



Building Self-directed Learner Through Authentic Assessment

Sri Endah Indriwati
Universitas Negeri Malang, Indonesia
sri.endah.fmipa@um.ac.id

Abstract: This research investigates how authentic assessment that is set in the beginning of the lecture in the learning contract can build self-directed learner. This research uses a descriptive qualitative analysis by analyzing seven students' tasks using authentic assessment, including the reflection of their experience, feeling and expression after one semester learning. The data are taken from the compilation of tasks that is submitted at the end of the semester. The results show that in each of the seven tasks build a self-directed learner. Though it was difficult at first, along the semester they are habituated to do the tasks and made them to be a self-directed learner. Based on these findings it is suggested that the task using authentic assessment set in the beginning of the lecture in order to make the students to be aware of learning in different ways.

Keywords: self-directed learner, authentic assessment, task, reflection

Learners in higher education environments are adult learners. Students are referred to as adult learners whom are associated with the ability of students being able independently to learn everything they need it. The ability independently and actively manages and plan the learning activities of individuals referred to as Self-Directed Learner (O'Shea, E. 2003). According to Merriam, S. B (2011) Self-Directed Learner students can distinguish between adults and children. Self Directed Learner can be described as a process in which individuals have the initiative with or without external assistance in terms of arranging learning needs. Iwasiw (1987); Hiemstra, R. (2011) stated that the Self-Directed Learner is a form of learning when an individual has responsibility for planning, implementing and evaluating the results of his own. O'Shea, E. (2003) adds that the Self-Directed Learner is part of the personal learner in terms of planning and organizing all of their learning activities. It can be described as a whole that the Self-Directed Learner is a form of consciousness that shows a learning process that emerged as an initiative and individual responsibility in determining the learning materials, learning objectives, the way to acquire learning resources, the way to implement strategy of learning as well as how to evaluate the work of the done independently. This learning process is already owned by students because students have ability to develop responsibility for their own learning.

Self-directed learner by Dembo M.H. (2004) can also be interpreted as self-manage or control factors that affects student learning, students can create the optimum conditions for learning and removing the obstacles that interfere with the activity or learning process in which they live. A successful learner can find a way to overcome all obstacles that hinder the learning activities, and can surpass targets learning objectives that have been determined. Dembo's statement M.H. (2004) may explain why different students with middle school students that is located on a different classroom environment, learning begins with teacher referrals turn into the direction of the students themselves. The learning activities in universities no longer have to be directed teachers or educators regarding when, where and how to learn. In connection with this, the student should be able to carry out directly on how to learn independently by developing a variety of potential components of a self-directed learner.

According to Dembo M.H. (2004) self-directed learner has six indicators, namely: 1) Motivation is an internal process within the individual that affect habits such step selected; This includes the internal processes of interest, trust, power of understanding, as well as the expectations held within the individual; 2) Strategies and methods of learning which is a method or process of the selected individuals used as an individual strategy to obtain large amounts of information; 3) The social environment, related to the ability of individuals to obtain the information needed to learn from the social environment; 4) Management of time, related to an individual's ability to regulate the distribution strategy in time used to study a variety of capability and obtain information; 5) physical condition, relating to an individual's ability to actively prepare for the physical state is always ready to learn with good concentration. 6) Performance, related to the performance or results shown on the learning process through which then feed into the evaluation of themselves

According to Merriam, S. B. (2001) based on learning Self-Directed Learner which is then developed a model of self-directed learning to develop a process of self-directed learner within the individual (student). The main purpose of learning model of self-directed learning is to develop the capacity or ability of the individual to be able to directly control their learning activities independently. In each lesson is implemented, students' learning results obtained are expected to correspond to the learning objectives, and aligned with assessment instruments used in the assessment of learning outcomes of learners (students). Assessment instruments proceedings against self-directed learner should also be able to dig up all the information accurately to determine the development of self-directed learner and appropriate forms of assessment to be used that is an authentic assessment.

The success of students are affected by various factors, the most decisive factor is the study of students individual (M.H Dembo, 2004). How can individual motivate themselves in a process, process information, and set various conditions to suit the individual and can make optimal learning conditions in the social good, body condition, and the condition of learning resources used to support learning activities. In these circumstances the way of learning are more important than how much time is spent on learning. Learners who are able to condition themselves to study well is to find an effective way to the learning process which is passes with time reckoned with, while who cannot be reconditioned will use less efficient so less effectively to support learning activities

Authentic assessment is an assessment based on the activity of learners in accordance with the actual state or close to the real performance of learners (Svinicki, M.D. 2004). Furthermore Gulikers, J.T.M, et al. (2004) Svinicki, M.D (2004) mentions six characteristics of authentic assessment, namely: 1) a realistic assessment, shows the actual capabilities; 2) assessment requires consideration and innovation, which the participants are expected to have more than one solution to the problem; 3) assessment is according to the discipline of students passed; 4) assessment in accordance with context related to the ability shown students; 5) assessments ask students to demonstrate the ability to solve large scale complex problems; 6) assessment allows for feedback, training, and the opportunity the second time in resolving the issue. In connection with all six characters are so authentic assessment has components construct knowledge, emphasis on investigation and utilization assessment according to ability at school/ universities.

