peers, students elect to be with friends or students with whom they have studied before. Few students read homepage biographies, for example, in order to select group members from the larger number of students they do not know. When given choice to select level of interaction (e.g., levels ranging from 0 to 4+ times per week), almost all students make choices that suit their communication patterns/needs. Students report high satisfaction with having such a choice[9]. Based on principles of andragogy (study of adult learning), choice allows students to self-direct. However, independent work may not be aligned with a course objective to promote collaboration.

Asking students about interaction often produces opinion that it is not needed or expected in an upcoming course; but student satisfaction with DL hinges on interaction. This is a common conclusion in anecdotal faculty reports as well as in satisfaction/retention reports by consultants such as Noel-Levitz.

Challenges regarding interaction in DL:
1 - Interaction may be critical in some learning settings and not in others, but this is rarely acknowledged.
2 - Adult learners value independence and self-direction; they often opt out of peer interaction.
3 - Adults prefer interacting directly with instructors; one-on-one interaction isn't efficient for instructors.
4 - DL has not yet produced systematic evaluation research[10] and this affects more than just interaction.
5 - Learners may predict they won't need interaction, but may later positively rate it in course evaluations.
6 - Interaction is difficult to measure and to interpret; administrators sometimes err in evaluating DL instructors because they do not understand differences between F2F and online interaction[11].

Terminology: Research has begun to distinguish between interactivity (provided by technology) and interaction (the behaviors among the humans), with the former making the latter possible[12]. The following terms are not drawn from any one source but reflect typical language appearing in applied research.

INTERACTIVITY	INTERACTION	
One-on-one e-mail	Interaction	Collaboration
Public discussion board	Cooperative	Interdependence
Chat, IM (live)	Dialogue	Group work
RSS	Peer review	Peer-to-peer learning
Private message in LMS	Feedback	Discussion
Threaded discussion	Learning cell	Teaming
Social software (wiki, blog, etc.)	Mentoring	

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