

Interaction Equivalency in the OER and Informal Learning Era

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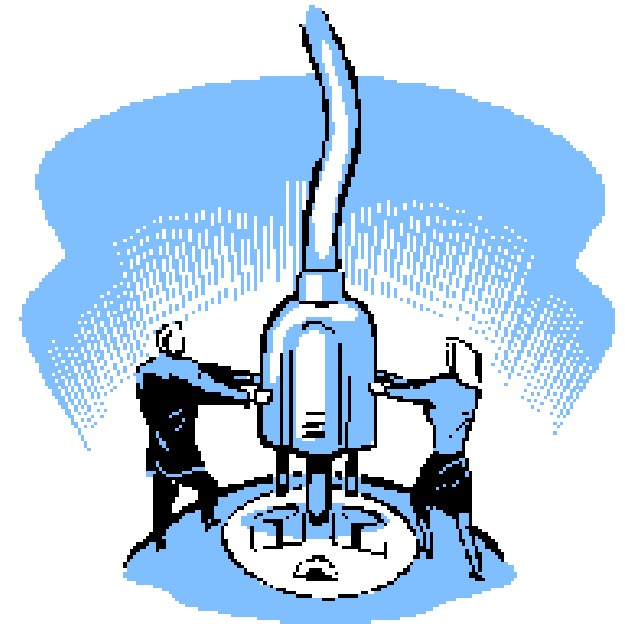


Outline

- Interaction Theories
 - Three Types of Interaction
(Moore, 1989)
 - Modes of Interaction
(Garrison & Anderson, 2003)
 - Interaction Equivalency Theorem
(Anderson, 2003)
- Modes of Interaction in OERs and Informal Learning
(Miyazoe & Anderson, 2013)

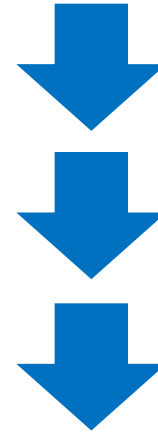
Interaction

- Definition (Wagner, 1994, p. 8)
- “reciprocal events that require at least two objects and two actions. Interactions occur when these objects and events mutually influence each other.”



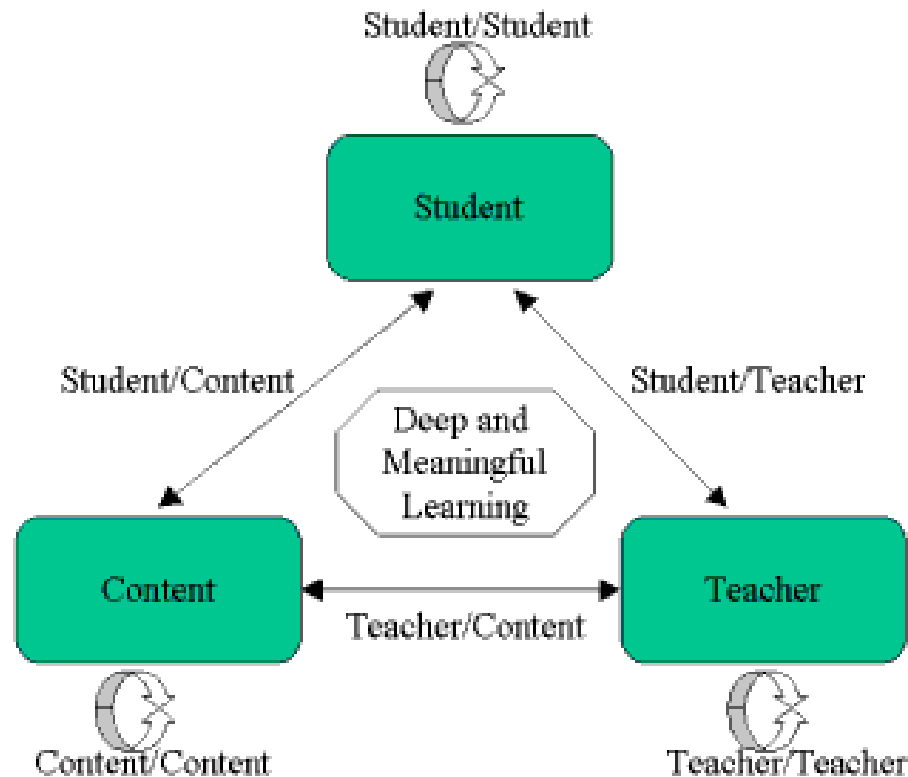
“Three Types of Interaction” model (Moore, 1989)