One example of authentic assessment is the portfolio, while the portfolio is in accordance with the design of authentic assessment. The portfolio is designed to obtain information on all topics are studied, such as the selection of sources and data required, the selection of reference sources to support data, strategy development is done, a note about a good evaluation of learners and educators. In accordance with a process that can be recorded in a portfolio, then this assessment can be used as a form of assessment that can develop a Self-Directed Learners.

Through a portfolio assessment also can get information about the extent to which self-directed learner develops the self-learners. Good portfolio quality, describes students who have the ability to regulate things that are used to solve complex problems and manage independently which is needed during the learning process.

Every task that is collected in the portfolio are equipped with reflection, evaluation of students and teachers as feedback to develop future learning task. This authentic assessment gives learners the opportunity to exercise and evaluation to enhance the ability and skill in solving problems. In the process of portfolio assessment can train and develop various capabilities, namely: 1) motivation to learn; 2) training and application of strategies and methods of effective learning for the individual; 3) being able to condition the social environment as a place of learning; 4) expanding the ability to set the time; 5) preparing the maximum condition on self to learn; 6) and being able to develop an evaluation of the performance of the learning outcomes that have been passed. These six components that can be developed through the portfolio are components of self-directed learner. Based on the previous description, the problems that arise, "How authentic assessment can build the capacity of self-directed learner, as well as can authentic assessment build the capacity of self-directed learner is balanced from all six components?"

METHODS

This study aimed to describe the ability of an authentic assessment can build self-directed learner. Description of authentic assessment to builds self-directed learner will be described qualitatively. Data was collected through examination of the documents on student assignments that are relevant to the instruments which is having been prepared. Document task that examined the form of evidence of learning activities collected in the portfolio as a form of authentic assessment. Within the portfolio there are seven kinds of elements interrelated tasks. Number of documents examined portfolio from 26 students.

The instrument used to collect the data developed based on six elements of Self-Directed Learner by Dembo M.H, (2004). Complete instrument can be seen in Table 1. After the data are collected, then the data were analyzed based on a percentage amount of appearance of elements of self-directed learner student of assignment documents which is checked.

Table 1 Table of Data Collection

	College student		Elements of Portfolio				
	I	II	III	IV	V	VI	VII
1							
2							
....							
26							

The maximum value in each element is given 5. Score 5 if assignments or elements of the portfolio can show six indicators that builds Self Directed Learner. The value of 4 if the elements of the portfolio shows the 5 indicators, the value of 3 to 4 indicator, the indicator value of 2 to 3, and a value of 1 if the elements of the portfolio only shows two indicators Self Directed Learner.

The data have been obtained then analyzed using descriptive qualitative analysis. The point value in the form of scores then totaled and calculated to the percentage, which is to describe the magnitude of Self Directed Learner built during the learning process to the

assessment process. Value percentages are then categorized into five categories, namely builds levels: very low, low, medium, high, and very high. Criteria of all five of these categories can be seen in Table 2.

Table 2 Criteria Percentage Level of *Self Directed Learner*

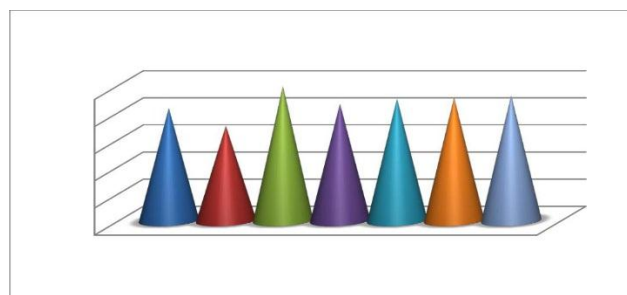
No	Achievement		Explanation
	Value	Category	
1.	25,00-40,00	Very low	Much less builds an authentic assessment of Self Directed Learner
2.	41,00-55,00	low	Less builds an authentic assessment of Self Directed Learner
3.	56,00-70,00	medium	Enough builds an authentic assessment of Self Directed Learner
4.	71,00-85,00	high	An authentic assessment of good at building Self Directed Learner
5.	86,00-100,00	Very high	Very good an authentic assessment of in building Self Directed Learner

FINDINGS

Based on the analysis performed on seven types of tasks in the portfolio assignment I (Journal of Learning) classified in the high category, 83.1% and tasks II (analysis of curriculum development) classified in the moderate category is 70.0%. Whereas in all five other task that Duties III, IV, V, VI, VII (Analysis ministerial regulation, analysis of KD, Development of Lesson Plans, Development Syllabus for Annual Program and for a program on each Semester, and Reflection in the end of the semester) belong to the category of builds self-directed learning which is as high as respectively has a value 99.23%, 86.15%, 90.0%, 90.77% and 92.31%. Overall use of authentic assessment can build Self Directed Learner with a percentage of 87.36% the value of belonging to a very high category. The complete results of the data obtained based on the analysis results can be presented in Table 3.

