

Authentic Learning Model with Multiple Source for 21st-century in Higher Education "Reinventing Higher Education Paradigm" Responding the Global

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Abstract

Purpose This article is aims to Multiple Source Learning Acces and Authentical Learning for 21st-century "Reinventing Paradigm of Higher Education Relevance" Responding to Global Perspective In this study, the researcher will use qualitative methods, to examine the condition of the natural object, in which the researcher is a key instrument, conducted the data collection techniques combined, the data analysis is inductive, and qualitative research results further emphasize the significance of the generalization. The research approach used in Literacy Research. The learning paradigm of the 21st-century strengthens students' ability to think critically, to control information technology communications and collaboration. Education is an activity to develop cognitive, affective, psychomotor, education is not just the transfer of knowledge, but also more (the value of transmission). Therefore, learning outcomes are not solely to achieve instructional goals (instructional effects), but also the impact of drover (nurturant effect), which is considered creative productively. Furthermore, students have high creativity with great curiosity (curiosity). Authentic learning typically focuses on real-world, complex problems and their solutions, using role-playing exercises, problem-based activities, case studies, multiple source and perspectives, ways of working, habits of mind, and community. Authentic activities enable learners to make choices and reflect on their learning activity, both individually and as a team or community. Interdisciplinary perspective: Relevance is not confined to a single domain or subject matter specialization. Instead, authentic activities have consequences that extend beyond a particular discipline, encouraging students to adopt diverse roles and think in interdisciplinary terms and Integrated assessment: Simulation-Based Learning, Student-Created Media, Inquiry-Based Learning (Open Learning Initiative), Peer-Based Evaluation, Working with Research Data, Open education, multi access learning, Reflecting and Documenting Achievements.

Keywords: Multiple Source Learning Access, Authentical Learning, 21st-century paradigm

1 INTRODUCTION

As a result of changes in the environment, the growth of digital native children are different from previous generations, then, the way students think and process information fundamentally differently at all. If it is the case then the school should revolutionize themselves. The instructional material taught in the 21st-century need to be equipped with relevant examples from the world of the 21st-century; students should be able to see the connection between what they learn with the fact that they see the environment around them. Students must obtain and use a device or devices they need to describe the real work environment so that they acquire the necessary skills at a high level as expected of them to face the challenges of the 21st-century For those reasons, the school of the 21st-century must integrate technology into the whole

learning process. Schools of the 21st-century must provide a learning environment that enables students to develop an attitude of curiosity, teach skills that are useful for the student life in the future and allow them to practice the ability to work collaboratively in teams to find out, solve problems, make and communicate the results of their work through the container and the shape that best suits the child's condition and capacity of the 21st-century.

The learning process is able to accommodate the students' critical thinking skills cannot be done with one-way learning process. Critical thinking skills built by studying material from different sides and thorough. The ability to connect science with the real world is done by getting students to see life in the real world. Opportunities and varied learning activities which are not monotonous. Learning methods tailored to the competencies to be achieved. Mastery of the competencies pursued by a variety of methods that can accommodate the learning styles of students auditory,

visual, and kinesthetic a balanced manner. Thus each of the students gets the opportunity to learn the same. The use of technology, especially information technology communication, facilitating students keep up with technology, and get a wide range of learning resources and media. Learning resources that allow students explore the increasingly varied teaching materials with a variety of approaches in accordance with students' learning styles and interests. Project-based learning or problem-based, connecting students with the problems faced and encountered in every day. inquiry and investigation were undertaken by students.

2 LITERATURE REVIEW

Authentic learning is defined as learning that is seamlessly integrated or implanted into meaningful, "real-life" situations (Jonassen, Howland, Marra, & Crismond, 2008). Also, it is stated that in authentic learning, learners are presented with realistic problems or projects that have realistic purposes and given the opportunity to investigate and converse about these problems and projects in manners that are applicable to them and their lives (Carlson, 2002; Mims, 2003). Moreover, author, Audrey C. Rule, designed four principles that define authentic learning experiences. These principles refer to: 1) focus on practical, lifelike problems that imitate the trade of experts in the field with communication of results to individuals outside the classroom; 2) be inquiry-based with an emphasis on metacognitive skills; 3) encourage learners to participate in active conversations in a social learning environment, and 4) allow learners make choices and guide their own learning in meaningful, task-oriented work (Rule, 2006).

