

THE EFFECT OF CONSTRUCTIVIST APPROACH OF LEARNING AND LANGUAGE COMMUNICATION IN EDUCATION

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Abstract

Constructivist approach acknowledges learning in context and learning of knowledge could only be achieved through meaningful activity, learning is a continuous, life-long process resulting from acting in situations. Learners should identify, pursue and reflect on their own learning goals while solving the genuine problems in the world. That is, learners are to be self-aware and autonomous. In this respect, the necessary constructivist conditions for learning and elsewhere. The recent advances in technology have necessitated first new approaches and then new methodologies in the area of foreign language learning and thoroughly teaching. The Internet and the virtual learning environment have diversified the opportunities for school teachers, instructional designers as well as learners by varying and broadening the alternatives for learning and teaching of languages. Employing tools and applications, other than classroom and course books, in the learning of foreign languages requires reconsidering the pedagogy, methodology, applications, teacher roles, interaction types, and teaching environment itself. And also multiple selections of channels, through which the teaching materials can be implemented mandate the revision of traditional one way communication between the teachers and the learners. An acknowledgement is brought about by the constructivist approach with its assumptions about learning and knowledge, multiple perspectives and modes of learning and the complexity of learning environments. Constructivist approach is promising at promoting learners' language and communicative skills as well as at fostering their autonomy, social and interactive skills contributing to their development into more confident, pro-active and responsible individuals by supporting incentives on diverse media in language learning and teaching.

Keywords: Foreign Language Learning, Distance Education, E-Learning, Videoconferencing.

Introduction

Constructivism has multiple roots in the psychology and philosophy, among which are cognitive and developmental perspectives of Piaget, the interaction and cultural emphases of and Bruner, the contextual nature of learning, the active learning of Dewey, the epistemological discussions postmodernist views, and the paradigm and scientific revolutions of Thomas Kuhn learning could be summarized as the actively constructed by learners as they are trying to make

sense of their experiences, learners form, elaborate and test candidate mental structures until a satisfactory one emerges particularly conflicting experiences will cause perturbation in the new structures, so that they can be restructured and constructed anew to make sense of the new information That is, knowledge is not representing or corresponding to the external reality, but in visible daring is constructivist, because he firmly believed that knowledge acquisition is a process of continuous self-construction. That is, knowledge is not out there, external to the child and waiting to be discovered. Instead, knowledge is invented and reinvented as the child develops and interacts with the surrounding world. Accordingly, children actively approach their environments and acquire knowledge through their actions. Children go through stages.

Constructivism Learning

Individualizes and contextualizes students' learning experiences. What is meant by constructivism? The term refers to the idea that learners construct knowledge for themselves--each learner individually (and socially) constructs meaning--as he or she learns. ³ Constructing meaning is learning; there is no other kind. The dramatic consequences of this view are two fold

- (1) We have to focus on the learner in thinking about learning.
- (2) There is no knowledge independent of the meaning attributed to experience (constructed) by the learner, or community of learners.

Let me discuss the second point first because, although it appears radical on an everyday level, it is a position which has been frequently adopted ever since people began to ponder epistemology. If we accept constructivist theory (which means we are willing to follow in the path of Dewey, Piaget and Vigotsky among others), then we have to give up Platonic and all subsequent realistic views of epistemology. We have to recognize that there is no such thing as knowledge "out there" independent of the knower, but only knowledge we construct for ourselves as we learn. Learning is not understanding the "true" nature of things, nor is it (as Plato suggested) remembering dimly perceived perfect ideas, but rather a personal and social construction of meaning out of the bewildering array of sensations which have no order or structure besides the explanations (and I stress the plural) which we fabricate for them. I'm sure that many of you have had philosophy courses which have exposed you to these concepts, and you may accept this basic premise that there is

no such entity as a Ding an sich whether or not we can perceive it. Yet we all tend to remain closet realists, and refute Bishop Berkeley, as Samuel Johnson did, by kicking the stone and feeling real pain. The more important question is, does it actually make any difference in our everyday work whether deep down we consider knowledge to be about some "real" world independent of us, or whether we consider knowledge to be of our own making? The answer is yes, it does make a difference, because of the first point I suggested above: in our profession our epistemological views dictate our pedagogic views. If we believe that knowledge consists of learning about the real world out there, then we endeavor first and foremost to understand that world, organize it in the most rational way possible, and, as teachers, present it to the learner. This view may still engage us in providing the learner with activities, with hands-on learning, with opportunities to experiment and manipulate the objects of the world, but the intention is always to make clear to the learner the structure of the world independent of the learner. We help the learner understand the world. but we don't ask him to construct his or her own world.