Table 3 Percentage Occurrences of Self Directed Learner

Self Directed Learning	Elements of Portfolio							Total/ average-2
	I	II	III	IV	V	VI	VII	
	108	91	129	112	117	118	120	795
%	83,1	70,0	99,23	86,15	90,0	90,77	92,31	87,36



An authentic assessment of is an assessment that can provide motivation as well as a goal so that learners can develop self-directed learning in self-learners. Based on the analysis it appears that the whole process of authentic assessment can provide a good encouragement for learners to organize and formulate their learning activities. Learners are able to know what is needed and what must be done to be able to do learning activities. This is in accordance with the results of Embo, M. et al (2010) indicated that authentic assessment is a method that can raise the self-directed learning in self-learners. Authentic assessment is the driving force and motivation for learners to continue to develop themselves

The portfolio consists of seven tasks which are to provide motivation and encouragement for students to be able to manage and organize learning activities, evaluating results and determining of what should be the strategy. What can be shown that learners already developed the ability to self-directed learning? From the results of the portfolio which is composed by can be seen how students build a motivation to develop their portfolio well. The results of the portfolio can describe how the motivation of learners generate action to control the behavior which is can be set up strategies to be applied in various situations resolve the issue.

Percentage of the total is shown on the 7 tasks in the portfolio compiled by learners describe 87.36% Self Directed Learner on the learner. This shows that the authentic assessment provide encouragement and a motivation to develop a Self Directed Learner on learner. The assessment process is one of the efforts of educators to facilitate develop the capacity and skills of life skills in self-learners. Proficiency in question here is more emphasis on the ability of self-learners independently, able to motivate themselves to organize the whole purpose of the learning process, strategy and time should be structured, learning resources to look for, the preparation of a good environment for learning, so that learners are can effectively achieve learning results accordance to learning goals that they had set on.

Point most tasks build Self-Directed Learner is on duty III (Analysis Regulation) which shows the percentage of the highest of 99, 23%. This task is a task that most and takes a lot of time to get it done. The characteristics that this task has been successfully motivating learners are to organize and formulate all their resources to solve the task independently. Experience gained from the task can develop independently of motivation and will foster the responsibility to conduct the learning process. The assessment process is based on genuine evidence of the work of in preparing an analysis of the system applicable curriculum.

In connection with the learning process associated with each task is also certainly related to the assessment process. Learner assessment process is conducted for the purpose as a means of evaluating the success of the learning process. Authentic assessment is a form of assessment that can authentically convey any assessment activities to provide all the information the ability to learner (Paris, S.G and Paris A. H. 2001). Portfolio is included in the authentic assessment to facilitate learners to perform a self-assessment. Self-assessment gives the opportunity to be able to organize and manage their own learning which is more effective for students.

In accordance with the principle of Self-Directed Learner is described by Paris (1999): (1) a self-assessment to understand something deeper; (2) personal Management to think about the methods and strategies used; (3) Regulation of time to complete a variety of ways; (4) Personal Regulation to gain the experience of each individual. The portfolio is used as an authentic assessment which can directly experience the students to have a fourth of the principle of Self- Directed Learner. Boud, D (1995) explains that the assessment serves as a mechanism that controls the learners to be able to prepare for what should be done with regard to something that he needs to learn.

At the point the task II (analysis of curriculum development) classified in the medium category with a percentage of the value of the emergence of Self-Directed Learner on learners

of 70.0%. This task has the lowest percentage among the seven assignments contained in the portfolio. This task is related to the development of learners to understand the development of a curriculum that occurred during the period of time, based on the results obtained showed that the percentage of the character of this task is less controlling to prepare learners to understand the problem. It shows the assessment on the assignment will be to develop some aspects of Self-Directed Learner. Garrison, D.R (1997) stated that self-directed learner is a basic human competence. A good assessment will form a system that could control the learners so that learners can release all their abilities.

An authentic assessment of contains projects and tasks to be completed by learners. Project and task is to motivate students to build self-motivated to develop skills competency self-directed learner that includes motivation, strategy, management time, able to condition the social environment as a place to learn, to set conditions for maximum learning, and be able to develop an evaluation on Performance results learn. The integration between learning activity is with good judgment will guide the to be able to carry out independent learning activities, as well as being able to find a variety of ways accordance to with the character themselves in completion problem. Garrison (1997); Boud, D (1995) stated that the assessment is very important in any activities of the learning process. An authentic assessment of provides influences especially for adult learners at the college who have a goal to become a professional person.

