Situated cognition term paper examples

Profession, Student



Philosophy

The theory of situated cognition postulates that human thoughts are related to the environment in which we are situated. That what a human perceives, and how we conceive the activities we are involved in develops together with what we do physically.

Situated cognition suggests that the learning process of an individual is tied to the authentic activity, culture and context of an individual. I. e., it is difficult for a person to learn from unnatural activities for instance learning a foreign language by immersion is easier than having to learn a new language through secondary media such as textbooks and vocabulary appendices. Situated learning very much provides a broad framework of the authentic tasks and in-context value of apprenticeship acquired. However, this is different from behavioural and cognitive learning.

Behaviourist and cognitive theories tend to look the external knowledge to the world in either behaviours or internal structures involved. Situated learning looks more into the broader perspective incorporating both the behavioural and cognitive elements by observing the interactions between people and the environment and also the importance of the prevailing situation. Wilson and Meyers (2000) termed situated learning as being" to bring the individual and the social together into a coherent theoretical perspective."

Situated learning differs with behavioural and cognitive learning in the following manner. The situated cognition process emphasizes ion the culture and socio-cultural activities of people within a specific environmental setting. Learning in this theory is not about gathering information but rather being immersed into membership of the community and acquiring transformation gradually whereas in a behavioural and cognitive learning situation the learning psychology is both behavioural and cognitive. The situated cognition majorly focuses on the integration of the individual into the practices of the community. The main focus in behavioural theories aids the associated connection between stimuli and the response created. In cognitive processes, the information process mainly occurs within the learner as the brain is regarded as the engine of thought and, therefore, helps one in understanding mechanisms of the brain and representations of the mind (Brown, Collins, & Duguid, 1988, p. 3). The knowledge in situated learning is seen as the actions of an individual or a group, actions and knowledge are inseparable in this theory while on the other hand knowledge is exhibited by the behavioural change of an individual and the organization structure that the learner assumes in cognitive learning.

Situated learning and cognition in everyday life according to Lave

Lave discusses the problem of transferring of students in a school learning situation and holds that in contrast to the classroom setting a natural setting is a function of context, culture and activity. In his finding, Lave found that cognition is supported, defined and interpreted by the social surroundings of an individual (Lave, 1988, p. 3). People are more comfortable with solving problems through participation and interaction rather than formal approaches. The participation helps an individual to adapt a comfortable solution though successful reasoning. The social strain, context and culture help in the acquiring and development of cognition skills. For instance, Architects acquire their skills by working with fellow master architects the same way physicians learn by observing other more experienced physicians.

Brown, Collins and Duguid's view on situated cognition and learning culture is as follows

The education system had modelled learning as it is today. They highly criticized learning that separated learning and doing. According to them doing was an integral part of learning and that cognitive apprenticeship provides original practice through social participation. Cognitive apprenticeship is a learning model based on situated learning theory. Its major advantage is that it provides the platform of putting the situated cognitive theory to practice.

Situated Cognition diagram

The concepts that should be acquired in the use of situated learning are that knowledge is not regarded as an object and memory are not a location, but rather knowledge is the actions of an individual and how he participates in new situations. When interacting with communities the construction gained are knowledge, learning and cognition. The specific cultural practices and artefacts used include the cultural models in a society. As new situations improve the thinking ability of a member, his thinking also shapes the situation resulting. This results in a systemic casualty and linear object casualty. Cognitive apprenticeship by involving students allows students to observe the legitimacy of community resources and at the same time helps them acquire strong motivational factors. The engagement helps students understand more and the communication with peers. Legitimate peripheral participation is the process of how a learner engages in sociocultural practice and becomes competent in the practice. Participation gives the student the feeling of belonging.

The education system in today's classes involves the student reasoning rules and laws that were formulated by people before them. The system basically instructs the student to act on pre-accepted standards and how to seek solutions to problems that are defined. This fixed-meaning approach today does not confer well to new situations. In contrast, the traditionalist approach which was the basic way of apprenticeship provided unique cases and authentic situations where the learner learnt how to deal with ill-defined complex problems. This is way better than the modern approach as the daily unexpected challenges improve the new situation reaction of an apprentice. In administering cognitive apprenticeship, the teacher considers the professional tasks processes involved. The teacher involves the students by providing authentic tasks that would make the students develop effective strategies. The teacher though has to model requisite strategies prior and coaches the students as they undertake the tasks independently (Driscoll, 1994, p. 5).

Situational learning advantages are laid out as follows: - The student gets to learn through practice by participating personally in communities. Learning becomes a co-constitutive process where the learner is continually moulded through actions and relations with the people (Watson & Winbourne, 2010, p. 5). The knowledge of a community is accrued in the daily practices. It is, therefore, impossible to separate the knowledge from the doing element one learns by doing. Participation enables students to participate socially different from how cognition is happening in minds of students in a class. Lave has numerous examples of acquiring knowledge through situated learning. One of his best examples is the Weight Watchers program that was used to determine food servings. Lave describes (1988)," Dieters were asked to prepare their lunch to meet specifications laid out by the observer. In this case, they were to fix a serving of cottage cheese, supposing that the amount allotted for the meal was three-quarters of the two-thirds cup the program allowed. The problem solver began the task muttering that he had taken a calculus course in college. Then after a pause he suddenly announced that he had 'got it!' He filled a measuring cup two-thirds full of cottage cheese, dumped it out on a cutting board, patted it into a circle, marked a cross on it, scooped away one quadrant, and served the rest" (p. 165). The example clearly demonstrates how one can pick cues from the environment in solving daily puzzles.

Another example is how Brazilian children successfully solved a mathematical problem while on the streets selling produce. When another or equivalent problem was presented in a class scenario, the child failed. This example shows how artefacts and context help the child understand the problem better in its natural form (Lave & Wenger, 1991, p. 6).

References

Brown, J. S., Collins, A., & Duguid, P. (1988). Situated cognition and the culture of learning. Palo Alto, CA: Institute for Research on Learning. Driscoll, M. P. (1994). Psychology of learning for instruction. Boston: Allyn and Bacon.

Lave, J. (1988). Cognition in practice: Mind, mathematics, and culture in everyday life. Cambridge: Cambridge University Press.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge [England: Cambridge University Press. Watson, A., & Winbourne, P. (2010). New directions for situated cognition in mathematics education. New York: Springer.