



The Constructivist Approach: Radical and Social Constructivism in the Relationship by Using the Implementation Career Level on the Vocational Education

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ABSTRACT

Vocational education is oriented to the secondary educational in which focusing on the development of the student in order to be ready to work professionally and ready to improve their self-potential, in particular, field work. The aim of this paper is to analyze the constructivist approach to vocational education, the relationship between radical and social constructivist and the implementation of the career level on the voced. The result of this discussion to explain the relationship between radical constructivism and social constructivism is viewed the strong abilities. Radical constructivism related the construction mental structure and meaning by individual. After studying, the social constructivism is more focused the social interaction than the individual knowledge construction, the stressing of construction is shown about the meaning in the social interaction activities. Implementation would be successful about the career in the vocational education and needed the educators to make an active facilitator, particularly to guide the students by question with their assumptions and trained the students by reconstructing the new meaning of knowledge, so that students can be a good career.

1. Introduction

As part of the national education system, vocational education is an education in secondary education that promotes the development of the ability of learners to be able to work in a particular field, the ability to adapt in the workplace, see employment opportunities and career development in the future. Development of vocational education curriculum should be comprehensive and responsive to the social dynamic, relevant not overload, and able to accommodate the diversity of needs and advances in technology. There is a tendency in the world of education today is to go back on the idea that children will learn better if the environment is created naturally. Learning would be more meaningful if the child has his own what

he learned, not knowing. Oriented learning targets proved successful mastery of subject matter within the competence given the short term, but fail to provide children solve problems in the long-term life. Contextual approach (contextually learning and teaching) is an approach to teaching that characteristic fulfill that hope. Contextual learning is a concept of learning where the teacher presents real-world situations into the classroom and encourage students to make connections between the knowledge possessed by the application in their lives as members and the community. With this concept, the learning outcomes expected to be more meaningful for students. Seven major components underlying the application of contextual learning in the classroom. Seventh major component that is constructivism, questioning, inquiries, community learning, modeling, reflection and authentic assessment. The argument in this paper is based on social constructivism and radical constructivism in related implementation career level on the vocational education. At first, the author introduced the notion of constructivism, radical constructivism, and social constructivism in brief in conjunction with the implementation of vocational education career.

2. Literature Review

2.1 Constructivism

Constructivism meaning varies according to one's perspective and position. In the context of education, there is the philosophical meaning of constructivism, as well as personal constructivism. It seems imperative to introduce the notion of constructivism in epistemology, philosophy, and theory of learning. Constructivism is a system of beliefs (worldview) in which the construction of knowledge or process of knowing is compared metaphorically with the construction of a building or furniture or an artifact (Ernest, 2010). The act of construction depends on what tools an individual already has. The tools are prior conceptions of the world through experiences. An individual may construct knowledge of something based on what he or she already knows about it and how he or she reconceptualizes the new experiences based on earlier experiences. The process of knowing is related to one's cognitive, affective, psychomotor, mental, and metacognitive responses to the change within those conceptions, Glasersfeld. 1995³⁾. Hence, one's construction of knowledge stands on what he or she already has in the form of prior knowledge and conception, and how the new experiences adapt to the new conceptions, schemes, or actions (Steffe & Thompson, 2000).

Constructivism has many faces- trivial, constructionist, cultural and social, radical, critical, feminist, and postmodern constructivism. One can be a trivial constructivist or a constructionist. Others can be critical or feminist or postmodern constructivist in terms of how they practice teaching and learning and how they conceive and implement the respective epistemologies. The intent this paper focuses on radical and social constructivism in the Relationship by using the Implementation Career Level on the Vocational Education. Doolittle and Camp (1999). Constructivism look not as a single entity (entity), but looked at as a series of theoretical. Doolittle and Camp Classify understanding constructivism into : cognitive constructivism, radical constructivism, social constructivism. Based on some opinions on the definition of constructivism being addressed by experts in the above it can be concluded that constructivism is a philosophy of knowledge that had the notion that knowledge is the result of construction (formation) the man himself. Humans construct their knowledge individually and through their interaction with objects, phenomena, experiences and their environment. A knowledge is considered correct if it can be useful knowledge to deal with and solve problems that appropriate (Suparno, 2008:28).

