

Introduction

A learning theory is an attempt to describe and explain how living creatures and, potentially, artificially intelligent constructs people absorb, process, and use information so we can comprehend the tasks of learning. Learning theories stem from our interest in trying to explain what happens in the learning process and define knowledge issues so that we can understand the processes. This, in turn, helps us adapt that knowledge to help us become more aware of how learning works. In our pursuit of better teaching and learning techniques, we often draw upon theories to help us build educational frameworks from where we can construct solid structures for our instructive needs. While assembled components are often driven by a teaching directive, objectives are often aimed at helping those in the learning process.

Dr. Mohamed Ally, the writer of *Foundations of Educational Theory for Online Learning*, describes in the article what he considers to be the basis of educational theory and model necessary for successful online learning. Dr. Ally's areas of research, knowledge, and writings have included topics such as "mobile learning, workplace learning, e-learning, distance education, and program planning and development" (Athabasca University, 2009, para. 4) and has a wide range of abilities with respect to distance education concepts. He is currently the Director and Professor of the Centre for Distance Education at Athabasca University in Canada (Athabasca University, 2009, para. 4).

Overview

The basis of Dr. Ally's article is to describe the foundation of educational theory and how it necessitates the principles of effective online learning design. Ally then proposes a model demonstrating how the aspects of educational theory contribute to its structure.

The piece begins by summarizing the benefits of online learning as well as the design aspects that need to be incorporated into it. Ally then provides details on the “schools of learning” that he feels provide the backbone for the educational theory to support it and provides details on the implications of their contribution. These schools of learning are: behaviorist, cognitivist, and constructivist. Additionally, connectivist theory is seen as a guide to online learning.

The implications within each of these schools is that they provide a collaborative canvas where they mix to form a picture of common educational theory that can be applied to practical online learning concepts. Dr. Ally identifies many areas within the various schools where we can readily see how online learning design and development tactics and techniques support the respective theories.

Following this information is the effective online learning strategy model Ally developed, showing how each level of learner interaction affects and is affected by other forces (technical, individual, etc.). In addition, he provides descriptive details on each type of interaction and walks us through the processes of those interactions.

Organization

The piece is organized with a great deal of introductory material to help readers understand the needs of online learning. It then proceeds to describe the schools of learning and how each helps build effective online learning with the assistance of connectivism structure. Based on the amount of material needed to be covered by the author, there is an unnecessary waste of reader attention spent on this preparatory information as much of this content is somewhat second nature to colleagues and others who would otherwise seek the writing.

The format of the document does help lay people get quickly educated on the topic, however, by providing an overview on what online learning is, how online learning can help students, and how online learning can be developed. This also potentially serves the purpose of informing educated peers of the concepts he is using and their definitions within the body of the article so that there can be no reader misinterpretations or misunderstandings.

Once introductory overtures are completed, Ally tells us of the concepts of the three schools of learning and how each one determines special aspects of online learning. To help assist in this endeavor, Ally informs us that the connectivist theory is also going to be integrated with this special online learning theory and model.

For the most part, the language use in the article is decidedly self-explanatory. Where there are exceptions, Ally often provides explanations of terms so that readers have a common ground of understanding. There are some concepts though that are not explained sufficiently and the article would benefit from more details on those terms so as to help in the discussion and clarify intent.

Topic Material and Conclusion

Dr. Ally discusses many concepts as presented by the different schools of thought and they are compelling ones. Through his summary of the schools of learning, Ally breaks down the strategies that can be drawn from each theory into the following components:

- Behaviorist Strategies – the teaching of “what” (that is, factual information)
- Cognitivist Strategies – the teaching of “how” (that is, methods and principles)
- Constructivist Strategies – the teaching of “why” (that is, internal processing along with situational/contextual learning)

(Ally, 2008, p. 20)

He reports that the behaviorist school of learning is an aspect of online learning theory in that learning is demonstrated overtly by learners, through external behavior – deliberate proof that they have attained knowledge. Conversely, he also considers the cognitive school of learning a part of the learner formula in that it supports the notion that learners use “memory, motivation, and thinking” (Ally, 2008, p. 19) to build knowledge. Additionally, the concepts of constructivism are incorporated into the mixture in that the context of life experience (that is, the senses) is actively being processed and turned into knowledge.

