Constructivism: Its Implications for Language Teaching and Second-Language Acquisition

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Abstract

This article presents the term constructivism both as a theory of learning and as a philosophical concept. In this regard, principles and assumptions of the theory of constructivism as propounded by its proponents, viz.: Immanuel Kant, Jean Piaget and Lev Vygotsky, have been revisited to establish its link with language teaching and second-language acquisition. To bring the implications to light, this article makes use of five selected key theoretical [case] studies underpinning the connection between constructivism and language teaching and second-language acquisition. The analysis indicates certain key observations. One is that language teaching-learning and language acquisition are both activities that involve interactions between the teacher and the learner. However, to create knowledge, the teacher is required [enjoined] to facilitate and guide learners to 'discover'. In accordance with the constructivist theory of learning, learning is not only individual but also active, as the creation of knowledge is socially constructed. In this way, the language learner must be enabled to independently learn and socially interact with others in order to acquire the linguistic knowledge and skills that a learner will eventually use to interact with others in the real world. These practices are informed by constructivism as it deals with the nature of knowledge and the way knowledge is created. The article, therefore, concludes that in language teaching and learning, both nature and nurture should be supported by creating an enabling environment in which linguistic knowledge is constructed.

Key words: Constructivism, Language; Language teaching; Second-language acquisition; Constructivist Philosophy

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Introduction

Constructivism as a philosophical concept has a critical role to play in the search for knowledge, as human beings, we are always surrounded by things that make even our world uncertain. Constructivism, founded by Immanuel Kant (1724-1804), helps a man to know these things mainly through social constructs. It has been believed all over the world that education opens up the world and brings a man into the light. This article is, therefore, an attempt to bring an understanding of the connection that exists between constructivism and language teaching and second language acquisition. In this article, evidence (*data*) is presented from the five selected theoretical (*case*) studies to show the implications of the theory of constructivism for language teaching and second language acquisition.

Conceptualization: Philosophy and Constructivism

Since philosophy is regarded as the father of other disciplines, perhaps constructivism cannot be understood if not rooted in the father. Thus, according to Nyirenda & Ishumi (2002, p.3) "philosophy," broadly, is rational critical thinking of a more or less systematic kind about the general nature of the world or reality, the justification for belief, the conduct of life and correct reasoning. Philosophy can be seen from three major perspectives, viz.: as an *activity*, as a set of *attitudes* and as a *body of knowledge* (p.6). Thus, philosophy, generally, helps a man to reach a conception of the entire universe with all its elements and aspects and their relationship with one another. Additionally, Nyirenda and Ishumi (*ibid*.p.10) show that philosophy has four main branches, viz.: metaphysics, epistemology, axiology and logic, all of which help us to understand the universe and its elements. However, epistemology deals with the search for knowledge and its limitations, and for that reason is said to be the most fundamental branch of philosophy as it discusses philosophical truth, falsehood, and the validity, sources and nature of knowledge. Thus, philosophy of education represents answers to questions about the purpose of schooling, a teacher's role, and what should be taught and by what methods (Brown, 1994, p. 58).

On the other hand, constructivism is a perspective that is rooted in epistemology, the main branch of philosophy, and is regarded as an opposing epistemological position to positivism. This is because

constructivists believe that reality is dependent on the mind and is socially constructed through relationships, psychological activities and shared understanding (Gall, Gall & Borg, 2007, p. 21; Neergaard & Ulhoi, 2007; Plowright, 2011). Constructivism deals with the nature of knowledge and the way knowledge is created. Thus, it opposes the idea of ontological reality by focusing on knowledge as constructed. To expound this, three proponents of constructivism, viz.: *Immanuel Kant, Swiss Jean Piaget and Russian Lev Vygotsky* are revisited chronologically.

First, Immanuel Kant, a German philosopher and founder of constructivism, is widely considered to be the prominent figure of modern philosophy. He argues that fundamental concepts and the structure of human experience are sources of morality. Kant devised a model of an individual epistemology by examining the basis of human knowledge and its limits. He brought together the idea of critical philosophy as presented in the *Critique of Pure Reason* (1781),which was to establish and investigate the legitimate limits of human knowledge (Mathews, 1992, p. 11). Kant also argued that the human mind is an originator of experience rather than a passive recipient of perception and that the external physical world is known only through individual sensations. Humans are interpreters who construct their own reality by engaging in mental activities (Stone, 1996, p. 43). Kant studied the combination of rationalism and empiricism which ultimately proved a kind of constructivism. He thought that only by internally constructing cognitive rules can a person organise experiences and develop knowledge. Thus, the constructivist learning theory is produced from the development of cognitivism that eventually became a new learning theory.