- Learner-Content
- Learner-Instructor
- Learner-Learner



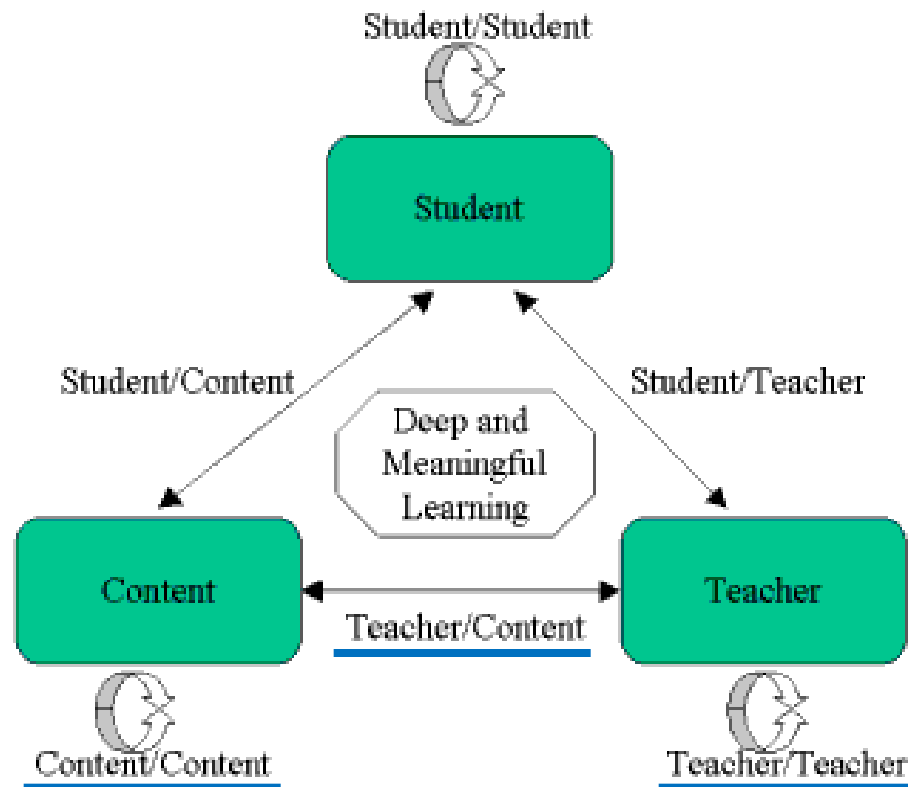
MOORE, M. (1989). Editorial: Three types of interaction.
The American Journal of Distance Education, 3(2), 1-7.

“Modes of Interaction” model Anderson and Garrison (1998)



Anderson, T., & Garrison, R. (1998). Learning in a networked world: New roles and responsibilities. In C. Gibson (Ed.), *Distance learners in higher education* (pp. 97–112). Madison, WI: Atwood Publishing.

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Daniel, J., & Marquis, C. (1977). **Interaction and independence: Getting the mixture right.** *Teaching at a Distance*, 14, 29–44.

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October - 2003

Getting the Mix Right Again: An updated and theoretical rationale for interaction

Terry Anderson
Athabasca University – Canada's Open University

No topic raises more contentious debate among educators than the role of interaction as a crucial component of the education process. This debate is fueled by surface problems of definition and vested interests of professional educators, but is more deeply marked by epistemological assumptions relative to the role of humans and human interaction in education and learning. The seminal article by Daniel and Marquis (1979) challenged distance educators to get the mixture right between independent study and interactive learning strategies and activities. They quite rightly pointed out that these two primary forms of education have differing economic, pedagogical, and social characteristics, and that we are unlikely to find a "perfect" mix that meets all learner and institutional needs across all curricula and content. Nonetheless, hard decisions have to be made.

Even more than in 1979, the development of newer, cost effective technologies and the nearly ubiquitous (in developed countries) Net-based telecommunications system is transforming, at least, the cost and access implications of getting the mix right. Further, developments in social cognitive based learning theories are providing increased evidence of the importance of collaborative activity as a component of all forms of education – including those delivered at a distance. Finally, the context in which distance education is developed and delivered is changing in response to the capacity of the semantic Web (Berners-Lee, 1999) to support interaction, not only amongst humans, but also between and among autonomous agents and human beings.

Thus, the landscape and challenges of "getting the mix right" have not lessened in the past 25 years, and, in fact, have become even more complicated. This paper attempts to provide a theoretical rationale and guide for instructional designers and teachers interested in developing distance education systems that are both effective and efficient in meeting diverse student learning needs.

