

# Designing a Participative Learning Model to Improve Motivation and Functional Literacy Learning Outcomes

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This research aims at designing and examining the effectiveness of motivational participative learning model on the students' motivation and learning outcome during functional literacy learning. The approach used in this study is Research and Development (R&D). There are three stages in this study. First, the study began with an introductory study by conducting literary study and field study, followed by collecting data through the result of the interview, observation, and documentation descriptively and qualitatively. Second, a model prototype with the ADDIE design model was developed. Finally, an examination through the pre-test post-test control group design quasi-experiment was carried out on 69 research subjects that consisted of 35 learners in the experiment group and 34 learners in the control group. The data were analysed using descriptive analysis and a T-test to measure the effectiveness of the study. The findings presented that: 1) so far, the implementation of functional literacy learning mostly depends on the skill and ability of the tutor; 2) An improvement on learners' motivation was detected throughout each stage of the application of design of motivational participatory, those needed analysis, learning objective formulation, learning program planning, teaching-learning implementation, assessment on the learning process and outcome; 3) motivational participatory learning model is proven to be effective in improving the learning motivation as well as learning outcome. The motivation that is being discussed here includes attention, relevancy, confidence, and satisfaction. The average score of the pre-test was 7.82 compared to the post-test = 9.38. In other words, the learning outcome after the learning activity conducted was higher. In conclusion, the motivational participatory learning model is effective to be implemented in functional literacy learning for adults as the means to reinforce the functional literacy among society.



**Keywords:** *Motivational participatory learning, functional literacy, learning motivation.*

## Introduction

UNESCO is an international organisation that engaged in education and science. This organisation is also committed to eradicating illiteracy throughout the world. The literacy program intends to encourage all the international community to participate in the struggle to overcome the illiteracy issues in their own country. The majority of nations that becomes the member of UNESCO have signed the treaty of Education for All (EFA) made in 1990 in Jomtien, Thailand. This treaty was then reinforced in Dakar, Senegal, Africa, in 2000. The importance of literacy is supported by the most recent report by *the Organization for Economic Cooperation and Development (OECD)*, which was released on October 8<sup>th</sup>, 2013, in Brussels. It brought up some interesting findings, such as the fact that adults with proper literacy have higher opportunities in working worlds. They are more active in involving democracy life and volunteer activities; also, they have a better quality of health and higher income. In the UNESCO report, Omoyen (2010) devoted to fighting against illiteracy through conducting supervision, data collection, and providing facilities.

The Indonesian government is required to eliminate illiterates because Indonesia has joined the LIFE program (literacy initiative for empowerment) since 2008. This program was initiated by UNESCO to be implemented in nine countries with the biggest amount of illiterate. Those are India, Pakistan, China, Mexico, Bangladesh, Egypt, Brazil, Indonesia, and Nigeria (UNESCO, 2013). The most recent data in 2015 presented that the amount of above 15 Indonesian citizens who are illiterates is 4.2%. According to the location, people in rural areas have a higher proportion of illiterates. This situation consistently appears in any group of ages. Based on the age group, the highest illiteracy rate is 25 years old and above (Direktorat Pendidikan Masyarakat, 2015).

An introductory study was conducted through a survey on the study group in several institutions, either in Society Learning Center, Library, or *Majlis taklim*. The objects of the survey were the staff, tutors, and learners. From the survey, there were several issues found: (a) the learning activity of functional literacy was oriented on a structured module, not based on the learners' need; (b) the learning objective mostly directed to the ability to memorise which was not functional nor compatible to the potential of learners and the surrounding environment; (c) tutors tended to dominate the learning process, the learning activity did not allow the learners to involve in finding and solving their problem themselves; (d) the tutor did not prepare any learning media that could ease the learners to comprehend the material and fail to attract learner's interest; (e) the atmosphere of the learning situation is stiff and unpleasant; (f) the communication between the tutor and the learners was less dynamic, it was



vertical that it created gap/distance between the higher and lower position, as a result, the learners did not feel free in sharing their experience.

The functional literacy we have so far is limited to implementing learning activity through training methods; it merely teaches about how to read, write, and calculate. There is a lack of learning model which allows the learners to participate in the learning activity actively. Whereas in functional literacy, learners' active participation is required since the learning deals with the learners' daily problems, needs, and problem-solving. In functional literacy, the process of learning the essential part of learning as learners will be motivated to learn if the material is close to their experience, interest, and needs. Every learner needs to be able to direct themselves. Therefore, it is the role of tutors to facilitate the process of sharing and hearing the learning experience from previous learners. The diversity among learners extended along with the increasing age. Thus the learning method should be able to accommodate all of those differences.