Second, the Swiss developmental psychologist Jean Piaget (1896-1980)believed that children use different mental structures to think about and make sense of the world. The structures available to children are determined by their biological readiness and their life experiences and he believed in genetic epistemology (Driscoll, 1994, p. 59). Because of his research experience, Jean Piaget is regarded as a foundational figure by many constructivists. As noted in his book entitled *The psychogenesis of knowledge and its epistemological significance,* no a priori or innate cognitive structures exist in man. The functioning of intelligence

alone is hereditary and creates structures through the organization of successive actions performed on objects, and so an epistemology conforming to the data of psychogenesis can be neither empiricist nor performationist but can consist only of constructivism (Piaget, 1954 p. 23). Piaget's theory of constructivism argues that people produce knowledge and form meaning based on their experience. His theory thus covers learning theories, teaching methods, and educational reform.

Last but not least is the Russian psychologist, Lev Vygotsky, who is regarded as the father of social constructivism as he believed that knowledge is constructed through dialogue and interaction with others (Vygotsky, 1978, p.86). He maintained that knowledge is co-constructed in a social environment and that, in the process of social interaction, people use language as a tool to construct meaning. The use of language between individuals in an environment as an inter-psychological tool is central to social constructivist thought on the learning process. Successful learning is said to result in an internal dialogue as an intra-psychological tool that can be used in the future in various situations (Marsh &Ketterer, 2005; Vygotsky, 1978). This scaffolding nature can be stored in the memory and be used by the learner to make sense of his or her environment at a later date.

According to the social constructivist theory, *knowledge* is different from *learning*. While knowledge is co-constructed in the environment (*inter-psychologically*) with others (Churcher, Downs & Tewksbury, 2014, p.35), learning occurs within the individual (intra-psychologically) with some internal mechanisms through collaboration. Thus, learning occurs at an individual level, and is a product of knowledge creation through collaboration, and knowledge is co-created in the environment. However, recently, several challenges have been levelled against the social constructivist ideology of education placed in Vygotsky's theory (Liu & Matthews, 2005, p.391). While Vygotsky's theory is assumed by many to be the origin of social constructivism, especially by those not affiliated with social constructivism, other scholars claim that he cannot be said to be purely 'social' enough. Lave &Wenger (1991), in postulating their situated learning theory, disapprove of Vygotsky's concepts of learning internalisation, generalisation and scientific

concepts, for they contain only "a small 'aura' of socialness that provides input for the process of internalisation, and is viewed as individualistic acquisition of the cultural given" (p. 47). This has different implications for educational practices from the common perception that Vygotsky "argued that knowing is relative to the situations in which knowers find themselves" (Cobb, 1996, p. 339).

Constructivism and Education

With regard to education, constructivism has two main principles which are useful for the learning process. These are how learners interpret events and ideas, and how they construct structures of meaning in learning situations. The constant dialectical interplay between construing and constructing is at the heart of the constructivist approach to education and not the discovery of ontological or objective reality. In fact, for constructivists, there is no objective reality as it is socially constructed and it carries different meanings for different individuals (Gall, Gall &Borg, 2007, p. 22).

In education, our epistemological beliefs dictate and should at least strongly inform our pedagogical view (Piaget, 1954). Philosophical discourses on education have always been conceived as being in pursuit of the most appropriate ends of education for any given community during each period of that community's existence. Thus, teachers' personal theories of learning have long been viewed as having considerable influence on almost all aspects of teachers' decisions about instruction (Glasersfeld, 1995, p. 4). Accordingly, teachers' views of learning guide them as they make decisions about the desirable means for implementing and assessing instruction. Hence, constructivists maintain that the ability of learners to collaborate with others makes them critical and see others' perspectives, learn more effectively problem-solving strategies and/or share cultural knowledge (Solomon, 1994, p. 43).

Constructing meaning is learning according to this theory. The dramatic consequences of this view are twofold. Constructivism is of the idea that students should always be actively and reflectively constructing (O'Donnell, 1997, p.1). This statement affirms that there is no such thing

as knowledge "out there" independent of the knower, but only knowledge we construct for ourselves as we learn. However, Solomon (1994) noted that knowledge consists of learning about the real world. Education systems need to understand that world, organise it in the most rational way possible, and, through teachers, present it to the learner. The impact of constructivism has extended to national reform documents that are produced by educational practitioners. For example, in Tanzania, changes are evident in the changes in the curriculum from the traditional content–based to competence-based curriculum that is envisaged to help learners relate the knowledge and skills acquired to his or her real world.