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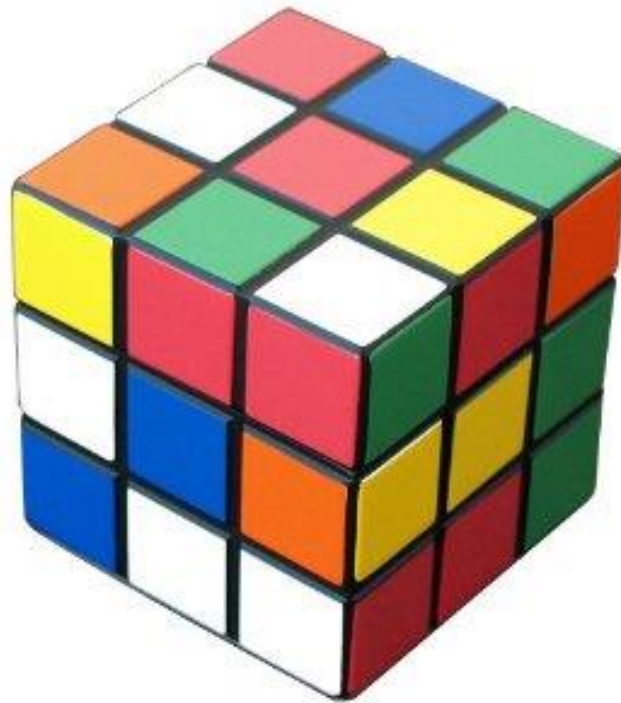
Anderson, T. (2003). **Getting the mix right again: An updated and theoretical rationale for interaction.** *The International Review of Research in Open and Distance Learning*, 4(2)

The EQuiv

- Thesis 1. Deep and meaningful formal learning is supported as long as one of the three forms of interaction (student–teacher; student–student; student–content) is at a high level. The other two may be offered at minimal levels, or even eliminated, without degrading the educational experience.
- Thesis 2. High levels of more than one of these three modes will likely provide a more satisfying educational experience, although these experiences may not be as cost- or time-effective as less interactive learning sequences.

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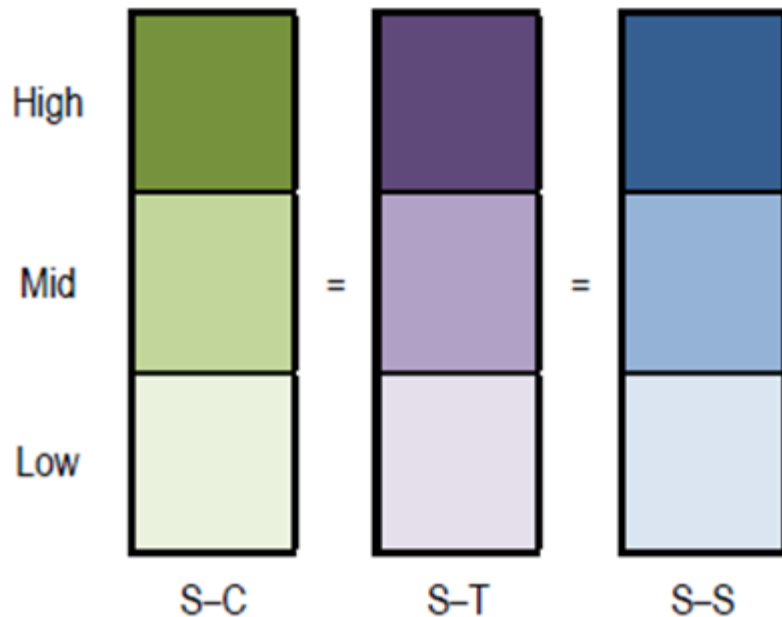
Interaction design...

High			
Mid			
Low			
	Student-Content	Student-Teacher	Student-Student

(Miyazoe & Anderson)

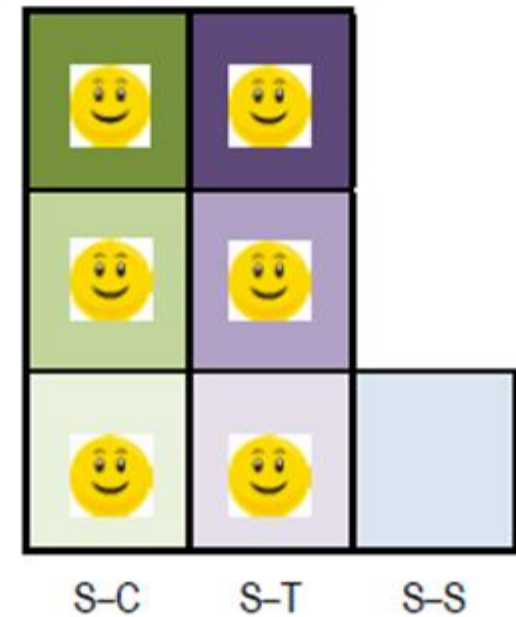
EQuiv Visualization

Thesis 1: Quality



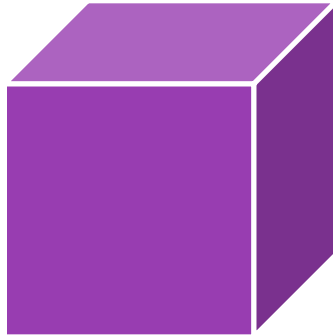
If it is at a high level and quality, it will suffice for effective learning.