The motivational participatory learning method is one of the attempts to ensure the success of functional literacy learning. The motivational aspect discussed here is the one developed by Keller (2009). ARCS motivation model is the abbreviation of *Attention, Relevance, Confidence, and Satisfaction*. ARCS motivation is the solution to developing a learning implementation that could influence on the motivation and learning outcome. ARCS motivation is one of the approaches to the design motivation aspect, along with the learning environment to encourage and maintain the learners' motivation to study.

In developing a new learning model, we need to refer to the previous learning model. The development of the motivational participatory learning model is the combination of participatory learning and ARCS motivational learning design. This model is suitable for the needs of functional literacy learning for adults in rural areas, mainly to induce their awareness to learn, grow their motivation in regards to their attention in learning, improve relevancy, build their confidence and satisfaction, as well as improve their competence in literacy. It is expected that the motivational participatory model could provide opportunities for the learners to participate and be motivated to seek, find, and process the knowledge, attitude, and skill by themselves for the sake of their life.

## **Literature Review**

### ***Motivational Participatory Learning Model***

The learning model is a conceptual framework to design and implement the learning activity, organise the learning experience to achieve the learning objective or competence, and guide the learning process in a systematic procedure. This statement is supported by Arends and Klicher (2010) that the learning model aims at helping the students to learn the basic skill and

knowledge through a series of learning stages. Joyce, Weil, and Calhoun (2011) explained that learning model is a conceptual framework in the form of systematic procedure that consists of several steps in organising the students' learning experience to achieve specific learning objective and serve as the guidance for the lesson designer and the teachers in planning and implementing the learning activity. According to Joyce, Weil, and Calhoun (2011), there are four groups of the model in learning; those are the information-processing family, the social family, the personal family, and the behaviour system family.

The motivational participatory model referred to active learning theory, cognitive development theory, constructivism learning theory, behaviourism learning theory, student-centred learning, experience-based learning, and Attention, Relevance, Confidence, Satisfaction (ARCS) motivational theory. Participatory learning is a set of learning process events that involve the learners participating in the series of learning activities actively, starts from planning, implementation, and assessment (Knowles, 1990; Sudjana, 2005). The concept of motivational participatory learning is developed based on the concept of ARCS motivational theory (Keller, 2009), andragogy (Knowles, 1990), *REFLECT (Regenerated Freirean Literacy through Empowering Community Techniques)* by Freire (Freire & Macedo, 2005), *Participatory Rural Appraisal (PRA)* by Chambers (1996), *LEA (Language Experience Approach)* by Dixon & Nessel (1983), and *Participatory Learning* by Sudjana (2005). Participatory learning offers an effective learning outcome, as Rogers (1994) stated. In essence, we have seen that, for learning to be active, the student participants in our group need to be active: they must be fully involved in the learning process. Furthermore, Rogers (1994) explained that participatory learning is needed since learning is the active process of learners, it is a lifetime process, and it is the attempt of self-liberation. Psychologically and sociologically, participatory learning allows learners to fulfil their needs to actualise themselves. It also helps them to develop the learners' *self-leadership, self-directed learning, and self-efficacy*.

Knowles (1990) mentioned the principles in implementing participatory learning, such as (a) learning needs-based, (b) learning goals and objectives oriented, (c) participant-centred, (d) experiential learning. While the principle of motivational participatory learning is: learning needs-based, learner-centred, and experiential learning, the learning will be based on the learning experience of functional literacy learning for adults to improve the learners' motivation. ARCS (*Attention, Relevance, Confidence, and Satisfaction*) is a form of problem-solving to design the motivation aspect and learning environment as an attempt to encourage and maintain the learners' motivation to learn. This model is developed based on the expectancy-value theory that consists of two-component, those values from the objectives to be achieved and expectancy to achieve the objectives successfully.

### ***The Importance of Functional Literacy for Adults in Rural areas***

Literacy plays an essential role in the development of science in society's life. Currently, science has been far developed and recorded in a science paper and being documented. In his study about literacy, Kucher (2005) argued that literacy has several dimensions that represented in every science paper or any other means of science documentation. Additionally, Kucher (2005) emphasised that in every reading text, there are specific dimensions that portray the reflection or the expression of the author. According to the socio-cultural dimension, literacy is the form of expression from the identity of a particular community, as presented from the letter used to show their existence.

