

The Role of Teachers in Application of Learning Theory Constructivism in Schools

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ABSTRACT

Constructivism is a psychology and philosophical perspective that argue that individuals form or construct much of their learning and understanding. In recent years, constructivism theory has increasingly been applied in the learning process. A number of education experts argue that rather than talking about how knowledge is obtained, it is more important to discuss how that knowledge is built. Even though there are several experts who have different opinions on the factors that influence learning and cognitive processes in students, their theoretical perspectives agree in defining constructivism theory. On the one hand, teachers are responsible for the learning process in the classroom. As a teacher, the teachers is tasked with designing learning programs, implementing and conducting assessments. Note only that, teachers must also be capable to create, build, discuss, collaborate and carry out experiments in a learning activity. Therefore, this article will discuss constructivism theory and its applications in the learning process using constructivist principles.

Introduction

Lots researcher and practitioner question a number of assumption cognitive about process study teach Because they believe that these assumptions doesn't fully explain learning and understanding student. Questionable assumptions is as following (Schunk, 2012): (1) Thought process are inside thought and no in in interaction with person or a situation (2) Learning and thinking processes relatively the same on each person, and on some person, a situation certain grow thinking more tall and more good than another (3) Process think more originate from knowledge and skills which developed in environment learning formal compared to only competence conceptual general which generated from experience and ability default somebody. Constructivist no accept assumption this because no exists proof concrete in the thought process that occurs in something situation and that process cognitive part big constructed by individual as a function experience they in the situation (Schunk, 2012). A number of notes constructivist about learning and its development highlighting contribution a individual to what which studied. Model constructivist social more emphasize importance interaction social in acquisition skills and knowledge. by because that, theory constructivism, and form its implementation need reviewed more carry on.

Research Methodology

This research is studies references with systematic literature review. This study collects a number of review results study in a way systematic, especially on results related research in a way empirical about theory constructivism in learning for give more guidelines wide to study quality education. Writer gather article related journals with studies theory constructivism in learning for give framework think scientific in theory constructivism, where writer use article journal study national nor international.

Results and Discussion

Theory Constructivism

Theory is device principle-principle which organized about incident certain in environment. Theory interpreted as connection from causality from a number of proposition. Like building, theory arranged in a way causality on fact, variable or draft and proposition (Tawheed,2020). Function theory in context study is:

1. Give framework work conceptual for something information study
2. Provide references for compiling design implementation teaching
3. Diagnose problems inactivity study teach
4. Review incident study in self someone
5. Examining external factors facilitate process study

Function theory Study as knife analysis based fact and phenomenon study . Later theory discussed is theory learning. Generally theory which intended is theory prescriptive and descriptive ;

1. Theory study prescriptive accentuated on how should process study held
2. Theory Study description emphasize on how is the learning process happen in self participant educate

On initially, constructivism it's not a theory, but rather a epistemology or explanation philosophical about essence a learning (Schunk, 2012). Theory is explanation scientific for a learning and possible a hypothesis for generated and tested. Whereas, constructivism no state that principle learning that there is and must found as well as tested, but learning that there is and must be found as well as tested by someone learner for create his learning alone. Para adherent theory constructivist reject presumption that truth scientific that there is. They opinion that no there is considered statement correct. There is lots opinion or not there is one version even which considered more correct than version other (Schunk, 2012). Compared looking a knowledge a truth , constructivist interpret it as a hypothesis. knowledge no forced from person other, but formed in in self each individual. Construction somebody considered correct for person the, however not yet of course for person other. This matter because somebody produce knowledge based on confidence and experience in situation certain which different from other. All knowledge then, nature subjective, personal, and constitute results from cognition we (Schunk, 2012). Different with emphasized theory influence environment to individual , theory cognitive assume that individual , behavior, and the environment interact in a way lead come back (Schunk, 2012). Assumption main constructivism is every man is active learner and develop from facet knowledge for interest self alone. For understand a material, participants educate must know principle basically, para constructivist different opinion in this matter; they opinion that function the originate from participant educate (Masgumelar & Mustafa, 2021).