Thesis 2: Quantity



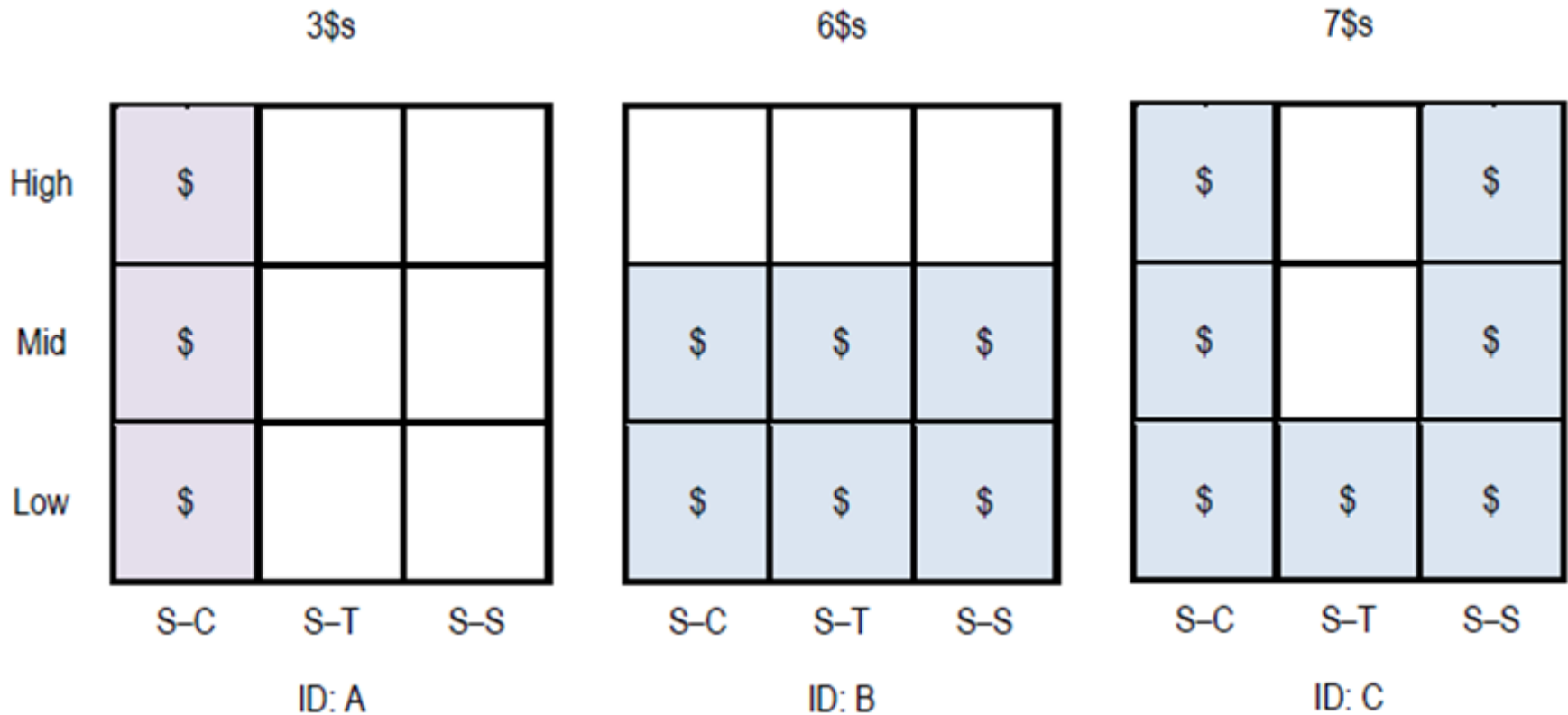
Increased interaction leads to higher satisfaction, but is it costly and time efficient?