McLoughlin, C and Luca J. (2002) stated that the activities of learning in college are learning professional. Each must have professional skills in accordance with field studies. Professional capability is greatly supported by the Self-Directed Learning in which learners should be able to independently with or without encouragement from the outside develop the ability to motivate yourself to learn, able to carry out effective strategies to support the process of learning activities, utilizing a variety of sources as well as time to solve a problem. Hiemstra, R. (2011); O'Shea, E. (2003) wrote that students have the ability and typical to float responsibility for their own learning. However, without assessment of students or are less able to do things systematically so that the implementation effectiveness of the learning activities are not integrated with each other or tend to cut drop out between the learning activities with other learning activities. This will make the learners are not able to Completion problem properly.

In general the results obtained from studies conducted show that an authentic assessment which has a role to building the skills Self-Directed Learner on Students. An authentic assessment of that serves as a mechanism to control the learners to continue to float the Self-Directed Learner on capabilities within each. Based on the importance of the assessment in the learning activities, especially to enhance the independence of the assessment selected noteworthy, the learning should use an authentic assessment which can access all the information on the development of as well as a good mechanism to develop a Self-Directed Learner on learners.

CONCLUSION

Authentic assessment can build self-directed learner of learners with the percentage rate of 87.36%. Authentic assessment builds a self-directed learner to function as a mechanism that controls the system in order to always develop the self-directed learner in themselves. Authentic assessment is an assessment that is professional so as to support professional learning activities at the college level.

At each learning activity is to note the type of assessment used. Ratings used must be appropriate to the learning objectives to be achieved as well as the competence to be developed

in self-learners. Authentic assessment is suitable for use as assessments that can build basic competencies possessed are self-directed learner competencies that can support into a professional.

REFERENCES

- O, Shea, E. 2003. Self-directed learning in nurse education: a review of the literature. *Journal of Advanced Nursing*, 43 (1): 62-70.
- Merriam, S.B. 2001. *Andragogy and Self-Directed Learning: Pillars of Adult Learning Theory*. New Direction for Adult and Continuing Education, No 89, Spring 2001. A Publishing Unit of John Wiley & Son,inc.
- Hiemstra, R. 2006. Is The Internet Changing Self-Directed Learning? Rural Users Provide Some Answer. *International Journal of Self-directed Learning*, 3 (2): 45-59.
- Dembo, M.H.2004. *Motivation and Learning Strategies for College Success, A Self-Management Approach second Edition*. New York: New Paltz.
- Svinicki, M.D. 2004. *Authentic Assesment: Testing in Reality*. New Direction for Teaching and Learning No. 100. Winter 2004. Wiley Periodicals, Inc.
(online:https://www.researchgate.net/profile/Marilla_Svinicki/publication/227699674_Authentic_assessment_Testing_in_reality/links/0a85e53bef572e3b72_000000.pdf), diakses 15 Februari 2016.
- Gulikers, J.T.M., Theo, J.B. & Paul, A.K. 2004. A Five - Dimensional Framework for Authentic Assesment. *ETR & D*, 52 (3). (Online: <http://dSPACE.library.uu.nl>), diakses 15 Februari 2016.
- Embo, M.P., Erik, W.D, Martin, V., Cess, P.M., Van Der, V. 2010. *Assessment and Feedback to facilitate Self-Directed Learning in Clinical Practice of Midwifery students*. *Medical Teacher*. (Online: [embo: http://users.ugent.be/~mvalcke/CV/embo.pdf](http://users.ugent.be/~mvalcke/CV/embo.pdf)), diakses 23 Februari 2016.
- Paris S.G. & Paris A.H. 2001. Classroom Applications of Research on Sel-Regulated Learning. *Educational Psychologist*, 36 (2): 89-101. (Online: <http://lhc.ucsd.edu>), diakses 23 Februari 2016.
- Boud, D.1995. *Assesment and learning: Contradictory or complementary*. Assesment for Learning in higher education. London: Kogan (online: <http://www.teacamp.eu>), diakses 27 Februari 2016.
- Garrison, D.R. 1997. Self-Directed Learning: Toward a Comprehensive Model. *Adult Education Quarterly*, 48 (1): 18-33. (online: www.researchgate.net), diakses 23 Februari 2016.
- McLoughlin, C dan Luca J. 2002. A learner-centred approach to developing team skills through web-based learning and assesment. *British Journal of Educational Technology*, 33 (5): 571-582. (online: <http://www.speakeasy-designs.com>), diakses 27 Februari 2016.