Constructivists are also different opinion in matter view to construction knowledge which originate from interaction social with teachers, friends peers, people old, and etc. Lots draft and principle which reflect idea constructivism , including cognitive processes, hope, mark, and perception self alone as well as others. so, though constructivism apparently new appear in world education, premise basically has which underlying a student build understanding with principle learning which there is (Suryadi et al., 2022). A number of idea constructivist no develop as good as theory other, but constructivism has influence study in learning and its development. Constructivism also has influence thinking in world education about curriculum and teaching. This is fundamental emphasis on the curriculum where student learn something topic from various corner look. For example, in learn how balloon air can fly, students possible read draft generally, see the process in a way direct, learn principle science involved in it. Idea constructivist this then also found in lots matter and influence design curriculum in teaching, like centered principle on process cognitive participant educate which developed by american psychological association (Tawheed, 2020). Assumption constructivist other is that teacher no should teach with method traditional like only convey a instructions to group student. On the contrary, they must compile situation like that appearance so that all participant educate become involved in a way active through interaction social. The activities can covers observe phenomenon, gather data, test and compile hypothesis, as well as work in a way collaborative with friend his peers. On the other hand, teachers from various discipline knowledge compile a curriculum together. Student taught for arrange self yourself and take role active in learning with set objective, evaluate progress, as well as surpass achievements learning.

Theory Constructivism : Contribution and Application

Formulation theory that no only important but also vital for psychology and education so that you can proceed or growing , as well solve problems found in every field (suparlan, 2019) . based on opinion that, you can is known that theory in education have role or a very strategic function. if deep education no have theory so can confirmed education no will develop in accordance with what was expected . Deep theory education own role for solve every than the problems faced (Budyastuti & Fauziati, 2021) . Needed capable theories give road go out from various

problem the . This explains it that a theory have very strategic function in advance education . Following a number of function theory in education :

1. Give discoveries become systematic
2. Give birth to hypothesis
3. Make predictions

Study explore assumption constructivist about learning still in stage beginning. Wrong one difficulty in constructivism is approach the hypothesis in a way specific which will tested (Schunk, 2012) take notes a claim that "Participant educate build knowledge they alone "applies for all theory learning cognitive. Theorycognitive looking cognition as centerconfidence, mark, hope, so that there is decent explanation about how thought and feeling formed in center cognitive every individual. For example, theory cognitive social emphasize roleex pectation, for example, efficacy self, and objective ; confidence and cognition this no appear so just, but built by participant educate. Constructivism on finally must evaluated no based on corrector not the premise ; on the contrary, important for determine what is the student process build knowledge and how factor social, development, and teaching can influence it. Study more carry on also requiredfor determine when influence situation have impact which more big in process construction mentally participant educate. Weakness from lots theory constructivism is the emphasis on relativism (Schunk, 2012) or the idea thatall form knowledge can justified because they built by participant educate which different. Will but, power educator no can accept this premise with good because education demand we for embed values like honesty, fairness, and not quite enough answer on participant educate (Abdiyah & Subiyantoro, 2021). Study show thata number of ability numeric mathematics no built but part big nature genetic (Schunk, 2012). Ability other like processing say need influence environment. Method learning which mappedwith more good to in structure cognitive actually can produce learning which are more good (Sugrah, 2020). Constructivism own implications important to teaching and design curriculum (Schunk, 2012). Method which most effective is with involve student in a way active in learning them and give that experiencechallenge thinking they for arrange repeat confidence they toknowledge which there is . Constructivism also underlying emphasis on teachingreflective. View constructivist social emphasize that learning group social and collaboration friend peer beneficial. When students become example role model and observe one the same other, they no only do matter the, but also teach skills about efficacy self which moretall for study (Schunk, 2012).

Expectation Teachers in Constructivism Theory

One of interesting topic Lots attentive and integrated good with theoryconstructivism is expectation teacherin process learning. Theory and study show hope teacher to student related with action teacher and results study student (Schunk, 2012). Encouragement for explore teacher expectations come from test intelligence non-verbal to participant educate in beginningyear teachings. The teacher was notified that this testpredict participant educate will develop in a way intellectual during one year teachings. Researcher actually identify in a way random as much 20% population school and give what is the name this to para teacher. Teacher no realize exists oddity and identity participant educate no there is relationship with mark exam. Teacher teach like normal and student tested repeatin one semester during one year and two year then. For two test First, participants educate was in the teacher's classwhich given name special ; for test final, student enter a class newwith teacher which no own name special. After year first, difference intelligence which significant seen in between class experiments and classes control ; there is difference more big between para participant learn in class one and two. On year next, participant educate this lost superiority they, how everresults class experiment show enhancement superiority compared to class control. The difference more big in between participant educate which achievement with mean values are compared with participant outstanding students tall or low. Invention similar also obtained for mark read. By whole, difference between class experiment and class control is small, fine in test read nor on test intelligence. From results study the can concluded that hope Teacher can role as reference fulfillment self participant educate because performance participant educate reflect hope the teacher (Schunk, 2012). The experts opinion that results which more strong happen on child on golden age because they own contactnear with the teacher. Participant educate that more old works more good after they meet with teacher new.

