

Elaboration Theory

General

Elaboration theory is one of the [cognitivist models for instructional design](#) proposed by [Charles Reigeluth](#) and his associates in the late 1970s. It was based on the cognitive research findings available at the time and influenced by works of [Jerome Bruner](#) (see: [discovery learning](#)) and [David Ausubel](#) (see: [assimilation theory](#)). Very well accepted, elaboration theory was offering suggestions on how to **organize and sequence different types of instruction on macro level**.¹⁾ For organizing instructions on the micro level, Reigeluth suggested using [Dave Merrill's component display theory](#).

What is elaboration theory?

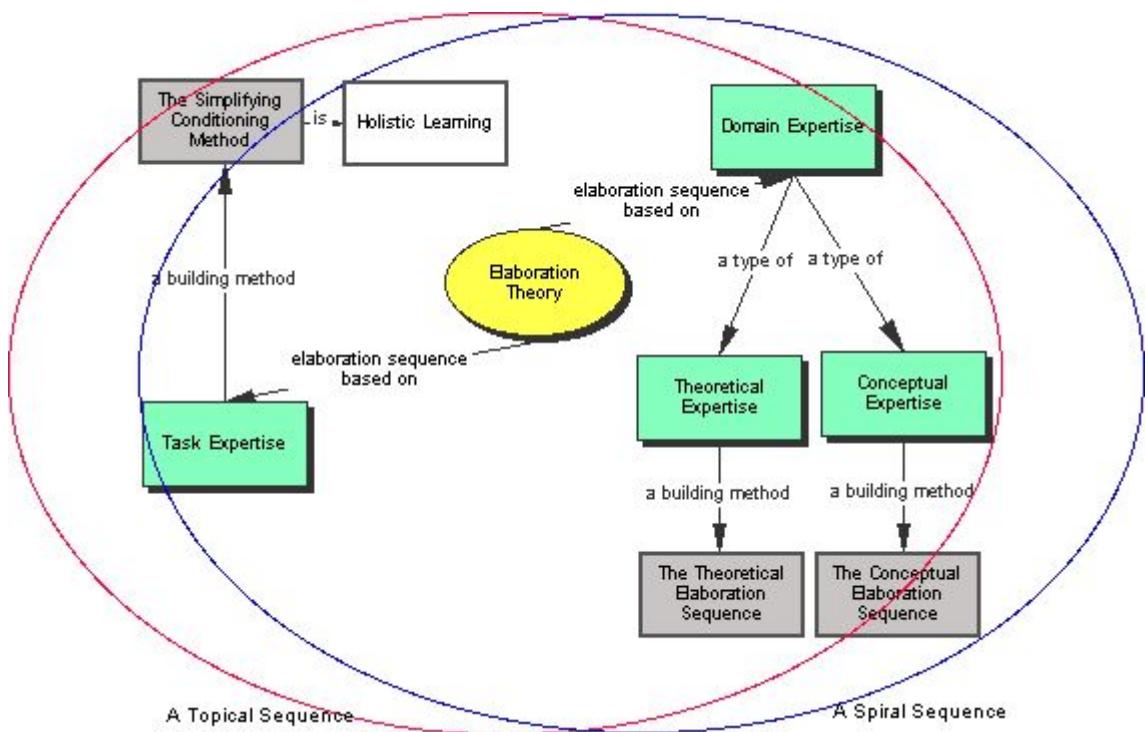
The key principle of the elaboration theory is that the **content** being taught should be organized **starting from the simplest** and then increasing order of complexity and that learner has to **develop a concept** in which new ideas will be meaningful and well accepted.

In context of elaboration theory, Reigeluth distinguishes between domain expertise (the process of becoming an expert in the body of knowledge of a more theoretical discipline) and task expertise (the process of becoming an expert in the procedural knowledge of a discipline involving more practical tasks). In order to teach a student to become one of the two, elaboration theory suggests instruction should be organized in the following **eight strategies**²⁾:

