Context-Based Learning

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Without Abstract

Synonyms

Object-based learning

Definition

Context-based learning is a pedagogical methodology that, in all its disparate forms, centers on the belief that both the social *context* of the learning environment and the real, concrete *context* of knowing are pivotal to the acquisition and processing of knowledge. The approach is based on the firm conviction that learning is a social activity that is badly served by most classroom situations due to an inherent misrepresentation of how the mind acquires, processes, and produces knowledge. Learning is a communal activity centered on the interactions between persons with substantial interests and standard classroom structures that do not respond to this may well inhibit the success of learning.

Theoretical Background

The German philosopher G. W. F. Hegel succinctly critiqued theoretical approaches to questions of practical philosophy in his subtle comment about the Owl of Minerva flying only at dusk. The comment asserts that in areas of human discipline and practical activity (and education is a human activity), theory can only be a descriptive practice that arises when the trial and error and nitty-gritty of actual practical engagement with the world and people

has become a stable institution. Only when such activities and conventions have progressed to an effective level are general principles and rules of conduct, in short *theory*, distilled out of everyday performances and practices. Context-based learning is perhaps only just entering into the self-conscious phase whereby thinkers reflect on the theory that can best capture an overtly practical engagement with the learning environment. The approach is still, in many ways, an immanent response to the day in day out process of learning and transmitting knowledge, whereby new techniques have been developed bottom-up rather than inspired and determined by preexisting theoretical commitments. And nowhere is such a pragmatic approach more appropriate than in a pedagogical methodology that seeks to integrate the interests of the would-be knower with the body of knowledge before him or her.

Of course, theoretical precedents have been sought in the educational literature, and two thinkers above all others seem to stand out: John Dewey, the American pragmatist, and Lev Vygotsky, the Russian psychologist. From the former, context-based learning derives an overtly pragmatic commitment: learning is an activity bound up with human interests. Just as the standard of truth and knowledge in Dewey's deeper philosophical theory is their utility, a statement is true if it is useful, so must learning prepare the subject for social engagement. In response to his theoretical commitments, Dewey believed that education ought to be dominated by real-life tasks and challenges and that theory and facts were to be learned through activity, rather than the standard model of a passive student receiving knowledge from an expert or superior. The latter thinker, Vygotsky, asserted that culture and the learner's immediate environment determine both how he or she thinks, that is, the processes of reasoning, and also the content of his or her thinking, that is, the elements of knowledge that are combined and used in the thinking process. One's success in learning is dependent upon the environment of learning and the activity is best facilitated through a process of problem solving in collaboration with peers, relations, or teachers. Intellectual development depends greatly on the social situation of learning and how interactions with teachers, relations, and peers around the learner occur. So, the *context* in which learning is *based* is a dual axis: on the one hand, the context is the social situation of learning whereby knowledge is acquired, processed, and produced through collaboration and use rather than direct dissemination; on the other hand, the context must be an engagement with a real-life task whereby knowledge interfaces with an actual, empirical reality. Both axes instigate a move away from the hierarchical model of passive-learning in the traditional lecture hall or classroom situation.

However, as indicated, it is the actual practice of context-based learning that, for the most part, reveals its commitments and implicit assumptions. The method redefines the roles of both learner and teacher: the former is to be actively involved in the learning process and the latter is to facilitate the learners' taking possession of the knowledge for him or herself. The learning process is not about rote learning of facts, but is interest governed in the sense that the learner perceives that there is something at stake in the learning rather than the mere propensity to pass an examination or gain credit. Learning is no longer seen as something happening to one, but an activity in which one is engaged. Consequently, the teacher becomes a facilitator or a supervisor of tyro researchers; he or she is no longer a dispenser of facts and theories, but an organizer of a social community of equal learners.

