

INTERNATIONAL SEMINAR STKIP PGRI TULUNGAGUNG

PROCEEDING OF INTERNATIONAL SEMINAR EDUCATION FOR NATION CHARACTER BUILDING at STKIP PGRI Tulungagung January 2015

Editors: Supriadi Yepi Sedya Purwananti Ajar Dirgantoro INTERNATIONAL SEMINAR STKIP PGRI TULUNGAGUNG Proceeding of International Seminar Education for Nation Character Building @ STKIP PGRI/Tulungagung 2015

These proceeding contain the full text of paper and talks presented in the International Seminar "Education for Nation Character Building" at STKIP PGRI Tolungagung on January 24th, 2015

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Layouter: Budi Hermawan

First Published, 2015 ISBN 978-602-72660-0-1

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Published by



STKIP PGRI Tuhingagung Tulungagung, East Java, Indonesia Phone +62355-321426 Fax +62355-321426

http://www.stkippgritulungagung.ac.id

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TEACHERS, INNOVATIVE INSTRUCTIONAL DESIGN AND A GOOD CHARACTER IN INFORMATION ERA

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ABSTRACT: Education in the information era requires a different substance to the educational needs of the industrial era. The education system is transformed from habituation paradigm to education that focuses on learning(from standardisation to alignment), Learning experiences are designed to find new educational needs. Thus teacher have a big role to create learning experience that supported target of curriculum. This article focuses on the discussion about the teacher's role in developing instructional design to develop character building in this information era. Keywords: Teacher, Innovative Instructional Design, Character, Information Era

A. EDUCATION IN THE INFORMATION ERA

Some Basic Principles of education in the information era are: (a) spesific design and diversity; (b) initiative and self-regulation; (c) collaborative and emotional development; (d) comprehensive and integrated (Reigeluth, 2009). Three main points that become the focus of this discussion are: (1) some key words that distinguish the new paradigm of the information erafrom the old paradigm of the industrial era. The characteristics of the industrial era are standardization, centralized control, adversarial relationships, autocratic decision making, compliance, conformity, one way communications, parts-oriented and teacher as king. Meanwhile, the nevJ paradigms of information era arecustomization, autonomy with accountability, cooperative relationships, share decision making, initiative, diversity, networking, holism, process oriented, learner (customer) as king; (2) Reigeluth introduces two major learning methods, namely: the basic method and a new method that can accommodate the students' interest such as problem-based learning, project-based learning, simulation, tutorials dan team-based learning; (3)Instructional theory must provide a design that allows the students to make their own learning decisions, and give alternative learning methods to choose so that the learners can make their own decisions about what to learn and how to learn it. The Learning process provides a variety of options in which the learners serve as a unique designer who can provide an alternative option to maximize all of their potential.

The new paradigm of learning theories are designed specifically to demonstrate the learner's strength, initiative and responsibility, ability to work in groups, thinking skills, mctacognitive skills and diversity, In this term, learning theory is designed to help demonstrate the learning experience (Reigeluth, 2009). This theory of learning should be developed in a wider area. Not only in term of the cognitive domain but it also needs a theory that can demonstrate an understanding of students' high-level thinking skills, development of metacognitive skills, problem-based design and interdisciplinary or thematic environment and makes learning guidelines for specific domains, such as the development of the affective domain, emotional intelligence and character of education.

B. TEACHER AS INSTRUCTIONAL DESIGN INNOVATOR

Teacher's quality can be seen from 11 categories, i.e teacher's characteristic, instruction, communication, relationship, assessment, attitudes, classroom discourse, strategies, teacher quality, collaboration and behaviors (Scheetz, Matrin, 2008). Bain's study identifies six characteristics of the best teacher, which are based on the expertise and teaching skills. First, the best teacher .knows their subject well, and depth of his expertise is manifested in several ways. Furthermore, the learners know how to contribute to the understanding of their discipline, demonstrate his expertise and knowledge by giving example, expect learners to receive the knowledge given, and they continue to learn and improve their own areas of expertise; second, students said that the best teacher can motivate; third, teacher prepares each class session not as an entertainment, but by planning their class professionally and combined with comprehensive knowledge; fourth, they define clearly the learning outcomes to be achieved; fifth, help learners to achieve the learning outcome and sixth they know how to measure the learner's progress.