1. Structure organizing	Structure organizing can be conceptual (presenting objects, or ideas with certain common characteristics), procedural (presenting a set of actions in order to accomplish a goal) or theoretical (presents theoretical aspects, causes and effects). Selected organizing structure must reflect course's main focus. According to Reigeluth, every course holds one of this three to be more important than the other two.
2. Sequencing content	Content should be sequenced in increasing order of complexity: a course should start with the most basic and more complex ones should be built on them.
3. Within-lesson sequencing	Regardless to the structure organizing, within-lesson sequencing can be topical (topic is studied in depth before moving to the next one) or spiral (firstly all topics are briefly introduced before going into details about each of them). Sequencing content within a lesson should present theoretical ideas from simple to complex , steps of a procedure in their order of appearance , and conceptually organized instructions from more familiar and general concepts.
4. Summarizers	Content reviewers should be presented as a learned rule followed by example and practice materials.
5. Synthesizers	Diagrams, images or other synthesizers enable easier meaningful integration and assimilation of new knowledge into existing knowledge.
6. Analogies	Analogies enable easier relation of new knowledge to prior knowledge.
7. Cognitive strategy activators	in terms of images, diagrams or simply directions to mentally represent learned content.

8. Learner control

can also increase effectiveness of learning. Reigeluth suggest learners should practice control over instructional strategies and content.



Criticisms of the elaboration theory resulted in a new more holistic approach presented by Reigeluth in 1992, called simplifying conditions method (SCM). In simplifying conditions method Reigeluth suggested instructional designers should "work with experts to identify a simple case that is as representative as possible of the task as a whole"³⁾. This representative would serve as an epitome of the course.

Criticisms

The first criticism of elaboration theory applies to the fact that it is more a model or a design procedure than a learning theory. It has been suggested⁴⁾ elaboration theory should be reformulated into a set of principles more related to the very process of learning.

Other criticisms of this theory come from **distinguishing between only three different knowledge types** (theories, procedures and concepts). This is a simplifying design constraint, yet there are surveys^{5|6|7)} that resulted in different, sometimes significantly larger number of knowledge categories.

Another critic of this theory bases on the used assumption that most general concepts are always closest to learner's prior understanding, which has shown to be unfounded by Wilson and Cole⁸⁾, especially in case of an ill-defined learning domain.

Keywords and most important names

- **Elaboration theory, domain expertise, task expertise, content sequencing**

- Charles Reigeluth

Bibliography

Wilson, Brent, and Peggy Cole. A critical review of elaboration theory. *Educational Technology Research and Development* 40, no. 3: 63-79. September 1992.

Elaboration Theory (Reigeluth) at [Learning Theories](#). Retrieved March 11, 2011.

TIP: Elaboration Theory (C. Reigeluth). Retrieved March 8, 2011.

Ho, Wenyi. Reigeluth's Elaboration Theory. [Pennsylvania](#). Retrieved March 11, 2011.

Read more

Reigeluth, C.M. The elaboration theory: Guidance for scope and sequence decisions. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory*. (Volume II). Hillsdale, NJ: Lawrence Erlbaum Assoc. 1999.

Reigeluth, Charles M. Elaborating the elaboration theory. *Educational Technology Research and Development* 40, no. 3: 80-86. September 1992.

1)

Reigeluth, Charles M. In search of a better way to organize instruction: The elaboration theory. *Journal of Instructional Development* 2, no. 3 : 8-15, 1979.

2)

Reigeluth, Charles M. In search of a better way to organize instruction: The elaboration theory. *Journal of Instructional Development* 2, no. 3 : 8-15, 1979. Cited by Ho, Wenyi. Reigeluth's Elaboration Theory.

3)

Reigeluth, Charles M. Elaborating the elaboration theory. *Educational Technology Research and Development* 40, no. 3: 80-86. September 1992.

4) 8)

Wilson, Brent, and Peggy Cole. A critical review of elaboration theory. *Educational Technology Research and Development* 40, no. 3: 63-79. September 1992.

5)

Alexander, Patricia A., Diane L. Schallert, and Victoria C. Hare. Coming to Terms: How Researchers in Learning and Literacy Talk About Knowledge. *Review of Educational Research* 61, no. 3: 315 -343. Fall 1991.

6)

Dreyfus, H. L., & Dreyfus, S. E. *Mind over machine: The power of human intuition and expertise in the era of the computer*. New York: The Free Press. 1986.

7)

Winograd, T., & Flores, F. *Understanding computers and cognition: A new foundation for design*. Norwood NJ: Ablex. 1986.

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