This study controversial and has criticized in a way conceptual and methodologicalafter lots effort replication yetsucceed. Although thereby, hope teacher of course there is and proven relate to various results study student. A model for explain self- fulfilling prophecies is as following :

1. Teachers develop expectations that wrong.
2. Hope this make para teacher treat student in a way different
3. Teacher treat a number of student with hope low
4. Student react to that treatmentdifferent for confirm hope the start was wrong (Jussim et al ., 2009,matter. 361)

Schunk (2012) argues that onbeginning year teachings, teacher form expectation based on interaction beginning with student. Teacher possible start treat student in a waydifferent in accordance with hope this. Behavior teachers are

reciprocal ; for example, teacher which treat his students with warm tend accept warmth as the reply. Behavior students start strengthen behavior teacher and his hope. If action the no in accordance but flexible, behavior student possible can proven or defined return with hope which already there is. When a expectation no appropriate, performance student can decrease and become in accordance with expectation the teacher. So teacher forms hope, they can convey it to student through socio-emotional, input and output verbal, as well as bait come back. Climate socio-emotional covers smile, nod head, contact eyes, and actions friendly. Teachers can create more climate warm for student which they expect more tall compared to with others. verbal input can varies when student with hope tall own more lots chance for interact and study matter new in matter more material difficult. Output verbal refers to numbers and duration interaction academic. Teacher more Lots involved in exchange academic with student with expectation tall compared to with student with expectation low (Schunk, 2012). They also more persistent with trust self high and make they give answer with good. Bait come back refers on use praise and critics. Teacher praises students who have expectation tall and more lots criticize student which have hope low. Although factors this role, there is difference big in between teacher. A number of teacher in a way consistent push student which achievement low and treat they with good like pattern which explained previously for person which achievement tall (for example , give more lots praise , encourage they for answer more lots question). Appropriate teacher expectations to student can increase motivation study. Expect all student for study with effort best also enter sense. Most teacher school base have hope positive for student, give lots success, and use it often praise (Schunk, 2012). Apparently, participants educate build theory implicit about what which teacher do, think, and expect from they. How theories this can influence action achievement they not enough can predicted. Confidence we about what other people expect from we possible increase motivation , lower motivation , or direct we for act contradictory with principle. Advice best is with expect all student can study and give support for they which indeed should thereby for help they build expectation which in accordance for self they alone.

The Role of Teachers in the Learning Process

According to the big language dictionary in Indonesia, "person who his job teach". In language english called teacher. As for in Language Arab can translated to mu'alim, mudarris, ustadz, muaddib, Murobbi and murshid (Siti Nurzannah ,2022). In Language Indonesia, term teacher also synonymized with term educator. However, meaning educator this more wide its coverage including also in inside teacher, lecturer, counselor, tutor learn, instructor, facilitator, and designation other which meaning with him. This definition as which has formulated in act No. 20 Year 2003 about system education national, there said : "Educator is power education which qualified as teacher, lecturer, counselor, tutor study, widyaiswara, tutors, instructor, facilitator, and designation other which in accordance with specialty, as well as participate in organize education". Then again in in act No. 14 2005 concerning teachers and lecturers chapter I Article 1, the teacher is defined : "Teachers are educator professional with task main educate, teach, guiding, direct, practice, evaluate , and evaluate participant educate on education child age early track education formal, educational basics, and education middle " (Hyun et al., 2020). Words "teacher as professional educator " indicated that no everyone can lifted or placed task become a teacher, because teachers are as something profession which demand skill special in carry out task and his role. Teacher is person which own mastery in field knowledge knowledge, skills and skill which he obtained through training and education certain. For more in full about teacher's qualifications already very bright the provisions in constitution. So, from exposure in on can concluded teacher is as something profession, which has qualification certain in implementation his task in matter educate, teach, guiding, motivating, facilitate participant educate in learning so that achieved objective education which has set.