As the learner becomes the center of their own educational experience situated within a communal group, so he or she reflects upon the first axis of the context (the social

environment), the object (the intersection of the knowledge with empirical reality), and the experience of learning. The advantage is obvious: through learning, the leaner is also *learning to learn* and progresses from a dependent student to an independent subject. The second axis of the context concerns the engagement with real-life learning challenges. These activities would ideally involve both intellectual and *physical* activity: the movement of the students, the seeking out of data, the measuring of objects, and so on. The learning context must be both a concrete reality and the site of an investment of abstract ideas and epistemological mores. So, one approach would be to invest academic knowledge of philosophy, physics, literature, and so on into a real context such as health care, art galleries, the music industry, political events, and so on, reflecting the interests of the learners themselves. A second approach would be to frame the pursuit of academic knowledge in terms of real-life challenges: the objective of making river water safe to drink (chemistry) or the understanding of why public consensus is so outraged when cadaver's organs are used without consent (philosophy). In both approaches, it is obvious that the epistemological base of the discipline is broadened (in the chemistry example, there must be an explicit discussion of why we would want safe water and where the technology would be useful) and that the acquisition of knowledge crosses disciplines (in the philosophy example, data on the medical use of organs would have to be compiled).

The process of learning should involve distinct phases. One, the learner begins with empirical engagement with the site or interaction of the knowledge that relies on facts and theories already belonging to the learner as well as knowledge shared with peers and the encounter with new knowledge in situ. Two, the learner then conceptualizes that reality in terms of concepts and theories is drawn from one or more academic disciplines. The knowledge acquired from a traditional discipline is perceived as useful to the completion of a task or in the satisfaction of the learner's self-directed interest. Three, the concepts and theories of the discipline are applied or used and thus engage reality and a concrete problem or object, so that the student sees and commands them in action. The learner takes possession of the knowledge in order to satisfy an interest. Four, the results and conclusions acquired and generated are disseminated in a variety of ways, determined by appropriateness: presentations, reports, theses, web pages, and so on. The approach encourages higher-order thinking alongside the passive acquisition of discipline-based knowledge and involves the learner in the social construction of knowledge that interfaces with a concrete reality.

The advantages of the approach are that the learning environment facilitates the internalization of knowledge and facts because they are connected to the reality of learners' lived experience. Learners are involved in the production of the knowledge in a tyro researcher role whereby a hands-on experience makes learning into a *doing* and not just a *happening*. Furthermore, learners are motivated to acquire the knowledge and see it as valuable because it solves a specific problem or engages a distinct reality. The motivation to engage in learning is interest rather than punitively driven. As a pedagogical method, it implicitly builds upon the knowledge that learners already possess and so increases confidence and independence through active involvement and social collaboration.

Important Scientific Research and Open

Questions

Much of the research into context-based learning is rather appropriately an active engagement with new pedagogical techniques in specific disciplines (Anthony et al. *1998*; Hansman *2001*; Rose *2009*). The majority of this empirical research is concerned with the effectiveness of imparting skills and relating academic knowledge to real-life challenges. In these studies, there is an attempt to compare the acquisition of knowledge concepts through traditional means and through context-based approaches. The hypothesis that underpins much of the research is that if a learner can understand why they are learning what they are learning, it will somehow be of significance to them and hence retained. The empirical case needs to show that this is more than a mere truism and the theoretical work has to articulate a framework that explains why this is the case.

There are, however, also some theoretical assumptions that deserve more attention. Most obviously, the reduction of epistemology to simple pragmatism whereby discipline-specific knowledge is only of value if it can be utilized or applied to tasks and social integration seems to prioritize skill learning over facts. Moreover, context-based learning ought to perhaps be conditional and not a universal theory. It may perhaps be more suited to specific disciplines and the balance between student-led and facilitator-governed learning will differ from discipline to discipline and perhaps also from learner to learner. A core dissemination of knowledge is required at the dependent stage and should not be discounted: independence develops from dependence and the use of context-based approaches should be attentive to these considerations. Empirical investigations are required to measure the effectiveness of the technique and to discern the correct balance between the dependence and independence at the various stages of an education.

Cross-References

Bottom-Up and Top-Down Learning

Collaborative Learning

Dewey, John

Interests and Learning

Learner-Centered Teaching

Personalized Learning

Problem-Based Learning

Project-Based Learning

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