MAPPING THE LEARNING STYLE OF LEARNING MENTORS IN THE FORMAL AND INFORMAL EDUCATION IN THE PROVINCE OF YOGYAKARTA SPECIAL REGION

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Abstract

 *Non-formal education is growing very rapidly in Indonesia, and non-formal education teachers have a very vital role. But research on pamong is very limited. This study aims to develop a learning style questionnaire and map the learning styles learning mentors . The research method is done by survey. The results showed that the learning style questionnaire was good, the learning style of pamong consisted of: First, 64.00% of the learning mentors had adopted the theoretical style. Second, 18.00% of the learning mentors had adopted the activist style. Third, 16.00% of the learning mentors had adopted the reflector style. Fourth, 2.00% of the learning mentors had adopted the pragmatic style.*

**Keywords**: mentors, instrument validity, learning style,

1. Introduction

Educational system is categorized into the formal, the non-formal, and the informal degree. The learning process in a formal degree such as schools is conducted with the support of multiple means, like buildings and other supporting facilities, that demand abundant cost, land, and human resources. On the other hand, the learning process in an informal degree such as the one that involves generally adult learners should be based, in conceptual-theoretical manner, on andragogy theory that positions an adult learner as a subject that should perform the learning process upon his or her own initiative and awareness and should not be dependent on other people. Achieving the success level of adult learners’ learning process according to the needs that have been commonly formulated demands information with regards to the learning orientation and the learning style of adult learner. The learning process of adult learner nowadays, especially on the multiple activities of non-formal education, has been lack of implementation toward the principles of adult learning specifically the ones that entail the understanding toward the learning orientation and the learning style of adult learner. Kebutuhan belajar dalam PNF salah satunya yaitu MOOC ditemukan hasil penelitian bahwa the learner’s needs and factors for predicting MOOC participation. For this study, The overall results indicate that learners’ needs for participation of MOOC were proposed as 5 factors including 17 sub-factors: expansion of educational purpose, change of learning environment, securing sustainability of education, contribution to educational innovation, realization of lifelong education.

In order to understand the learning orientation and the learning style of adult learner, there should be an instrument that might be implemented in the discovery and the measurement of the learning styles among the learning mentors. This instrument is known as PNFI and the results of implementing this instrument are beneficial for formulating lesson plans, conducting learning process, and managing learning programs continuously and comprehensively in a wider scale on the non-formal education. According to the data in 2014, there are 6,500 Teaching-Learning Activity Programs (PKBM, Program Kegiatan Belajar Mengajar), Common Art Studios (SKB, Sanggar Kesenian Bersama), Home-schooling, course and training institutions, and communities of hobby that serve as a communal means for developing and improving both the personal and the communal quality. In addition to establishing the non-formal education institutions, the government also supports the family education as a form of informal education in the community; the family education is under the command of the Directory of Family Education. Recalling the various non-formal education programs and the contributions of non-formal education degree to the educational supra-system in Indonesia, the time has come for the non-formal education to not only serve as a complimentary to the formal education but also to serve as a trend-setter in generating more well-qualified human resources.

The learning style mentor as adult people is one of the theories that might be applied into multiple learning development of the PNFI programs. As a result, the study will be very fundamental because it is related to the concept and the theory of adult people. According to the theory of Knowles, there are several aspects that become the learning focus of adult people. Therefore, from the results of the very fundamental study the researchers will try to consider whether the adult people in the context of Indonesian culture have the characters and the meanings that are similar to the existing theories or not and whether there are fundamental differences due to the different cultures that give birth to the theory of adult people or not. If the learning theory of adult people indeed has different characters then the learning theory will impact the approach that has been implemented according to the concept and theory of adult people, which has been borne from the western world that prioritizes the individual freedom. Such concept and theory of adult people is certainly in contradiction to the eastern culture, especially to the Indonesian people, because according to the eastern culture individuals may not be separated from the influence of social figures or cultures that have been commonly adopted and that have very strict role. In fact, this eastern culture has an impression that individual freedom in terms of politics, social, and culture may not be prioritized. With regards to the explanation, the researchers would like to expected that through this study the learning style of mentors in the non-formal degree will be discovered so that more appropriate and meaningful approaches might be provided in order to implement the PNFI programs.