Learning is something business or effort from educator for facilitate participant educate to achieve it mastery knowledge, skills and attitudes (Siti Nurzannah , 2022). Learning too can means something process for conditioning atmosphere study which most in accordance for student by teacher so that achieved objective learning which has set. As which has mentioned in on, there is three component main in learning namely ; educator /teacher, participant educate and source study. Learning can said as something system, which where third its components each other interact one the same other, so that happen connection which each other dependent and related. Learning no will can took place without exists interaction between third this component. Therefore sued exists good cooperation between third component this so that process learning can take place with effective and efficient (Siti Nurzannah , 2022). So that creation learning which effective that, then in this is the role of the teacher very decisive. How the role of the teacher in conditioning students, give motivation and become facilitator for they in learning. At least there is 19 role teacher will but only 9 role which most stand out in activity learning, namely : role teacher as educator, teacher, supervisor, coach, advisor, pusher creativity, actor, emancipator and evaluator (Siti Nurzannah ,2022). Then Siti also elaborate there is lots very role which should carried out by teachers including: as proofreader, inspirer, informer, organizer, motivator, initiator, facilitator, supervisor, demonstrator, manager class, mediator, supervisor, and evaluator. As for matter which must done a teacher when increase motivation study participant students, including (Hyun et al.,

2020): (1) Develop interest participant educate ; (2) Create atmosphere which pleasant in study ; (3) Give praise which reasonable to success participant educate ; (4) Give evaluation ; (5) Comment on the results work student ; (6) Create competition and cooperation which healthy. With motivation provided, teacher should own ability and skills for develop creativity participant educate. Creativity participant educate is ability participant educate for make combination and produce in accordance which new based on data, information, or things others who already there is. Creativity participant educate too can understood as ability for find various possibility or alternative answer to something problem, where the emphasis is on quantity, usability, and diversity answer in accordance with context problem which faced.

Conclusion

Theory is series part or variable, definition and proposition which each other relate which presenting a view systematic about phenomenon with determine connection between variable, with meaning explain phenomenon natural. Labovitz and Hagedorn (2020) define theory as idea thinking" thinking theoretical "Which they define as determining" how and why variables and statement connection can each other relate. Different with theory other, there is difference data collector about meaning constructivism. Constructivism is something epistemology, or explanation philosophical about essence learning. Adherent theory constructivist reject idea that truth scientific that there is knowledge no forced from outside but formed in internal a individual. Theory constructivist varied, start from theory construction self , theory mediation social, up to construction self in accordance with reality which exists. Constructivism require we make experience study teach for challenge thinking student so that they capable construct knowledge new. Premise the main thing is is that process cognitive is at in context physical and social . Draft cognition lies in relationships between individual and situation which there is. Theory Piaget nature constructivist and opinion that child - child pass series stages which different in a way qualitative : sensorimotor, preoperational, operational concrete, and operational formal. Based on theory, study interpreted as exercises formation connection between stimulus and response. According to theory study constructivism, something principle which most important in psychology education is teacher no only just give knowledge on student. If theory humanistic more put forward side humanist human and No demand period time learner reach understanding which desired, theory constructivism this more emphasize on content or required material studied so that form man completely. Deep internal problems learning too can't just seen from to what extent teachers are capable and not in talk in front class. However, which more takes priority is read and understand channel from theory study that alone. As example, lots teacher more like use approach genre theory naturalism in see process growth and development to participant educate. There are two possibilities, namely first of course teacher concerned no truly understand because indifferent not indifferent alias lazy read, second no there is understanding and already of course the implications on problem praxis (teach). Teacher is something profession which own qualification certain in implementation his task in matter educate, teach , guiding, motivating, facilitate participant educate in learning so that achieved objective education that has been set. The teacher as a motivator is about how teacher capable increase passion and enthusiasm study participant educate good with giving words motivational words nor tasks certain which will awaken flavor i want he knows. Teacher as facilitator no just question physique or means infrastructure even this is task school. Teacher as facilitator in here It means is about how Teacher facilitate mentally participant educate in learning. How the teacher gives chance as widely as possible for participant educate for, ask, discuss and etc.

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