Problems in learning

A constructivist application. Problem-based learning necessitates that learners work together to solve real problems while employing various resources and technologies. In this process, learners work together to identify the problem, assign tasks to be completed in order to achieve a solution, think critically as they gather data and resources towards solution, find a solution, then assess and reflect on the solutions posing problems and providing different activities in the process of finding a solution. Operate and learners form, elaborate, and test candidate mental structures until a satisfactory one emerges. Moreover, new, particularly conflicting experiences will cause perturbations in these structures, so that they must be constructed anew in order to make sense of the new information the similar process as schema accommodation and restructuring. Constructivist approach acknowledges learning in context and learning of knowledge could only be achieved through meaningful activity, learning is a continuous, life-long process resulting from acting in situations. Learners should identify, pursue and reflect on their own learning goals while solving the genuine problems in the world. That is, learners are to be self aware and autonomous. In this respect, the necessary constructivist conditions for learning are

1. Embedded learning in complex, realistic and relevant environments.
2. Provide for social negotiation as an integral part of learning.
3. Support multiple perspectives and the use of multiple modes of representation.
4. Encourage ownership in learning.
5. Provide adequate time for learners' investigation and in-depth engagement.
6. Nurture self-awareness of the knowledge construction process.

Necessity of Constructive Approach

According to constructivist approach like complexity, diversity is one of the characteristics of life which is to be reflected into the constructivist learning environments. General principles and single models do not always apply to all situations and cases in life. People differ in their social backgrounds thus their perceptions about the matters they encounter may be multiple. Multiple perspectives is widely accepted among constructivists. Problems and experiences in real life are complex and relevant; one cannot escape multiple attractors while trying to solve these problems. For this, school education must reflect the complexity of life. In Dewey's words (1966); education is not simply transmission of knowledge, but, "in its broadest sense, is the means of this social continuity of life" The complexity of learning environment could be provided via tools and content to be learnt. Perkins (1991) proposes "construction kits" and "phenomenaria" which could be either way digital or realia, and could enable learners to assemble toys, as well as abstract entities, such as commands in a program language, creatures in a simulated ecology, Legos, and language learning softwares. Wilson (1996) exemplifies phenomenaria like SimCity and SimEarth which enable learners to observe various phenomena and to manipulate concepts and assumptions. These are games where language learners could both create all aspects of a real city and manipulate among the relationships of language, city parts and construction. Sims is another version of phenomenaria in which virtual avatars (animated individuals) could build their own houses, buy their furniture, apply for jobs, shop for food, socialize with neighbors, go downtown for a drink and etc. While Negotiation among learners represents the diversity of perspectives and opinions about issues.

According to Spiro (in Driscoll 2000, p. 380) "revisiting the same material, at different times, in rearranged contexts, for different purposes, and from different conceptual perspectives. Microworlds and Hypertext. Papert (1981) defines microworlds as "small but complete subsets of real environments that promote discovery and exploration, they have two essential characteristics, one is they embody the simplest working model of a domain or system, and the second is that they offer a point of entry that matches the learner's cognitive state" make abstract concepts simple and concrete so that the child can relate them to his or her existing knowledge and fit them into his or her knowledge structure. One metaphor Paper uses is the way children learn to talk. This process happens without any formal organized learning and is encouraged by the environment. Paper used this analogy in describing 'Mathland' a context which is to learn Maths like living in France is learning French. This application could be beneficial in foreign language learning and teaching as well. Online games and virtual microworlds like Sims and Second Life could be employed to enrich the language learning experience and provide space for constructivist conditions mentioned earlier. Hypermedia designs like PCs, DVDs and other digital devices could easily be compiled and