Included, but not quite, is the connectivist theory. It has an equally important part to play in the structure of building the online learning theory and model, yet it is not seen as having the same standing. The message as a result is somewhat distorted in that we are told how relevant connectivism is, but that it is not considered part of the “school of learning” construct even though it would not appear to be in conflict with the three main categories under which learning theories appear. Admittedly, the connectivism theory, by its nature, may be a theory in flux as we see that it has a dependency upon technological structures which can be quite fluid, thereby making its concepts difficult to include as a semi-unwavering standard.

Speaking from a different perspective, Mayes in his article *Interactions in Online Education – Implications for Theory and Practice* emphasizes that interaction with concepts (conceptualization), interaction with tasks (construction), and interaction with people (dialog) as being essential to providing a framework for interactive learning (Mayes, 2006, p. 9-20). Much of his writing though is focused on the impact of technology on learning and less on the specifics of course design and details necessary to improve learning.

Reader Benefit

The article is acting as a conduit for experts in the field of distance education to look to the different theories he describes and use them to construct a collaborative or even hybrid learning theory in order to facilitate the development of an online learning theory so as to create better material and guidelines. As he described in the early portion of the text, “the delivery medium is not the determining factor in the quality of learning” (Ally, 2008, p. 18) rather it is through the use of a definable combination of theories with an eye toward future theories (for example, connectivism) that we come up with a better understanding as to how online learning is best designed, accessed, used, and accommodated in our existing educational structures.

Ally’s references are numerous, indicating that he has done the legwork necessary to document how others perceive various aspects of online learning (although it would be a worthwhile effort to review the references he provided to determine their appropriateness and timeliness). While it may be necessary to call attention to these concepts, principles, theories, et al, Ally’s context of providing these references within the article is somewhat irregular, with some citations blurring into his text and others serving as a distraction from the point being made – some serving no other purpose than to demonstrate that he has done an appropriate level of research.

To be certain, a researcher proposing a theory needs to perform due diligence and confirm that there are:

- Differences (and/or similarities) between existing work and that being written by the author

- No duplication of effort to the point of copying work or not noting where very similar work was already done

Other problems with the material is that it is uneven. Unnecessary time and attention is given to commonly shared concepts, apparently to confirm with readers that we have a baseline for terminology and basic concepts, but instead it serves no interest except to the casual reader who may be making his or her first foray into the world of distance education. That being said, there are also some terms that should be more clearly laid out so that the common ground Ally is trying to create actually exists.

In addition to specific terminology, sections within the chapter are also broken out into mixed content and substance blocks with an uneven distribution. When constructing a document that is supported by clearly denoted principles, it is necessary to develop a degree of balance between them so as to see how they are collaboratively held together and not developing subordinate or less important components. This is particularly true with respect to the sections on the Behaviorist School of Learning and the Connectivist Theory for Online Learning.

For much of the document, Dr. Ally focuses on the necessity of the three-legged stool of behaviorist, cognitivist, and constructivist theories in order to support the weight of online learning. The problem with his approach comes from his “shortened” leg of behaviorism where discussion material is woefully missing. (Ally, 2008, p. 20). By comparison, the behaviorist subject matter is considerably smaller than its counterparts, despite its needed place to stabilize the stool, making it a wobbly surface.

A similar circumstance exists for the section on the Connectivist Theory for Online Learning (Ally, 2008, p. 34-36). Treated as a poor cousin to the other existing theories, connectivism is

almost an afterthought and not given the same level of “dignity” afforded to the main three theories attributed to educational learning theory. The mention of it also seems unnecessary when reviewing the model Ally proposed for effective online learning.

Conclusion

The article by Ally raises some good points, but requires more specific information as relates to the individual theories/schools of learning and the construction of his list of implications. Despite that, however, the list is a useful one from which we can draw upon when developing online learning materials. To prove the article useful and quantify how theories affect the effectiveness of online learning material, it is necessary to perform more detailed research and earmark the specific principles that affect learner outcomes.

The concepts posed by Ally are extremely helpful. When compiled into a useful format of instructions and matched to theory components, they provide a valuable framework from which beginning and established instructional designers and educators can construct course materials with maximum impact.

References

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