In their study, Singh and Kamboj (2016) described the cause of illiteracy, in regards to the social aspect, in Ferozepur, Akello. The findings of Akello, Lutwama and Musiimenta's (2017) study portrayed the experience of women in joining functional literacy learning for adults as an attempt to improve their life prosperity in the Lango region, North Uganda. Hunter (1982) classified three basic categories from the definition of literacy. Each of the categories is based on the different assumption on the role of illiteracy among the society's life, such as (1) literacy as a set on basic skills, abilities and competencies; (2) literacy as the necessary foundation of a higher quality of life; and (3) literacy as a reflection of political and structural realities. *UNESCO* (2003) defined literacy as continuous learning that allows an individual to develop his/her knowledge and potential, and also to fully participate in the social activity.

## **Methods**

### ***Type of Research***

This research implemented *research and development* (R & D) approach by Borg and Gall (1983). This development research aims at creating a development model design that can be utilised as a new product model to be systematically tested in the field. The product then will be thoroughly analysed and repaired until a final product that fulfils the criteria of effectiveness, quality, and standard can be acquired. Later, to test the effectiveness of the motivational participatory learning model prototype, a quasi-experiment with pre-test post-test control group design will be administered.

### ***Research Procedure and Development***

The procedure and development of this research are simplified into three stages as follows: 1) introductory study, including literary study, field study, analysis, and data description; 2) model development; and 3) model testing through model effectiveness test. The model prototype is validated by two learning technology experts and two learning material experts.



The questionnaire validation used in this research is content validation. Besides, an open questionnaire is also used, and it contains inputs, suggestions, and recommendations that are categorised based on the compatibility between suggestions and recommendations from the experts.

### ***Research subject***

The respondents in the introductory study were 12 study groups, and the subjects are the management staff, tutors, and learners. The study was conducted in a descriptive method in the institutions, such as Society Learning Center (PKBM), Society's Library (TBM), and *majlis taklim*. While for the experiment, the subject of the research is *Uswatun Khasanah* Study Group, Jombor Village, Kecamatan Tuntang, Semarang Regency.

### ***Data Collecting Technique***

During the introductory study, the data were collected by analysing the result of the interview, observation, and documentation in a descriptive-qualitative manner. A study of literature was conducted to collect additional materials. Instruments and techniques used in the introductory study were interview guides, observation, and documentation. The observation was done during the learning process, both throughout the non-test activity to measure the learning motivation, and test to measure the learning outcome.

### ***Data Analysis***

Data analysis techniques used to identify the differences in learners' learning motivation and outcome before and after the treatment was t-test. Yet, the test was only conducted if all the normality test and the homogeneity data was fulfilled. The data was computed to calculate the normality, homogeneity, and t-test using SPSS program Windows version 23.

## **Results**

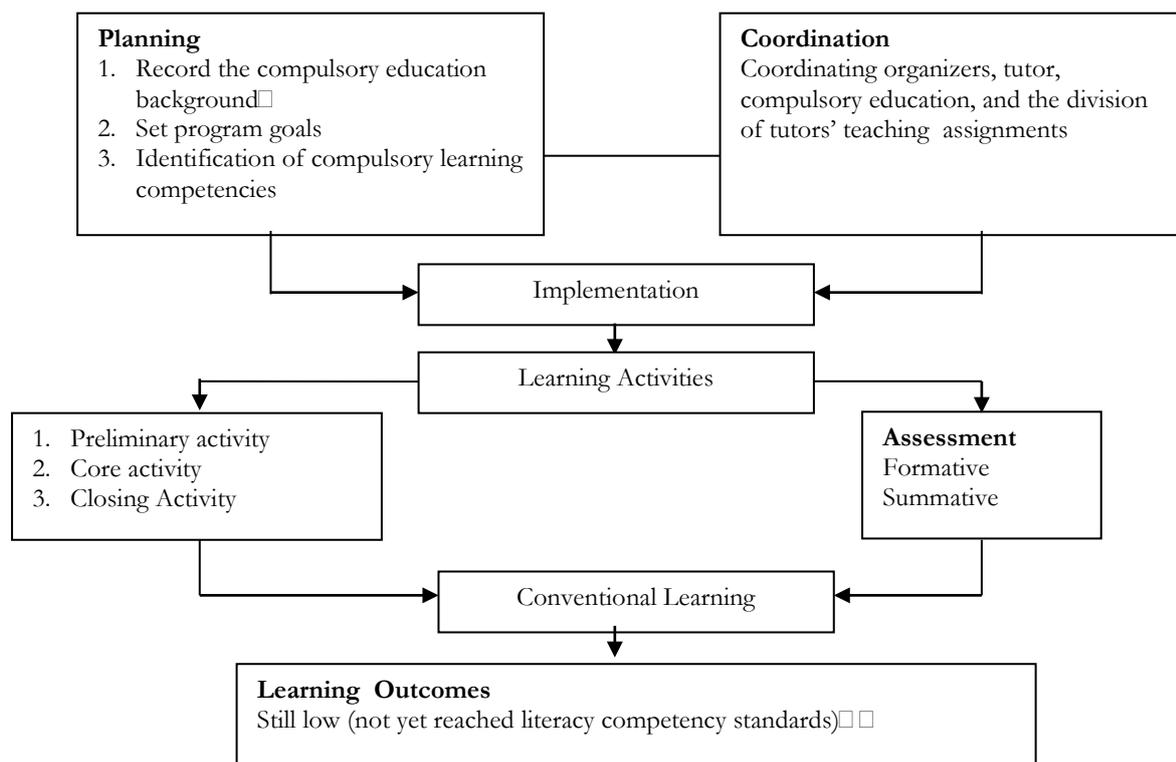
### ***The Factual Condition of Functional Literacy Learning Implementation***