Based on his research, Clifford (2008) determines that the Hierarchy of teacher's abilities are: (a) apprentice teachers know what to teach; (b) Journeyman teachers know what to teach and how to teach; (c) master teachers know what to teach, how to teach, why to teach, what, to whom and which times, how to assess learning, and how to continue to improve their own language and teaching skills. An effective teacher is a teacher that causes student's improvement on core content educational outcomes. Teacher effectiveness is the primary influence on gains in student's achievement.

Meanwhile, according to Wayne and Young (2003) in Munoz & Chang (2008), teachers degree levelsare sometimes related with positive gains, sometimes negative gains, and often inclonclusive gains. Innovative teachers should have some applicative abilities, namely: skill, abilities, strong communication skill, the ability to modify the learning environment, application of cognitive strategics, preparation in content, maintenance of high expectation, the ability to challenge student, remaining up to date, being open to the new ideas, helping students become autonomous, being a collaborator, being certified in education, showing enthusiasm and reflecting on one's practices (Scheetz; Martin, 2008). Innovation is always connected with productivity.

How innovative someone is can be measured from the result of his productivity. However, the indicator of an innovative teacher cannot always be connected with the result of a teacher's teaching and learning process. Teaching is a complex activity and it is a multidimensional activity that cannot be evaluated productively using simplistic polemic (Clifford, 2008). Further, Bain in Clifford (2008) confirms that a good teaching is not a matter of either expertise or motivational teaching technique alone.

Instructional design is a systematic procedure to develop education and training programs in a reliable and consistent style. Learning design is a complex process of creative, active and iterative (GustafonSc Branch, 2002). A system is an integration of a set of elements which interact with each other (Banathy, 1987). The main characteristics of a system are interdependent, synergistic, dynamicand cybernetics (Gustafon& Branch, 2002), Silvern's model and several other learning design modclsbascd on the flow behavioristic (Gustafon& Branch, 2002), They arc beginning to believe that human behavior can be observed, measured, planned and evaluated in a reasonable, reliable and valid. Cognitive psychology, especially the processing of information (such as Gagne, Briggs & Wager, 1992) has also been completed in preparation of the design theory of learning.

A systematic instructional design procedure can create learning more effective, efficient and relevant when compared with the use of non-systematic approach. Applying a systems approach to the analysis of how different parts of the system interact with each other and require coordination all activities.

C. TEACHER AND CHARACTER BUILDING

One indicator of -professional teachers is that they can be an agcoKfr learning innovation. They serve as an innovative teacher who will make learners have a good character, such as critical thinking ability, creative and able to solve the problem and have a high learning achievement. High learning outcomes can be achieved by conducting inference and implementation of innovative changes. Teachers are required to develop innovative learning strategies to optimize the students' critical thinking ability to iolve their problems. In this case the teacher should become agents of change. A conceptual framework to change is identified by Dormant, 1986 in Lu & Ordieb (2009). They are: (1) Adopters: a person who receives and uses and implements innovation; (2) Black Boxes: the innovation is created by agents of change to deal with anomalies; (3) Agent of change: Agent of change is someone who starts the changes, arrange the schedule of changes, create an atmosphere for changeand support the resistance to change, join anyone who supports change, convinces people to change and modifies the resistance to change; (4) domain, where innovation is implemented.

Peirce's inference models triardic (Cunningham, 1998) can be used to train a teacher to become an innovative person. Inference model of Peircc's triardic, include (1) abduction, in which learners produce hypotheses based on his experience, prior knowledge, awareness and a model socio-cultural to deal with anomalies, (2) deductions: learners test his hypothesis with the social context; (3) induction: learners confirm, reject or modify the previous hypothesis that they have Triardic Peirce's inference models, can also be developed as a step of research to see innovative changes in learners. In this case, the participants must demonstrate innovative changes by implementingthe inference and focus on learning outcomes that can be measured. In addition, participants also collect ongoing data in their class.