2.2 Radical Constructivism

Radical Constructivism (Fischer, 1995) is part of a larger 'constructivist' movement in the philosophy and sociology of science (Schwandt)⁸⁾. Radical Constructivism puts forward two main claims (Glasersfeld, 1989: 162) knowledge is not passively received but actively built up by the cognizing subject; b) the function of cognition is adaptive and serves the organization of the experiential world, not the discovery of ontological reality.

The paradigm of radical constructivism assumes that the mind is like an organism undergoing through an evolutionary process. Wuketits, 1984¹⁰⁾. The metaphor of the evolved mind, to this author, is the cognitive re-construction of the experiential world that continues an adaptation to better and clearer conceptual or mental percepts or schemes through reorganization of this world (Ernest, 1995; von Glasersfeld, 1995). It is worth noting that Radical Constructivism differs from Darwinian models of evolutionary epistemology in that it does not propose that different constructed knowledges gradually converged and eventually will merge into one knowledge system representing 'the real world' in full.

2.3 Social Constructivism

Social constructivism emphasizes the importance of culture and context in understanding what occurs in society and constructing knowledge based on this understanding (Derry, 1999). This perspective is closely associated with many contemporary theories, most notably the developmental theories of Vygotsky and Bruner, and Bandura's social cognitive theory. Social constructivism, strongly influenced, Vygotsky's work (1978) work suggests that knowledge is first constructed in a social context and is then appropriated by individuals. According to social constructivists, the process of sharing individual perspectives-called *collaborative elaboration*. This results in learners constructing understanding together that wouldn't be possible alone. Social constructivism views each learner as a unique individual with unique needs and backgrounds. The learner is also seen as complex and multidimensional. Social constructivism not only acknowledges the uniqueness and complexity of the learner, but actually encourages, utilizes and rewards it as an integral part of the learning process. Wertsch. 1997¹³⁾.

2.4 Career Defenition

In his foreword for the 2007 Handbook of Career Studies, by Gunz & Peiperl, Schein states that "The career field has grown enormously, but it is far from integrated. Rather, a few paradigms built on individual developmental theories such as those of Super and Holland have dominated the field. Such lack of integration is not in itself a problem, but the disregard of researchers in one paradigm for the relevant work of researchers in another paradigm is a problem when each set of researchers presents their work as the final and correct analysis of a particular area. Until this day, the meaning of career is understood differentially. For a long-range, historic view of career theory, we refer to the contribution from Moore, Gunz and Hall, 2007, in Gunz & Peiperl.

With Parsons (1909) as a pioneer, traditional definitions restrict career to professional work life which included advancement. Exemplary in this respect is the Oxford English Dictionary. 1989¹⁵⁾ definition of career as "a course of professional life or employment, which affords opportunity for progress or advancement in the world". The most cited definition here is that of career as "the evolving sequence of a person's work experiences over time", Arthur, Hall & Lawrence, 1989, p.8¹⁶⁾. Gunz & Peiperl (2007, p.4) attribute the relative success of this definition to its "virtue of being succinct and of leaving the matter open as to whether we are interested in experiences as the person experiences them (the so-called subjective career), Hughes, 1937¹⁷⁾ or as others see them (the objective career) and whether we are interested in the person as an individual or in the institutions through which he or she passes in the course of life (and in so doing, transforms and is transformed by them to a greater or lesser extent). Even broader, including the life career, Super. 1976¹⁸⁾ defines career as "the sequence of major positions occupied by a person throughout his preoccupational, occupational and postoccupational life; includes work related roles such as those of student, employee, and pensioner, together with complementary vocational, familial and civil roles" (p. 20).