Cost/Time issues



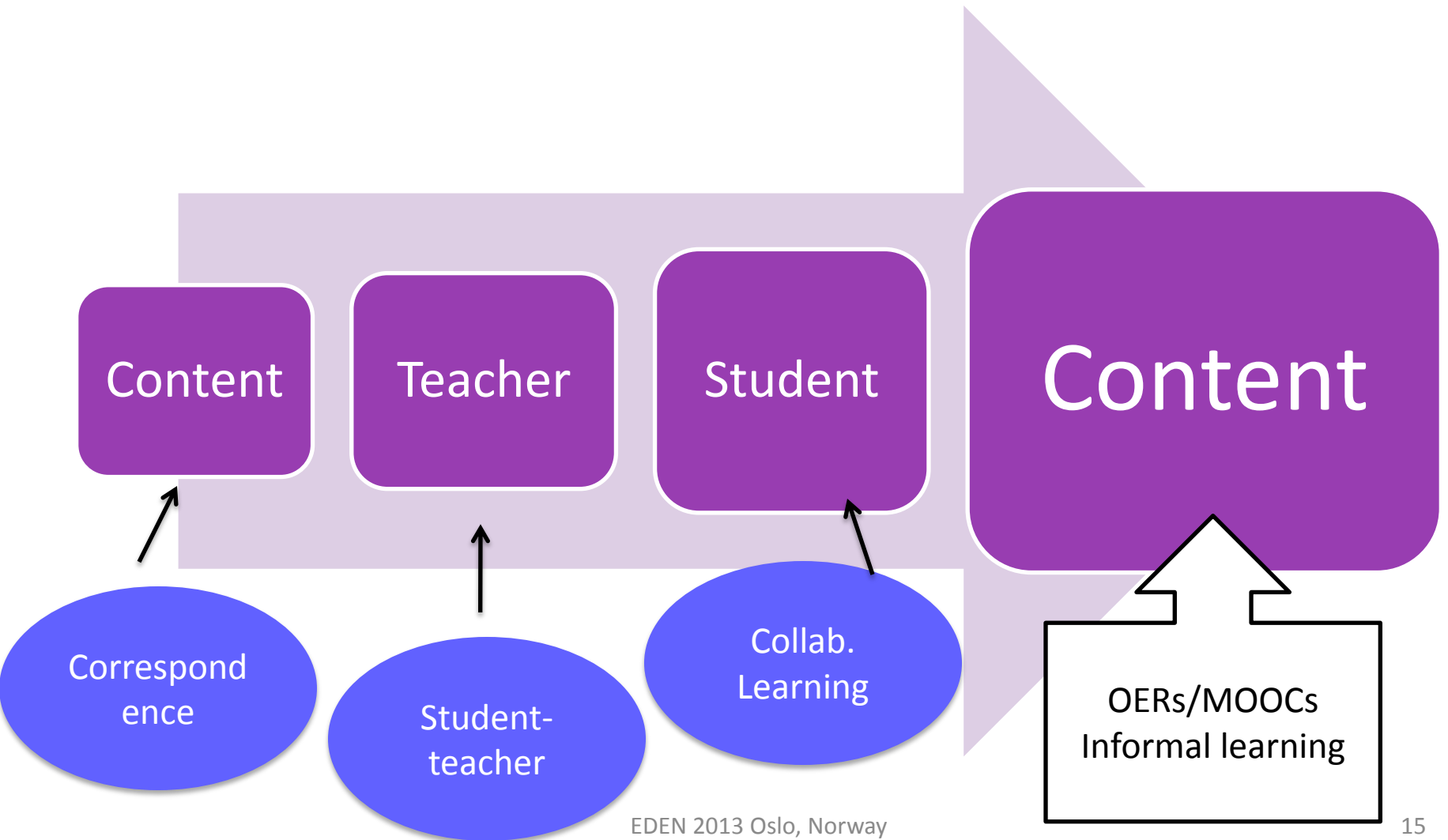
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Cost/Time issues

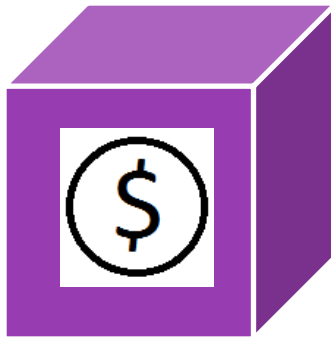


*SC: Student-Content, ST: Student-Teacher, SS: Student-Student

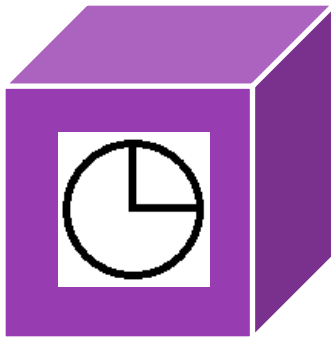
OER and Informal Learning in DE Interaction History