Constructivist Philosophy and Language

Constructivism entails giving an activity that is individual to the learner. The theory hypothesizes that individuals try to make sense of all the information they receive, and that each individual will, therefore, "construct" their own meaning from that information. Language, especially, second language is best acquired or learned when it is taught in the environment where it is used as a means of social interaction, thereby enabling learners to construct meaning about the language (Piaget, 1954). The theory has changed the design of the language curriculum to become a competence-based language teaching syllabus in which the learner is made to play an active role.

In this regard, research and theory on second language acquisition indicate that students' linguistic growth is related to the amount of time spent with the language through meaningful exposure and a child will need a mere linguistic input to trigger their innate ability to acquire language (Chomsky, 1965; Piaget, 1954; Long, 1975). In addition, Marlowe and Page summarize the foundation of the constructivist approach in relation to language that it is about constructing knowledge, not receiving it. thinking and analyzing, not accumulating and memorizing, understanding and applying, not repeating back and being active, not passive (Marlowe & Page, 2005).

Constructivism and Language Teaching

Constructivism is associated with language teaching and learning situations as it assumes that learning is a process of structuring meaning

in an active way and that a language teacher is to take the role of the facilitator rather than the knower. *Teaching* is showing or helping someone to learn how to do something, giving instructions, guiding in the study of something, providing with knowledge, and causing to know or understand (Phillips, 2000). In this regard, Bruner (1966b, p.40-41) noted that a theory of instruction should specify the following:

- The experiences which most effectively implant in the individual a predisposition to learn;
- The ways in which a body of knowledge should be structured to be most readily grasped by the learner;
- The most effective sequence in which to present the materials to be learnt; and
- The nature and pacing of rewards in the process of learning and teaching.

In the 1960s, when behaviourism had failed to produce better language learning outcomes, a generative-transformational school of linguistics emerged through the influence of Noam Chomsky. What Chomsky was trying to show is that language cannot be scrutinised simply in terms of observable stimuli and responses or the volume of raw data gathered by field linguistics. The generative linguist was interested not only in describing language or achieving the level of *descriptive* adequacy but also in arriving at an *explanatory* level of adequacy in the study of language - that is, a principled basis, independent of any particular language, for the selection of the descriptively adequate grammar of each language (Chomsky 1965).

Cognitive psychologists in defence of Chomsky took a theoretical stance, in that meaning, understanding and knowing are significant data for a psychological study. Instead of focusing rather mechanistically on stimulus-response connections, cognitivists try to discover psychological *principles* of organisation and functioning. Ausubel (1965, p.4) observed that using the *rationalistic* approach instead of a strictly *empirical* approach, cognitive psychologists, like generative linguists, have sought to discover underlying motivations and deeper structures of human behaviour, and going beyond descriptive to explanatory power has become of the utmost importance. Here is where the constructivist

theory of learning is embedded to enable a language learner to independently and socially construct linguistic knowledge.

Constructivism and Second Language Acquisition

In this essay, five theoretical studies are presented as case studies to show the implications of constructivism for language teaching and second-language acquisition.

Case Studies

Five selected studies have shown that constructivism provides a powerful second/foreign language environment that enhances its acquisition. In relation to this, consider the following:

I. Jin (2011, pp.15-16), on *"Constructivism-Application in Oral English Teaching of Non-English Majors"* for Chinese learners, provides five second/foreign language learning strategies that are enshrined in the theory of constructivism. These are:

- *Arouse the students' intense interest in learning the language.* Language learning/acquisition is most effective when students' interest, motivation and attitudes are taken into consideration. Students should be encouraged to experience the language, learn the language by self-discovery, and participate in discussion and negotiation activities.
- *Student-centred class with teachers' guidance.* Teachers should act as guides and facilitators in language learning; they should provide the students with more real-world situations (Brown, 1994). In class, the students should be given more time to speak; that is, the students should be the speakers in class, they should not just be regarded as the audience.
- *Accumulate the students' vocabulary to help with their speaking of the language.* Students often stop speaking or communicating because they do not know a word. But rich in vocabulary, students can express themselves better in A second and/or foreign language.
- *Make full use of the time in class and extend language learning after class.* English is a foreign language for students in China just as in Tanzania. They do not have a good environment for speaking English. It is well known that classroom instruction is the basic form

of English teaching and learning, but class time for students is limited. Given more time, students will be glad to speak more and more in class and in public.

- *Enhance the students' awareness of the target country's culture.* Language and culture usually go hand in hand, which tells us that culture is very important in language learning – *the socio-cultural theory of learning*. Language teachers should introduce the class to different cultures and customs of the English-speaking world in related situations. Only when one knows the background culture of a target language, in this case English, can one understand native speakers more easily and express oneself more correctly.