Romiță B. Iucua, Elena Marin (2014) mention for developing authentic learning through the process of initial teacher education. Starting from the assumption that authentic learning experiences are those that are personally relevant from the learner's perspective and situated within appropriate social contexts, authentic learning can be implemented are related to how to provide students with the opportunity to reflect or how to provide students with coaching and scaffolding at critical times, also promoting articulation to encourage students to verbalize their knowledge and thinking. Also, teachers have to enable students to use technology and to provide the opportunity to collaborate in order to have an authentic learning environment. The study focuses on the implications for higher education and its pedagogical practice for cultivating authentic learning in adult education with a continuous commitment to constructing self-based, authentic futures.

Kim & You (2012) noted that the change in the standard of academic performance was in line with the

development of information communication technology (ICT) and global economic growth. Changes adjustment exacting standards of education in preparing learners.

Education in the 21st-century by Patrick Slattery in his book "Curriculum Development In The Postmodern" should be based on five concepts, namely:

1. Education shall be directed to social change, empowering communities and liberate the mind, body, and spirit of man (that teaching must be directed towards social change, community empowerment, and the liberation of the mind, body, and spirit of individual human beings (Dorothy)
2. Education shall inspire. There are seven things that should inspire education, namely: (1) Do not idolize or bound by theory, ideology or religion because there is no absolute truth (do not idolatrous about or bound any doctrine, theory, ideology), (2) Do not think science you have now is the most correct, avoid narrow thinking (avoid being narrow-minded and bound to present views); (3) Do not force others, including children in any way, either by authority, threat, money, propaganda even with education (do not force others), (4) Never avoid contact with people who suffer or have to care with others (do not avoid contact with Suffering or close your eyes before Suffering), (5) Do not nurture hatred and anger (do not maintain anger or hatred), (6) Do not lose the identity under any circumstances (do not lose yourself in dispersion and in your surroundings), (7) Do not work in place which destroys human beings and nature (do not live with a vocation that is harmful to human and nature. (Thich Nhat Hanh)

ATCS (assessment and teaching for 21st-century skills) concluded four major issues related to 21st-century skills ways of thinking, ways of working, work tools and life skills. This way of thinking covers creativity, critical thinking, problem-solving, decision making and learning. How it works include communication and collaboration. Tools for work include information and communication technology (ICT) and information literacy. Life skills include citizenship, life and career, and personal and social responsibility. Kang, Kim, Kim & You (2012) provides a framework for 21st-century skills in the

domain of cognitive, affective, and social culture. Cognitive domains are divided into sub-domains: the ability manage information, namely the ability to use tools, resources and skills of inquiry through the discovery process; ability to construct knowledge with process information, giving reasons, and critical thinking; the ability to use knowledge through analytical processes, assess, evaluate, and solve problems; and the ability to solve problems using creative thinking ability and metacognition.

Competency mastery of these subjects do not provide broad impact on students if not accompanied with a mastery of the themes of the 21st-century. According to the Partnership for 21st-century Skills (2009) theme that emerged in the 21st-century are: global awareness; financial literacy, economic, business and entrepreneurship; awareness as citizens; health literacy; and environmental literacy. Global awareness skills include understanding and addressing global issues. Global issues in every aspect of life whether political, economic, social, cultural, technological, and knowledge. Learn from and cooperate with individuals representing diverse cultures, religions, and lifestyles is a requisite in entering the social world. An increasingly open world requires the ability to accept and understand the root cultures, religions, and lifestyles of others in a spirit of mutual respect and open dialogue in the context of personal, work and community. Century Skills Twenty first century skills were first defined by the agency P21 (2009: 6-7) which includes: (a) Learning and innovation skills (Creative and innovative, work with and implement innovative skills to innovate) (b) Critical thinking and problem-solving (think effectively and systematically, Make decisions and solve problems) (c) Communications and collaboration (Communicate clearly and be able to collaborate with others and work together in teams) (d) information, media and technology skills (information literacy , media literacy and ICT literacy) (e) Life and carrier skills (flexibility and adaptability, initiative and self-contained, can be sociable and interaction among peoples and nations, productivity and accountability, and responsible leadership).