EQuiv in OER and informal learning

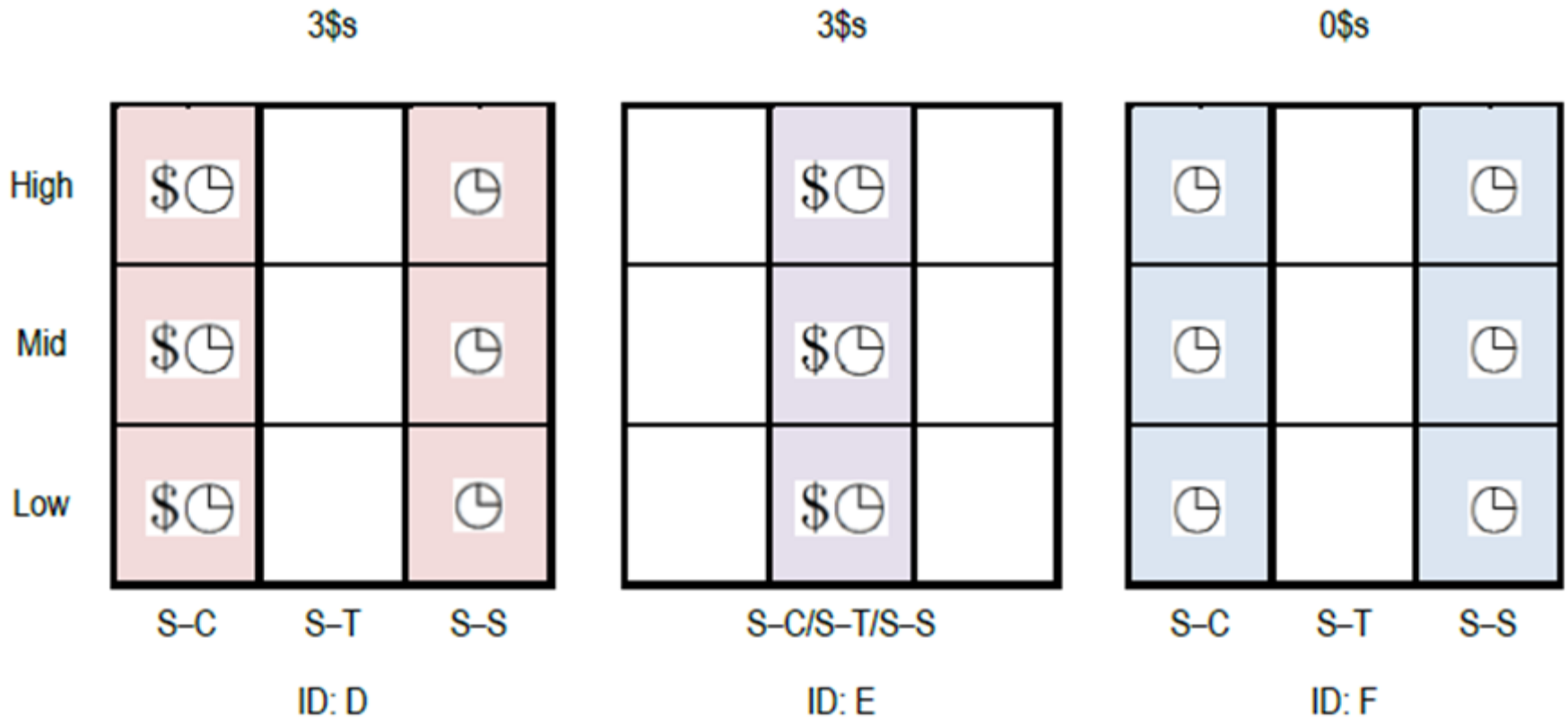


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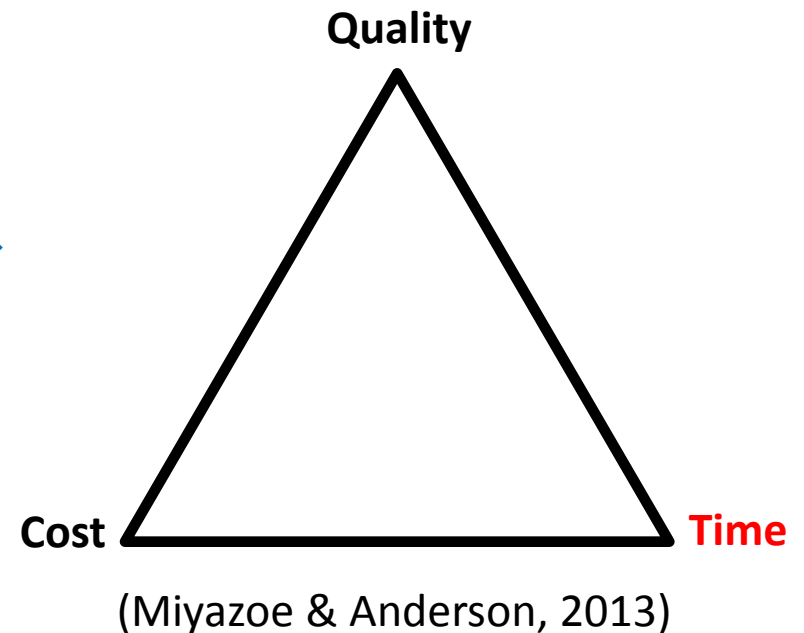
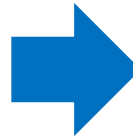