put into use to prosper the classrooms. They also allow for networking, thus sharing and collaboration is possible. In these designs, vast body of information about matters of interest like personal data, definitions, descriptions, photographs, videos and graphic designs, interviews and other samples of research could be presented. Using hypertext allows the learners to navigate through the materials. Via hypertext information chunks can be constructed and interlinked to stimulate and simulate the learning process and knowledge, links could be created to external information and learners' own texts could be published and shared in real life. Another constructivist aspect in hypertext is that pictures, sounds and other multimedia can be incorporated, which could benefit learners and language learners by creating a learning environment and setting in constructivist perspective. Accumulation of these hypertexts creates microworlds and hypermedia which provide access to rich information especially if they are implemented alongside the Web. Lowry & Wilson (2000) exemplify "World Lecture Hall" a website which presents examples of the Web being used for learning-courses, activities, etc. and serves as a mini-browsing environment with some quality screening, but lots of room to explore.

Technology of Learning

According to Miller (in Can 2006) videoconferencing can be defined as communication in which all parties can send-and-receive audio-and-video to-and-from each other. All other types of electronic communication (including typing, electronic drawing, the viewing and manipulating of websites, the playing of pre-recorded video, etc.) can occur within, or concurrently with videoconferencing. Videoconferencing is a form of interactive television. Burn (2002) asserts that "within the field of education, whilst videoconference systems appear to provide the potential to reach a wider student audience, offer greater flexibility, make use of scarce expertise and enhance communication channels between remote groups of learners and their tutors, its use within an educational context is still not well understood." Distance learning applications like computer conferencing and videoconferencing for language learning and teaching could be used by schools to enrich the classroom experience by allowing for all types of electronic communication and media, by connecting them to learning parks, museums, experts and even other schools worldwide through television monitors and video cameras. Along with the instructor on one end a facilitator could be employed on the other end. Thus, a conventional classroom is enriched. The facilitator could act as a helper, guide, example or interactor, communicative pair in activities. These aspects of conferencing and videoconferencing could bring into language learning the real life, real interlocutors and the target culture, which in return could serve as a valuable resource for meaningful language input, real life and simultaneous language practice, comprehensive output, pragmatic and discourse awareness presents Problem-based learning (PBL) as Lowry and Wilson (2002) exemplify one such example for

language learning, "Guess Who's Coming to Dinner: A French Revolutionary Dining Experience" in which learners prepare to assume identities of prominent French people like Rousseau and King Luis XVI and get ready for dining language. These applications create an environment for distance and e-learning. The Internet, websites and virtual learning environments provide autonomy, embedded learning in complex and relevant environments. Microworlds and hypermedia, with their potential for authentic activities, assist in rich learner centred learning environment and social negotiation. Goal-based, Problem-based and collaborative learning prosper the task environments and skills, and contribute into the implementation of variety of resources, technology, solutions via multiple perspectives, multiple modes of representations and reality, and helps in reflection on reasoning and ownership in learning. By creating conversation and collaboration among students, Open Software and Course Management Tools supply rich resources in construction and creation of new knowledge, encourage ownership, autonomy and reflection in learning.

Constructivist Approach in Teaching of Languages

Reinfried (2000) summarizes the constructivist principles in foreign language learning and teaching by comparing Wolff and Wendt's views. According to Reified constructivist language learning should be action oriented where language is learned through collaboration, free creation is praised, and learning is achieved by actively doing projects and self teaching. Constructivist language learning should be learner centered that supports individualization of learning and autonomy. Learner should develop awareness not only for learning but for the language itself and for the intercultural aspect as well. The last but not the least, constructivist language learning is to be holistic with content oriented perspective, authentic and complex learning environment. aspect, implementing online applications, using instructional technologies and diverse media in the process of learning and teaching languages are all advocated by constructivist approach. The Education Committee of European Union have defined the language learning and teaching experience in their comprehensive "Common European Framework of Reference for Languages" (CEF) as process oriented, including linguistic, sociolinguistic and pragmatic competence, skills and abilities for learning. Promotion of plurilingualism has been of concern for the European Union, for this the Education Committee has outlined some key concepts in language learning and teaching. Among these are action oriented approach that is encouraging active learning of the language learners, autonomy and self awareness in learning, cognitive and social aspects of learning, using instructional technologies and diverse media in the process of teaching and learning languages, promotion of life-long learning (CEF, 2001). These concepts are in line with the constructivist learning conditions mentioned above. The Internet, websites and virtual learning environments provide autonomy, embedded learning in complex and relevant environments.