Binkley et al (2012: 19-20) in his research with 21st-century skills ATCS21 split into 4 groups consisting of (a) ways of thinking; (B) ways of working; (C) tools for working; (D) living in the world. A. Ways of thinking Is group thinking skills. These skills will establish the concept of thinking of thinking is simple to high-level thinking. These skills emphasize the way to the higher-level thinking to more easily remember a concept and draw conclusions. Binkley et al (2012: 37-38) Ways of thinking split into three skills: (1) Creative and Innovative, (2) critical thinking, problem-solving and decision-making

process (3) Learning how to learn and metacognitive skills. Creative is the ability to think or perform any act aimed at finding solutions to a condition or problem intelligently, are not common, is the thinking of himself / original, and bring the right results and rewarding innovative while a person's ability to use the mind and resources power around him to produce a work that is really new, original or a work of his own thoughts, and that certainly can be beneficial for many people (Binkley et al, 2012: 37-38).

Educators must change the paradigm learning so that learners have the ability in the 21st-century, namely: Educators as a director of a facilitator, mentor, and consultant. Educators as a source of knowledge became a friend of learning. Learning is directed by the curriculum be directed by the students of curricula. Learn scheduled strictly time-limited into open learning, tight with a flexible time frame as necessary. Learning is based on the fact of being based on the project and the survey. theoretical, principles, and surveys into the real world, the reflection principle and surveys. Repetition and drills into the investigation and design. Rules and procedures for the discovery and creation. Competitive be Collaborative. Focusing on the class became focused on the community. The result formed earlier to open the results.

3 RESEARCH METHOD

In this study, the researcher will use qualitative methods, to examine the condition of the natural object, in which the researcher is a key instrument, conducted the data collection techniques combined, the data analysis is inductive, and qualitative research results further emphasize the significance of the generalization. The research approach used in Literacy Research (Truman, Mertens & Humphries, (2000).

4 RESULT & DISCUSSION

Learning strategies vary due to support by various types of learning that are owned by the student (multiple learning styles). Furthermore, as an educator should be able to organize and design learning so that students have the ability in the 21st-century. Thus the role of educators in the 21st-century, namely: educators as facilitators, educators as mentors, educators as a consultant, educator as a motivator, educator as a monitor (monitor student activity), educators as a learning companion for students. Authentical Learning paradigm change in the 21st-century. Romiță B. Iucua, Elena Marina (2014), Technology offers great advantages for authentic environments, because technology can provide scaffolds for the students, student may develop learning skills, such as thinking and problem solving

skills, information and communication skills, and interpersonal and self-directional skills. By empowering students to use technology, Moreover, technology can make lessons more memorable by employing a variety of different learning styles, because most students have a distinct learning preference, meaning they take in information best by either seeing, hearing, or moving their bodies. An important aspect of learning is for students to be able to communicate what they know, so teachers need to encourage their students to verbalize their own knowledge so that they can learn more efficiently. When students listen effectively they generate questions to further everybody's thinking and learning. Critical reflection can also be used as a way to integrate theory with practice, can facilitate insight, and stimulate self-discovery. Facilitating reflection in the classroom by emphasizing metacognitive strategies that can help improve student academic performance. Two ways to incorporate reflection into the classrooms is by reflective journaling and reflective portfolios. (Hubbs & Brand, 2005: 63). Diagnostic-reflective portfolios can also be used for reflection, as students set goals for themselves, look at past work samples, and reflect on their progress (Courtney & Abodeeb, 1999). According to Mitnik, 2009, collaborative learning is based on the model that knowledge can be created within a population where members actively interact by sharing experiences and take on asymmetry roles, interaction with their topic as they work in collaboration with their partner. An authentic learning focus on building substantive conversation in the classroom, where students are expected to share their ideas and thinking, enable presentation and defence of arguments. The advantages that well build tasks have are related to building Higher-Order Thinking, because students will be required to report findings in a creative format. This kind of assignments displays a strong engagement in higher order analysis, synthesis and evaluation, essential element to success in one assignment. Inviting students to find out more about different topics will give students a sense of empowerment in the classroom, because they will be the one that will have to search the information, select the valuable information and then create an opinion about what they have discovered. Doing this, student may develop learning skills, such as thinking and problem-solving skills, information and communication skills, and interpersonal and self-directional skills. By empowering students to use technology., Herrington, J., Reeves, T., Oliver R., & Woo, Y. (2002), Shifting procedures for the organization of education and learning in the classroom or the environment surrounding the

institution where students gain knowledge. The shift that includes the learning process:

1. From a teacher-centered towards the center on first student. If usually happens is the teacher talks and the students listen, listening, and writing - it is now the teacher should listen more to their students interact, argue, debate, and collaborate. The function of teachers of teaching turns itself into a facilitator for their students
2. From the direction towards interactive. If the first mechanism of learning that occurs is the one-way from teacher to student, so this time there must be enough interaction between teachers and students in various forms of communication. Teachers tried to make the classes as interesting as possible through a variety of approaches interaction groomed and maintained.
3. From isolation towards networking environment. If the first students can only ask the teachers and studied the books in the classroom alone, then present those concerned can gain knowledge from anyone and from anywhere that can be contacted and obtained via the Internet.
4. From passive to the active-investigate. If the first students were asked to passively listen and listen well what the teacher in order to understand it, then it is recommended that students should be more active by providing a variety of questions you want to know the answer.
5. From the virtual / abstract to the real-world context. If the first examples of the teacher to the students mostly are artificial, so this time the teacher should be able to provide examples that fit the context of every day life and are relevant to the material taught.
6. From the personal to the team based learning. If the first of the learning process is more personal or based on each individual, then that should be developed at this time is a learning model that emphasizes cooperation among individuals.
7. From the sweeping rules empower the typical behavior of attachment. If advance science or material taught more general (all the material that needs to be given),
8. From the stimulation of a single flavor towards stimulation to many directions. If the first student use only a portion senses in capturing the material taught by teacher (eyes and ears), then the current all five senses and physical-spiritual component must be actively involved in the learning process (cognitive, affective, and psychomotor).
9. From this single tool to the multimedia tools. If the first science teachers rely solely on the blackboard to teach, it is currently expected the teacher can use a wide variety of equipment and

technology education available - both conventional and modern.

10. From the one-way relationship shifts toward the cooperative If the first student must always agree with the teacher and should not be totally against it, so this time there should be a dialogue between teachers and students to reach a mutual agreement.
11. From the mass production towards customer needs. If the first of all students, without exception, to obtain any materials or content of the same material, so now every student has the right to earn an interest in accordance with the content or unique potentials.
12. From a single conscious effort toward plural. If the first student to be uniformly follow a way to proceed then that should be highlighted today is precisely the diversity initiatives that arise from each individual.
13. From the science shifted towards disciplinary knowledge plural If the first students just learn the material or phenomenon from the point of view of science, then the current context of understanding will be much better understood through a multi-disciplinary approach to knowledge
14. From centralized control toward autonomy and confidence. If the first of the entire control and control of the class is on the teacher, then now is the students entrusted to be responsible for the work and activities of each.
15. From a factual toward critical thinking. If the first things discussed in class is factual, then it must be developed discussion on various issues that require critical and creative thinking to solve.

From the transmission of knowledge to the exchange of knowledge. If the first happens in the classroom is the "transfer" knowledge from the teacher to the student, then in this modern century that happens in the classroom is the exchange of knowledge between teachers and students and between students and neighbors.

5 CONCLUSION

The new paradigm of education is required to build a society of educated, intelligent people will bring education as process Indonesia fully human. The paradigm of education is important to be updated into the learning system is more reliant on cognitive theory and constructive. Lessons will focus on High Order Thinking Skills (HOTS), ongoing development of intellectual abilities socially and culturally, to encourage students to build their own understanding and knowledge in the context of social and learning