In order to achieve the goal of the adult learning process based on the level of needs, it requires information about the learning style of adult learners. Generally, the current adult learning process in many non-formal educational activities is assumed less effective in applying the adult learning principles, especially the understanding of orientation and learning style of adult learners.

In order, the goal of learning are well achieved, need to understand the orientation and learning style of adult learner. And then, aiming to know and understand the orientation and learning styles of adult learners in non-formal education activities, it requires an instrument to measure and reveal the orientation and learning style of adult learners. This research aims to develop an instrument to measure and reveal the orientation and learning style of adult learners, and the research result may useful to formulate the lesson plans, implement the appropriate learning processes, and manage the learning service programs on non-formal education thoroughly and sustainable.

Geographically, the territory of Indonesia is very large and assume difficult to reach the target of the percentage participation number of formal education. In this case, non-formal education may be an alternative that has high flexibility and more reach the wider territory of Indonesia. This research is expected to provide a new direction in the development of education and learning to develop and reach the entire of territory of Indonesia. In addition, non-formal education also provides wider access for community into multi-entry and multi-exit of education services. Nowadays, non-formal education not only serves the people in the area or rural of the provinces and but also in urban areas. Non-formal education is growing very rapidly, such the growing of the number of non-formal education institutions.

The mentor learning style is one of the important concepts in achieving learning goal, and then it may apply in various development of non-formal education learning as the basis foundation in creating non-formal education programs. By knowing and understanding the orientation and learning styles of each educational unit, non-formal education learning programs are expected able to consider the character of each program.

1. Method

The research method used research and development through the steps (development procedures): (1) designing the design of the instrument (3) developing the instrument, (4) conducting the validation by non-formal education learning expert, measurement, and evaluation, (5) conducting limited trials, (6) conducting the data collection, analysis, and writing the results and (7) reporting the final results.

The design of the instrument is made according to the LSI-Kolb model with two main components; learning orientation and learning styles, and enriched by theoretical results to four main aspects: non-formal education, adult learning, measurement and evaluation of adult learning, and instrument technical computer-based. Then, continue to write the instrument items of questionnaire.

Validation stage will be conducted by inviting a number of experts through Delpi technique. The experts include of non-formal education, adult learning, measurement and evaluation, and IT experts. The focus of validation is the contents of the instrument.

The testing was conducted to four groups of respondents (divided into two stages of testing) who follows the adult education on non-formal education in urban and rural areas in the Province of Special Region of Yogyakarta.

The required data is quantitative. In the testing, emphasizes to the validity and reliability test, the instrument was tested through quantitative-statistical testing techniques. And also for further data analysis, conducted after two-stage trial.

1. Results

The research instrument aimed to reveal the adult learning style based on four categories proposed by David Kolb; activist, pragmatist, reflector, and theorist

Result of Content Validity

Based on expert judgment, suggested to:

1. Instrument in the activist section, 5 items of 29 items are not appropriate, they are:
2. Number 3 (I often feel the action is encouraged by feeling, indicates that person has thinking of careful and analytic).
3. Number 10 (a quiet person or wise tends to make me feel uncomfortable)
4. Number 13 (Rule are made to be broken)
5. Number 27 (I feel comfortable when I calm or silent)
6. Number 28 (I learn through feeling and watching of events)
7. Suggestion for number 10, activist is not skeptic.
8. Instrument in the pragmatist section, 2 items of 20 items are not appropriate, they are:
9. Number 6 (I believe to continuity)
10. Number 20 (People often assume that I am not sensitive to their feeling)
11. Suggestions for number 6 and 20: the theory is unclear.
12. Number 16: the sentence needs to be edited.
13. Instrument in the reflectors section, 1 item of 21 items is not appropriate. The item is no 9.
14. Instrument in the theories section, all the items (25 items) are appropriate.

Reliability Result

Instrument reliability showed that there were 87 items of adult learning style from 40 samples with age of 25 – 35 years through the Alpha Cronbach analysis obtained α = 0.706. In short, the instrument has good reliability.