Indeed, the career spectrum broader meaning and deeper than similar terms. Career implies a sequence of occupation, job and positions occupied throughout a person's work experience. (Tolbert, 1974). In line with this opinion, Healy 1982: 5¹⁹⁾ argues that a career can be defined, "as the sequence of major position occupied by a person throughout his, or her preoccupational, occupational and post-occupational life". Both this sense indicates that a person's career occurred since the time of study, work, and retirement. The problem that arises is whether the position of learning, work and retirement can be regarded as a career? That by Super (1976) referred that are more careers oriented person. The position can be seen as a career, depending on one's view and perspective regarding career where he was using.

The most important thing is how the quality of the individuals behaved in any such position. With this assumption, it can be said that the quality of behavior in these positions can be felt and meaningful to the lives of the individuals themselves.

Career success can be achieved through education, hobbies, profession, social, personal, and religion. Career covers all aspects of an individual's life, which includes (1) life-roles, such as workers, family members and citizens; (2) life-settings, such as in family, community agencies, school or work; and (3) life-events, such as in entering a job, marriage, duty, loss of a job, or resign from a job. Based on the various opinions on the above, it can be concluded that a career is a meaningful self-realization through a series of activities and covers all aspects of life are realized because of the strength of the inner person. Self-realization will be worthwhile when there is satisfaction / happiness of ourselves and the environment.

3. Methods

This paper is done by exploring the sources related to the topic. This study was descriptive qualitative research to explore the information constructivist approach (radical and social) in relation to the implementation of a career in vocational education. Source of data to be used is secondary data obtained by collecting data that is required in papers or collect references and literature related to the discussion in this paper such as research reports, theses and journals as well as reference books and data another support in varied websites that have relevance to this study. Data collection technique used is a literature review that is by collecting data by examining a number of literature such as research reports (theses, journal), books and other supporting data in the varied websites related to this topic.

4. Results and Discussion

4.1 Radical and Social Constructivism in connection with use of Implementation in Vocational Education Career Level

In theory, radical and social constructivist approach in vocational education is an approach that is very strong implications in which knowledge is formed from the formation process of construction based on experience. Radical and social constructivism are both seen as more powerful forms of constructivism. Radical constructivism attention to the construction way of thinking structure and meaning individually to interpret and construct the experience of interacting with the environment. In this case the radical construction is deemed to have a higher degree of cognitive constructivism than construction of mental structures (Doolittle and Camp, 1999). Social constructivism more attention to the social interaction of the individual knowledge construction; the emphasis on the construction of meaning in social interaction activities.

Career Implementation in vocational education in theory illustrates that the concept of constructivism relevant and influential in the career development of students in vocational education The combination of radical and social constructivism is a powerful form of constructivism shows that the development of construction mental structure and meaning individually to interpret and construct the experience of interacting with the environment and with regard to social interaction with emphasis on the construction of meaning in social interaction activities will greatly affect the level career in vocational education. From a career guidance standpoint, the important thing to remember about vocational education is that it has been seen for too long as useful to only highly restricted sample of the total student population rather than to all or most students. The mutual contributions of vocational education to Career Education are examined as recommendations are developed for greater meshing of these two elements of the educational process.

Through career counseling approaches in vocational education from an early age by implementing radical and social constructivism approach will give students to the variety and diverse types of careers in the field of vocational training. Reality it requires the ability to make a certain career choices appropriate level of student comprehension and understanding of the potential opportunities and career opportunities. The phenomenon that indicates that the service career information needs of vocational education students

have not been met, so that vocational students are confused in the face of the world of work. Although they are ready to enter the workforce as an area of expertise or skills practiced.

5. Conclusion

In the final stage of the come from this research the conclusion and suggestions from the research carried out the radical and social Constructivism in relation to implementation career level on the vocational education. Philosophy of constructivism assumed that knowledge is the result of human construction. Humans construct their knowledge through their interaction with objects, phenomena, experiences and their environment. Social constructivism and radical constructivism are a powerful form of constructivism. Radical constructivism attention to the construction of mental structures and means the individual to interpret and build the experience of interacting with the environment. Social constructivism more attention to the social interaction of the individual knowledge construction; the emphasis on the construction of meaning in social interaction activities. Implementation of radical and social constructivist approach early on will give an idea of the direction of career and vocational education for students to develop a career and a good competence.