starts from the beginning of knowledge and cultural perspective develop science and technologies. Based on the conclusions as described above, it is suggested as follows. Based on the ideas about "Reinventing of Learning Paradigms for 21st-century Education Responding to Global Challenges" : Overview: Teaching, Learning Competencies and Skills, researchers concluded components into three parts, namely knowledge, behaviors, and attitudes towards the environment. Learning Paradigms for 21st-century Education includes (a) the fundamental social and ecological principles and processes, (b) global environmental issues, (c) local environmental issues, and (d) strategies for environmental action. ongoing development of intellectual abilities socially and culturally, to encourage students to build their own understanding and knowledge in the context of social and learning starts from the beginning of knowledge and cultural perspective and the development of science and technology. Authenticity in teaching involves features such as being genuine, becoming more self-aware, being defined by one's self rather than by others expectations, bringing parts of oneself into interactions with students. Students must become comfortable with the real-world problems and in order to do that they have to be engaged in activities where students take part in activities directly relevant to the application of learning and that takes place within a culture similar to the applied setting. Also following these five ways to support authentic learning that were taken into consideration while designing the lecturers will prepare students "to deal with ambiguity" and put into practice the kind of "higher order analysis, Authentic Learning Model and with multiple source" required of them as future professionals. Providing students with coaching and scaffolding at critical times, Providing students with coaching and scaffolding at critical times is an important role that all teachers have to be aware off in order to provide authentic learning environments. It has also an important role in building positive and long-lasting implications for students' academic and social development, Provide students with the opportunity to reflect, Provide the opportunity to collaborate, Promote articulation to encourage students to verbalize their knowledge and thinking, Enable students to use technology.

6 REFERENCE

- Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for learning, teaching, and assessing. A revision of Bloom's taxonomy of education objectives*. New York: Addison Wesley Longman.

- Association, N. E. (____). *21st-century Preparing Students for a Global Society: An Educator's Guide to the "Four Cs"*.
- Bahr, N., & Rohner, C. (2004). The judicious utilization of new technologies through authentic learning in higher education: A case study. *Annual Conference Proceedings of Higher Education Research and Development Society of Australasia*. Miki, Sarawak (Malaysia). Retrieved April 24, 2007
- Beers, S. Z. (2012). *21st-century Skills: Preparing Students for the Future THEIR*.
- Brown, J. S. (1999). Learning, working, and playing in the digital age. Presented at the American Association for Higher Education Conference on Higher Education. Retrieved April 24, 2007
- Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453–493). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Carlson, A. (2002). *Authentic learning: What does it really mean?*. Western Washington University.
- Downes, S. (2007). *Emerging Technologies for Learning*. Coventry, U.K.: Becta. Retrieved April 24, 2007
- Herrington, J., Reeves, T., Oliver R., & Woo, Y. (2002). Designing authentic activities for Web-based courses. In G. Richards (Ed.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2001*, (pp. 18–27). Chesapeake, VA: AACE
- Jenkins, H., Clinton K., Purushotma, R., Robinson, A.J., & Weigel, M. (2006). Confronting the challenges of participatory culture: Media education for the 21st-century. Chicago, IL: The MacArthur Foundation. Retrieved April 24, 2007
- Jonassen, D., et. al. (2008). *Meaningful learning with technology (3rd ed.)*. Upper Saddle River: Pearson Education, Inc
- Kang, M., Kim, M., Kim, B., H. (n.d.). Developing an Instrument to Measure 21st-century Skills for Elementary Student.
- Krathwohl, D. R. (2002). A Revision of Bloom's Taxonomy: An Overview. *Theory Into Practice*, 212-232.
- NCREL & Metiri Group. (2003). *enGauge 21st-century skills: literacy in the digital age*.
- Rotherham, A. J., & Willingham, D. (2009). 21st-century Skills : the challenges ahead. *Educational Leadership*, 67 (1), pp. 16-21.
- Romîță B. Iucua, Elena Marina, *Authentic Learning in Adult Education. Procedia - Social and Behavioral Sciences*, 142 (2014), pp. 410 – 415.
- Reeves, T. C., Herrington, J., & Oliver, R. (2002). Authentic activities and online learning. *Annual Conference Proceedings of Higher Education Research and Development Society of Australasia*. Perth, Australia. Retrieved April 24, 2007
- Skills, P. f. *Learning for the 21st-century skills*. Tucson Partnership for 21st-century Skills
- Siemens, G. (2004). *Connectivism: A learning theory for the digital age*. Retrieved April 24, 2007
- Van Oers, B., & Wardekker, K. (1999). On becoming an authentic learner: Semiotic activity in the early grades. *Journal of Curriculum Studies*, 31(2), pp. 229–249.