The students; behavior in term of participation and comprehending the materials must be observed and recorded at the moment of teaching and learning process. The research steps are:(1) Inference of innovation: (a) writing the results of observation and criticism; (b) thinking of alternative strategies; (c) seeking research results that support a strategy proposed; (d) discussing the alternative strategy with colleagues and learners tutors; (e) writing plans and proposals; (f) conducting learning; (g) collecting carners's document; (h) analyzing data; (i) confirming, rejecting and changing strategies; (j) creating the journal, (2) Managing changes in skills, by doing the following activities: (a) identifying ABCD; (b) recording the change; (c) demonstrating the strengths and weaknesses of the strategy; (d) analyzing the systems that support and resistance of the institution; (c)justifying reasons; (f) implementing changes; (g) accessing changes periodically and modifying the changes immediately (Lu & Ortlieb, 2009; Ortlieb & Lu, 2011).

Information technologies have an important role in modern society and it can also influence the nationalpolicy (Chen So Chen, 2009). Integrating technology in learning will be easily achieved if teachers have the flexibility of mind set, tolerance, always want to try something new and have the innovation and ingenuity to combine the contents of the lesson, the purpose of education and technological environment. Besides, learners must design their own learning and have the courage and are willing to spend their time to upgrade their skills and knowledge (Mishra, Kochler, Kereluik, 2009) and attitude. In information era, implementation of educational character has not a simple process. It needs some innovations to build a good character. A good character attends to cognitives, motivations, behavior and skills. Character is a reliable inner disposition to respond to situation in a morrally good way. Character so conceived has three interrelated parts: moral knowing, moral feeling, and moral behaviors (Lickona, 1991:51). There are three main componens of educational character.

The componen arc (1) knowing the good; (2) desiring the good and doing the good. The learner's ability in integrating three componenscan be enchanced by giving them some trainings. Three studies in Taiwan establish a set of courses to investigate the effectiveness of integrated learning, peer coaching and cooperative learning. The result shows thatthe course has a positive influence on learner's learning practice (Paas, Renkel& Sweller, 2003 in Sorva, 2007). Besides, it also reveals that learners have high motivation and that young learnershave motivation to be a good learners. A good learners character have self-regulated learning. They performance reflect a good attitude, knowledge and skill. They are knowing the good, desiring the good and doing the good. Students' performance in self-regulated learning is closely related to self -regulatory efficacy (SRE which is defined as the efficacy of well performed self-regulatory mechanism such as self-observation, self-judgement, and self-response (Bandura, 1996 in Lee, 2009). Learning is influenced by the instructional methods, learner's characteristic and context of the experience (Cronbach, 1975).

Learning goals affect motivation and problem solving. A study conducted by Song & Grabowski (2006) investigates the relationship between two types of performance, they are Learning-Goal and its influence on motivation and problem solving to vary the three instructional designs to improve one of the two orientations. Group's Heterogeneity and homogeneity which are based on self-efficacy is predicted to affect motivation and problem solving (Song, Grabowski, 2006). In a self-regulated learning, students have more learning orientation. Thus, significantly, they have higher intrinsic motivation than the have performance orientation. Futhermore, students who students in heterogeneous group in monitoring and evaluation scores higher than homogeneous groups have higher score in monitoring and evaluating compared with the ones in a homogeneous group.

Learning-Orientation and Solution development goals has a significant relationship when students participate in the learning-oriented treatment and heterogeneous groups. Scholastic is a better strategy improve self-regulated learning. Learners' satisfaction requires assessment quality in thelearner interaction and interaction system (Song, Grabowski, 2006). Learners require actual quality of the information. In addition, it is necessary to design a model that is able to measure the effectiveness of their learning

D. CONCLUSION

Teachers have a big role to develop a good character in information era. They have a good chance to develop their professional competency. Yet, some capability must be enhanced by the teachers. They are: (1) Professional development, knowledge, beliefs and practices of teachers; (2) Teacher as agent of change; (3) Teacher as agent of innovation; (4) Facilitate learner to improve their ability in self-regulated learning and (5) Deal with technology. Besides their, teacher must have a creativity to create innovative instructional design. Innovative instructional design can facilitate teacher to optimize ability of student, engage student personal character to be a good and competence student.

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