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| **Table 1****Reliability Statistics** |
| Cronbach's Alpha | Cronbach's Alpha Based on items Standardized  | N of items |
| ,662 | ,706 | 87 |

Analysis Resutl of Items (obtained from Field Trial test)

29 items of 87 items were deleted based on test of correlation analysis items due to in appropriate. The deleted items were number of 1, 2, 3, 8, 11, 13, 15, 16, 21, 26, 29, 32, 36, 41, 43, 45, 46, 47, 48, 53, 54, 58, 59, 60, 61, 64, 65, 66, and 79. Overall, the results of statistical analysis showed the average items have mean of 0.670 and the score range among 0.225 to 0.990 with variance of 0.036. It concluded that 58 items showed the parenting learning style.

After the questionnaire had been distributed and the results had been gathered in 2017, the researchers found that the learning mentors had peculiar learning styles and the composition of these learning styles were as Figure 1.

The data of the learning mentors were gathered from 40 questionnaires that had been distributed to Sleman, Kulonprogo, Bantul, and BPKB; unfortunately, the data that had been gathered from the questionnaires that had been distributed to the City of Yogyakarta and Gunungkidul could not be mapped. From the 40 questionnaires that had been returned, it was apparent that 64.00% of the learning mentors adopted the theoretical style, 18.00% of the learning mentors adopted the activist style, 16.00% of the learning mentors adopted the reflector style, and 2.00% of the learning mentors adopted the pragmatist style.

Activist learner refers to individuals who involve themselves in undergoing new experiences. Individuals who adopt this learning style enjoy and are fond of being surrounded by the new experiences. They are open and not sceptical (suspicious) and these characteristics make them enthusiastic with all kind of new things. The motto of individuals with this learning method is “I will try anything although for once in a while.” Individuals with this learning style tend to act first and consider the consequences later. Their days are filled with activities. They solve their problem by sharing opinions. Soon after the joy of performing an activity has disappeared, they will be busy looking for the joy of performing other activities. They tend to be enthusiastic in dealing with new challenges; however, they will be bored with implementation and consolidation which might last longer. These individuals are the people who like establishing friendship and getting involved directly with other people but, in the long term, they will also like trying to perform all of their activities.

Pragmatist learner refers to the individuals who are cunning in trying multiple ideas, theories, and techniques in order to see whether all of these aspects can be put into practice. They positively look for new ideas and take opportunities to perform experiments with persistence. These individuals are the people who return from the management classroom by bringing new ideas that are so overwhelming that they want to practice them right away. They like attaining something immediately and they are confident in performing the ideas that draw their interest. They tend to be upset with the discussions that are contemplative and do not solve the problems. These individuals are also very practical, embracing other people, inclined to make practical decisions, and fond of solving problems. They respond problems and opportunities “as challenges.” Their motto is “There will always be a better way” and “If we can use something then that thing must be good.”

Figure 1.

Reflector learner refers to the individuals who like standing behind the back and also considering and observing an experience carefully from multiple different perspectives. They gather the necessary data both individually and communally and they are more inclined to carefully think about the problem before making any decision. The careful data collection and analysis regarding an experience is the only thing that these individuals calculate; consequently, they will postpone performing their activities as long as possible in order to make accurate decisions. Their motto is “we should be careful.” These individuals are thinkers who like considering all possibility and implications before taking actions. They like sitting at the back of the room during a meeting or a discussion. They like observing the actions of other people. They listen to other people and understand the direction of a discussion before stating their own points. They tend to have low self-esteem, to keep the distance, and to be more tolerant. When they take actions, they provide a wide description regarding the past and the present and they will provide their view and the others’ view as well.

Theoretical learner refers to the individuals who adapt and integrate observations into complex (complicated) yet logical theories. They think about the problems through vertical, sequential, and logical manner. They discern different facts into coherent theories. They tend to be perfectionist and they will not easily surrender until all matters become neatly explained and in accordance to the rational logics. They like analysing and synthesizing problems. These individuals are cunning in manipulating fundamental assumptions, principles, theories, models, and reasoning systems. Their motto is “We should respect logical thinking and rationality.” The questions that they always raise are “Is it logical?” and “What is the underlying assumption?” These individuals tend to be more analytical and to think rational objectiveness of subjective and ambiguous things. Their approach toward any problems is always logical. This is their “mental set” and they clearly deny all kind of discordance. They prefer to maximize the value of certainty and they will feel insecure with subjective assessment, deviating logics, and reckless matters.