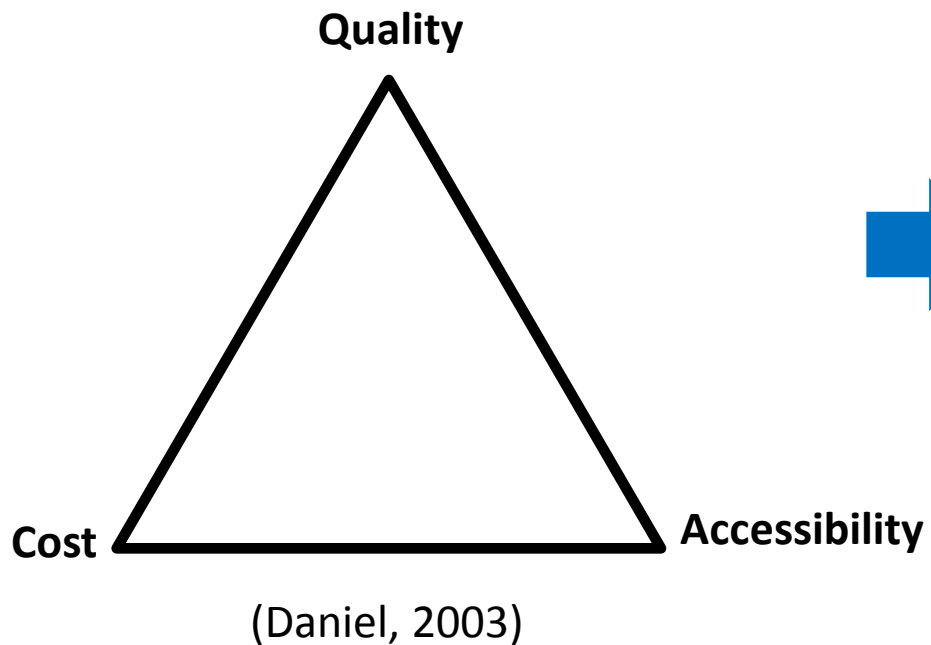


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EQuiv in OER and informal learning

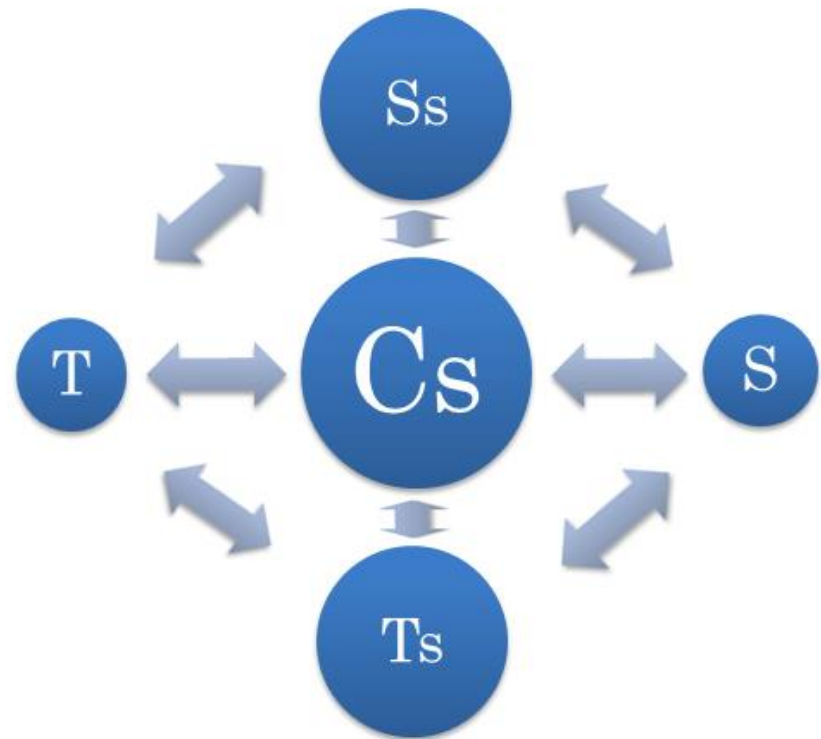
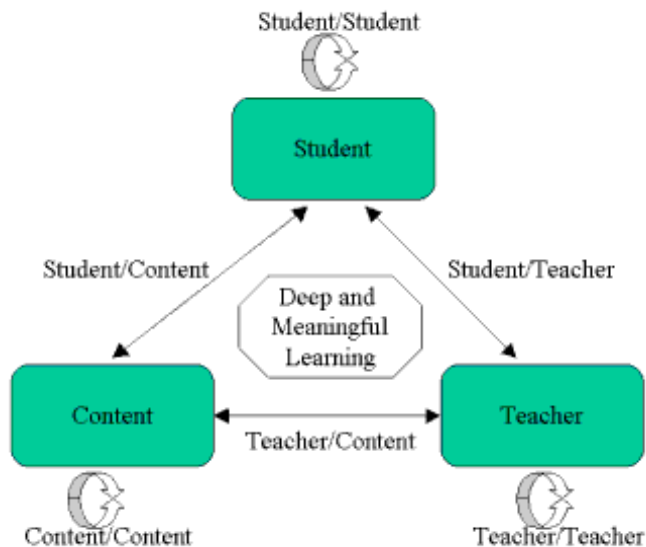