Microworlds and hypermedia, with their potential for authentic language activities, assist in rich learner centred learning environment and social negotiation in foreign language learning area. Goal-based, Problem-based and collaborative learning prosper the task environments and skills, and contribute into the implementation of variety of resources, solutions via multiple perspectives, multiple modes of representations and reality, and help in reflection on reasoning and ownership in foreign language learning. By creating conversation and collaboration among students, Open Software and Course Management Tools supply rich resources in construction and creation of new knowledge, encourage ownership, autonomy and reflection in foreign language learning.

Classroom Teaching

In concordance with constructivist approach employing technologies like the Internet which creates a new environment both for foreign language learning and teaching will diversify the classroom and course books. Websites and the virtual learning environments have the potential to transform the pedagogy and methodologies for foreign language learning and teaching. Creating Microworlds and Hypermedia designs for learning necessitates new approaches to learning like collaborative learning, problem-based learning and goal-based scenarios. Learners have the opportunity to work together and collaborate while learning the language by creating their own designs and projects. In terms with constructivism they are likely to learn for themselves while solving real life problems and achieving goals in teams and groups like real micro societies. Moreover, forming such societies out of classroom is acknowledged for the sake of simulating the real life solutions to real life problems. Negotiation of meaning could easily be achieved through this kind of collaborative and meaning construction approach. Making Open Software and Course Management Tools, like Moodle and BlackBoard, accessible to learners could serve to implement the multiple constructivist conditions for learning in the foreign language learning and teaching. Learners would have more opportunities to contact all classroom materials, activities and the instructor on and out of site; this in return would enrich learner activity and learning opportunities. They would also serve as synchronous and asynchronous learning environments, where learners could create and learn together both during and out of class. In addition, using distance learning applications like computer-conferencing and videoconferencing could serve as brand new environments for communication, sharing and experience in foreign language learning and teaching. Learners would have the opportunity to come together from very different physical environments and enable them to share diverse experiences and perspectives and cultures. This is in lines with constructivist approach, which necessitates multiple experiences and perspectives of the knowledge to be constructed during the Classes. According to constructivist approach and constructivist learning principles, online

learning and teaching of languages mentioned above could also be promising at promoting learners' language and communicative skills as well as at fostering their autonomy. Learners would have more opportunity for self study as well as collaboration. In asynchronous learning environments, for instance, learners could contribute by having time for research and acquire the necessary skills for further knowledge construction. The acquisition of these social and interactive skills would contribute into their development into more confident, pro-active, responsible and social individuals. This has also been considered in CEF, the Common European Framework for Teaching and Learning of Languages.

Conclusion

In concordance with constructivist approach employing technologies like the Internet which creates a new environment both for foreign language learning and teaching will diversify the classroom and course books. Websites and the virtual learning environments have the potential to transform the pedagogy and methodologies for foreign language learning and teaching. Creating Hypermedia designs for learning necessitates new approaches to learning like collaborative learning, problem-based learning and goal-based scenarios. Learners have the opportunity to work together and collaborate while learning the language by creating their own designs and projects. In terms with constructivism they are likely to learn for themselves while solving real life problems and achieving goals in teams and groups like real micro societies. Moreover, forming such societies out of classroom is acknowledged for the sake of simulating the real life solutions to real life problems. Negotiation of meaning could easily be achieved through this kind of collaborative and meaning construction approach. Making Open Software and Course Management Tools, like Moodle and BlackBoard, accessible to learners could serve to implement the multiple constructivist conditions for learning in the foreign language learning and teaching. Learners would have more opportunities to contact all classroom materials, activities and the instructor on and out of site; this in return would enrich learner activity and learning opportunities. They would also serve as synchronous and asynchronous learning environments, where learners could create and learn together both during and out of class. In addition, using distance learning applications like computer-conferencing and videoconferencing could serve as brand new environments for communication, sharing and experience in foreign language learning and teaching. Learners would have the opportunity to come together from very different physical environments and enable them to share diverse experiences and perspectives and cultures. This is in lines with constructivist approach, which necessitates multiple experiences and perspectives of the knowledge to be constructed during the classes. According to constructivist approach and constructivist learning principles, online learning and teaching of languages mentioned above could

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