II. Yang &Wilson (2006, pp.367-370), on "Second language classroom reading: A social constructivist approach" in China. They found that constructivism in the classroom was relevant in various ways. Thus, they argue that when teaching the reading of English as a foreign language, teachers should apply the following:

- *Provide a context and purpose* for reading;
- *Use and model the think-aloud technique;*
- *Ask questions* from what students learn;
- *Create awareness* of the author behind the text;
- *Use peer-scaffolding;*
- *Set their students free;* and
- *Use macro-tasks* with an authentic audience.

With the above-mentioned techniques, the social constructivist approach to reading offered useful tools and principles for EFL teachers to encourage students to energetically participate in text events, and enter into active dialogue with the texts and their authors, not as outsiders, but as active participants.

III. Can (2009), on "*Learning and teaching languages online: A Constructivist approach,*" found that 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. He further explained that:

> The constructivist approach is promising at promoting learners' language and communicative skills as well as fostering their autonomy, social and interactive skills, contributing to their development into more confident, proactive and responsible individuals by supporting incentives on diverse media in language learning and teaching (Can, 2009, p.1).

In addition, Reinfried (cited in Can, 2009, p.68) summarises constructivist principles in EFL learning and teaching in three forms. According to Reinfried, constructivist language learning should first be action oriented, whereby language is learned through collaboration, free creation is praised, and learning is achieved by actively doing projects and self-teaching. Second, it should be learner-centred that supports individualisation of learning and autonomy. In this way, a learner should develop awareness not only of learning but also of the language itself and the inter-cultural aspect as well. Last but not the least, constructivist language learning is to be holistic with a content-oriented perspective and authentic in a complex learning environment. In so doing, learning is said to be meaningful and engaging.

IV. Kao (2010), "*Examining Second Language Learning in a Socio-cultural Stance*" presents the relevance of the socio-cultural constructivist theory to second language learning/acquisition using the following construct terms:

- *Mediation:* Vygotsky emphasises that the human mind is mediated and human consciousness is fundamentally a mediated mental activity, as Lantolf & Appel, cited in Kao (2010, p.116) observes;
- *Zone of Proximal Development* (ZPD): This is the distance between the actual development level as determined by independent problem-solving, and the level of potential development as determined by problem-solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86).
- *Scaffolding:* Bruner (as cited in Kao, 2010, p.121) observes that *scaffolding* is the process of setting up a situation that makes the child's entry easy and successful, and then gradually pulling back and handing the role to the child as he becomes skilled enough to manage it.

- *Self-regulation:* This involves learners in increasing their capacity to formulate action plans to master and control their own behaviour, to verbalise their plans and goals, generalise skills to new situations and learn how to communicate and think (Kao, *ibid.*, p.124).

With these enabling concepts, Kao (2010) concludes that Vygotsky's socio-cultural theories clearly provide a social-constructivist perspective by which to view second-language learning (SLL) as a social practice.

V. Jones & Brader-Araje (2002) investigating *"The impact of constructivism on education: language, discourse and meaning"* argue that:

- A child's speech is as important as the role of action in attaining the goal. Not only do children speak about what they are doing but also their speech and action are part of one and the same complex psychological function, directed towards solving the problem at hand (citing Vygtosky, 1978, p. 25).
- For Vygotsky, a further criterion that distinguishes scientific from everyday concepts is the fact that the former are learnt in a formal schooling setting whereas the latter emerge from children's experience of the everyday world. He argued that schooling's emphasis on using language to talk about language (metalinguistic reflection), as opposed to talking about non-linguistic reality, is an important force in the emergence of scientific concepts (citing Wertsch, 1985, p. 103).
- The greatest change in children's capacity to use language as a problem-solving tool takes place somewhat later in their development, when socialized speech is turned inward. Instead of appealing to the adult, children appeal to themselves; language, thus, takes on an intrapersonal function in addition to its interpersonal use (citing Vygtosky, 1978, p. 27).
- Knowledge is never acquired passively, because novelty cannot be handled except through assimilating a cognitive structure the subject has already experienced. Indeed, the subject does not perceive an experience as novel until it generates a perturbation relative to some expected result.

Based on the above, Jones & Brader-Araje conclude that *Constructivism* in education emerged after the failure of behaviourism as a welcome and refreshing view of learning that centres on the active learner in the teaching-learning process.

Conclusion

This article has presented the theory of constructivism, its underlying principles and implications for language teaching and second language acquisition, in particular. The article has also shown that there is a close link between constructivism and language teaching and second language acquisition. Thus, in language teaching, both nature and nurture should be supported and the teacher should create an enabling learning environment in which linguistic knowledge is constructed.

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