External vectors of mega-universities



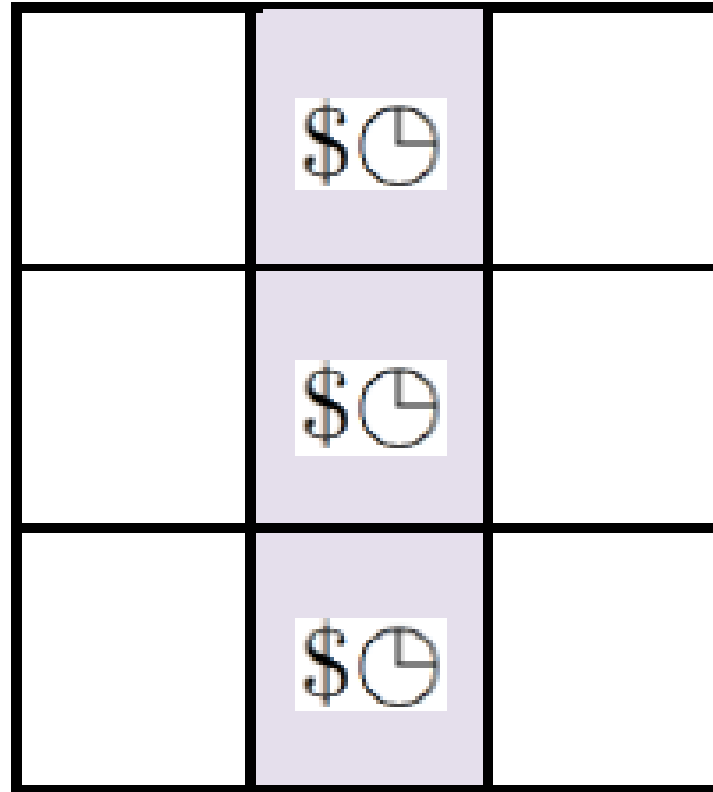
Modes of Interaction in OERs and Informal Learning Era

- Learner-Content
- Learner-Instructor
- Learner-Learner



(Miyazoe & Anderson, 2013)

Thesis 1: Quality



S-C/S-T/S-S

The Interaction Equivalency (EQuiv) Website

*The Equivalency Theorem information
sharing space*



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Home

This website is designed to share information on the [Interaction Equivalency Theorem](#) posited by Terry Anderson (2003).

In a nutshell the theory posits that if any one of student-student, student-teacher or student-content interaction is of a high quality, the other two can be reduced or even eliminated without impairing the learning experience—thus creating means of developing and delivering education that is cost affordable for all of us.

CC NC SA

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Thank you for listening!

For questions/suggestions:

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terrya@athabascau.ca

Core References

- Anderson, T., & Garrison, R. (1998). Learning in a networked world: New roles and responsibilities. In C. Gibson (Ed.), *Distance learners in higher education* (pp. 97–112). Madison, WI: Atwood Publishing.
- Anderson, T. (2003). Getting the mix right again: An updated and theoretical rationale for interaction. *The International Review of Research in Open and Distance Learning*, 4(2), from <http://www.irrodl.org/index.php/irrodl/article/view/149/230>
- Daniel, J. (2003). *Mega-universities = mega-impact on access, cost and quality*. Retrieved from http://portal.unesco.org/education/en/ev.php-URL_ID=26277&URL_DO=DO_TOPIC&URL_SECTION=201.html
- Daniel, J., & Marquis, C. (1977). Interaction and independence: Getting the mixture right. *Teaching at a Distance*, 14, 29–44.
- Miyazoe, T. (2012). Getting the mix right once again: A peek into the interaction equivalency theorem and interaction Design. Retrieved from <http://newsletter.alt.ac.uk/2012/02/getting-the-mix-right-once-again-a-peek-into-the-interaction-equivalency-theorem-and-interaction-design/>
- Moore, M. (1989). Editorial: Three types of interaction. *The American Journal of Distance Education*, 3(2), 1-7.