References

- Arthur, M.B., Hall, D.T. & Lawrence, B.S. (1989). Generating new directions in career theory: The case for transdisciplinary approach. In: M.B. Arthur, D.T. Hall & B.S. Lawrence (Eds.), *Handbook of career theory* (pp. 7–25). Cambridge: Cambridge University Press.
- Belbase, S. (2014). Radical versus social constructivism: An epistemological-pedagogical dilemma. *International Journal of Contemporary Educational Research*, 1(2), 98-112.
- Derry, S. J. (1999). A Fish called peer learning: Searching for common themes. In A. M. O'Donnell & A. King (Eds.),
- Doolittle, P.E dan Camp, W.G. 1999. Constructivism: The Career and Technical Education Perspective. Kirk Swortsel (Ed.): *Journal of Vocational and Technical Education*. Volume 16, Number 1.
- English, L.D dan Halford, G.S. 1995. *Mathematics Educations Model and Process*. New Jersey: Lawrence Erlbaum Associates Publishers.
- Ernest, P. (1995). The one and the many. In L. P. Steffe & J. Gale (Eds.), *Constructivism in education* (pp. 459–486). Hillsdale, NJ: Lawrence Erlbaum.
- Fischer, Hans Rudi (ed.) (1995) *Die Wirklichkeit des Konstruktivismus: zur Auseinandersetzung um ein neues Paradigma*. Heidelberg: Carl-Auer-Systeme.
- Glaserfeld, Ernst von (1995) Die Wurzeln des 'Radikalen' am Konstruktivismus. In: H.R.Fischer (ed.), pp. 35-45.
- Glaserfeld, Ernst von (1989) Constructivism in Education. In: T.Husen and T. Neville Postlethwaite (eds) *The International Encyclopedia of Education. Research and Studies*, pp. 162-163. Supplementary Volume 1. Oxford: Pergamon Press.
- Gunz, H.P. & Peiperl, M. (2007). *Handbook of career studies*. Toronto: Sage Publications
- Healy, Charles G. (1982). *Career Development; Counseling Through the Life stages*. Massachusetts, Atlantic Avenue, Boston: Alyn & Bacon Inc.
- Hughes, E.C. (1937). Institutional Office and the Person, *American Journal of Sociology*, 43, 404-13.
- Learning In Dewey, Piaget, And Montessori : *International Journal of Instruction*. July 2012 Vol.5, No.2
- Meijers, F., Kuijpers, M. & Winters, A. (2010). *Leren kiezen/kiezen leren*. Een literatuurstudie. S Hertogenbosch, Utrecht: ECBO, Studying career learning: a critical concept overview.

Steffe, L. P., & Thompson, P. W. (Eds.). (2000). *Radical constructivism in action: Building on pioneering work of Ernst von Glasersfeld*. New York, NY: RoutledgeFalmer.

Suparno, Paul. 2008. *Filsafat Konstruktivisme Dalam Pendidikan*. Yogyakarta: Kanisius.

Super, D.E. (1976). *Career education and the meaning of work; monographs on career education*. Washington: The Office of Career Education, US Office of Education.

Schwandt, Thomas A. (1994) Constructivist, Interpretivist Approaches to Human Inquiry. In: N.K.Denzin and Y.S.Lincoln (eds) *Handbook of Qualitative Research*, pp. 118-137. London: Sage.

Social constructivism <http://pds.uh.edu/~srmehall/theory/social.html>

Vygotsky's, L.S. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press

Wuketits, F. M. (1984). Evolutionary epistemology: A challenge to science and philosophy. In F. M.

Wuketits (Ed.), *Concepts and approaches in evolutionary epistemology* (pp. 1-29). Dordrecht, The Netherlands: Reidel.

Wertsch, J.V (1997) "Vygotsky and the formation of the mind" Cambridge

Wicaksono, Rohadi. 2007. Mengapa Harus Konstruktivistik. Diakses pada tanggal 20 November 2015 dari <http://www.rohadieducation.wordpress.com> .