In the case of learning maps of the learning mentors, it is apparent in Figure 1 that 64.00% or the majority of the learning mentors has adopted the theoretical learning style. These learning mentors think more logically, sequentially, neatly, and rationally. This finding might be related to the duty and the function of a learning mentor namely to teach, to dedicate, and to develop learning model based on the existing learning theories.

Non-Formal Education, which is one of the educational degrees that are outside the formal degrees, might be implemented in structured and sequential manner; has main domain of activity that includes life capability education, early childhood education, youth education, female empowerment education, literacy education, job skill education and training, and other types of education that are directed toward developing the students’ capabilities (UU RI No. 20 Tahun 2003).

The development of Non-Formal Education was pioneered by the appearance of a view toward individualistic long-life learning or study which then triggered the formulation of the concept of formal education, non-formal education, and informal education 1. Subsequently, a socialistic view that assessed the non-formal education in relation to the society development and poverty appeared to the surface 2. The birth of non-formal education concept was also influenced by the view of Ivan Illich (1970) regarding the problematic school education and by the view of Faure (1972) that triggered the appearance of formal education concept, non-formal education concept, and informal education concept. It should be noted as well that the support toward the non-formal education has come from several experts namely Paulo Freire (1972) and also Evans (1981) and Peter Jarvis (2004, 2007) from the next decade.

In the context of non-formal education learning context, in addition to Freire with his Problem Posing Theory, several experts have also established their theories: Knowles (1975) with Andragogy and Self-Directive Learning; Jack Mezirov (1977) with Transformational Learning; Carl Rogers (1969) with the emphasis on Self-Actualization; and Gagne (1977) with Problem-Solving Learning Concept. Within this group, Action Knowledge (Barnes, 1977) and Experiential Learning (David Kolb, 1984) also appeared.

After the appearance of the theory by Knowles (1975), there came a new view regarding the adults learning process as the development of the pedagogy and the andragogy learning; this new view is known as heutagogy learning. Heutagogy learning is a learning model that emphasizes on the importance of self-determined learning. This learning is also a learning concept that emphasizes on the importance of individual willingness and persistence within the learning process.

1. Conclusions

Based on the compiled instruments, then the instrument were validated by experts through the suggestions, there were 5 items of 29 items that were not appropriate in the activists section; there were 2 items of 20 points that were not appropriate in the pragmatist section. The calculation of reliability and validity were obtained in the testing stage: overall, the results of statistical analysis showed the average items have mean of 0.670 and the score range among 0.225 to 0.990 with variance of 0.036. It concluded that 58 items showed the parenting learning style. Instrument reliability showed that there were 87 items of adult learning style from 40 samples with age of 25 – 35 years through the Alpha Cronbach analysis obtained α = 0.706. In short, the instrument has good reliability.

From the questionnaires that have been distributed, it is apparent that 64.00% of the learning mentors adopt the theoretical style. The theoretical style learners adapt and integrate observations into complex (complicated) yet logical theories. This type of learners thinks about their problems through vertical, sequential, and logical manner. They discern different facts into coherent theories. They tend to be perfectionist and they do not easily surrender until all matters become neatly explained and in accordance to the rational reasoning. Then, 18.00% of the learning mentors adopt the activist learning style. The activist learners refer to the individuals engage themselves in undergoing new experiences. In this situation, they are happy being surrounded by the new experiences. This type of learners is open and not sceptical and such characteristic tends to make this type of learners enthusiastic with all kinds of new matters. Next, 16.00% of the learning mentors adopt the reflector learning style. The reflector learners tend to stand behind the back at any occasion and carefully observe and consider a new experience from multiple different perspectives. Last but not the least, 2.00% of the learning mentors adopt the pragmatic learning style. The pragmatic learners are cunning in trying multiple ideas, theories and techniques in order to see whether all of these aspects are applicable in the practice. They positively look for new ideas and take opportunities to perform any experiment with persistence.

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