The tutor in functional literacy has a different role compared to those in formal education institutions since the learners are adults in the surrounding society, not students of a specific age group. The duty of the tutor starts with discovering the background of the learners and identifying literacy competence such as reading, writing, calculating, listening, and speaking. The implementation of learning activity depends on the ability and skill of the tutor. During the learning implementation, the learning activity starts with initial preparation by holding socialisation and information sharing about what they are about to learn. The learning activity of literacy education includes reading, writing, calculating, and listening. The implementation

of functional literacy education is conducted through these following stages: 1) The management list the data of learners who have graduated from basic literacy education or those who have referral letter of literacy competence (sukma), next confirm the people's availability and willingness to be the learners of extensive functional literacy education; 2) Formulate the objective from the implementation of literacy education program by conducting a coordination meeting among the management staff, tutors, and learners; and 3) The management staff arrange the schedule of the learning activity and adjust it to the agreement of the study group. In other words, the schedule is made flexible based on the opportunities and preparation of learners and tutors.

### ***Factual Model***

Based on the findings from the introductory study, the implementation of functional literacy in PKBM, TBM, or *Majlis Taklim* is illustrated in the diagram below.



**Figure 1. The factual Model of Functional Literacy in Study Group in Semarang Regency**

The planning of activity learning is based on the result of discussion from the committee and the tutors under permission from the village. The plan to prepare the learning is not yet involving the learners. The establishing of the learning program is not yet paying attention to the learning need of the learners. However, the establishment has done the data collecting of

learners that has been graduated from basic literacy or have owned the certificate of "Melek Aksara" (literacy).

The learning activity on the functional literacy teaching that is conducted by the tutor is generally: the activity if introduction, core, and closing—the learning method used to lecture and task given. The evaluation is done on the level of formative and summative. It is because the tutors also teach in kindergarten as well as in primary school. Then the learning result is not yet achieved the standard competence of literacy (SKK).

### ***Design of motivational participative learning model***

The design of model development used to formulate the prototype model of the motivational participative model here is the learning design of ADDIE (Branch, 2009). The presentation of the learning design of ADDIE in designing the learning model of motivational participative on the functional literacy teaching of advance level are described as follow: 1) Analysis, the result analysis that is made is in the form of characteristics of the learners, the identification of gap, need analysis and the detailed task analysis that is based on the needs; 2) Design, on the level of design here, is initiated with the determination of learning goal; 3) Development, the first thing to do is to formulate a learning goal, constructing a test, where the test must be based on the purpose of teaching that is formulated; 4) implementation; it is the actual step in applying the learning developed; and 5) Evaluation, this step initiated in very four steps by doing the formative evaluation to find out the revision.

The series of steps of motivational participative learning model on functional literacy education is described as follow:

#### **Step 1: Identification of Learning Needs**

Before the identification of learning needs is done, first, the realisation process is done to the learners and also giving motivation for them. In the identification steps for the learning needs, the opinion sharing method is used.

#### **Step 2: the formulation of learning goals**

In this step, the learners are involved in formulating the learning goals of functional literacy. The method used in this activity is the group discussion.

#### **Step 3: the construction of a learning activity program**

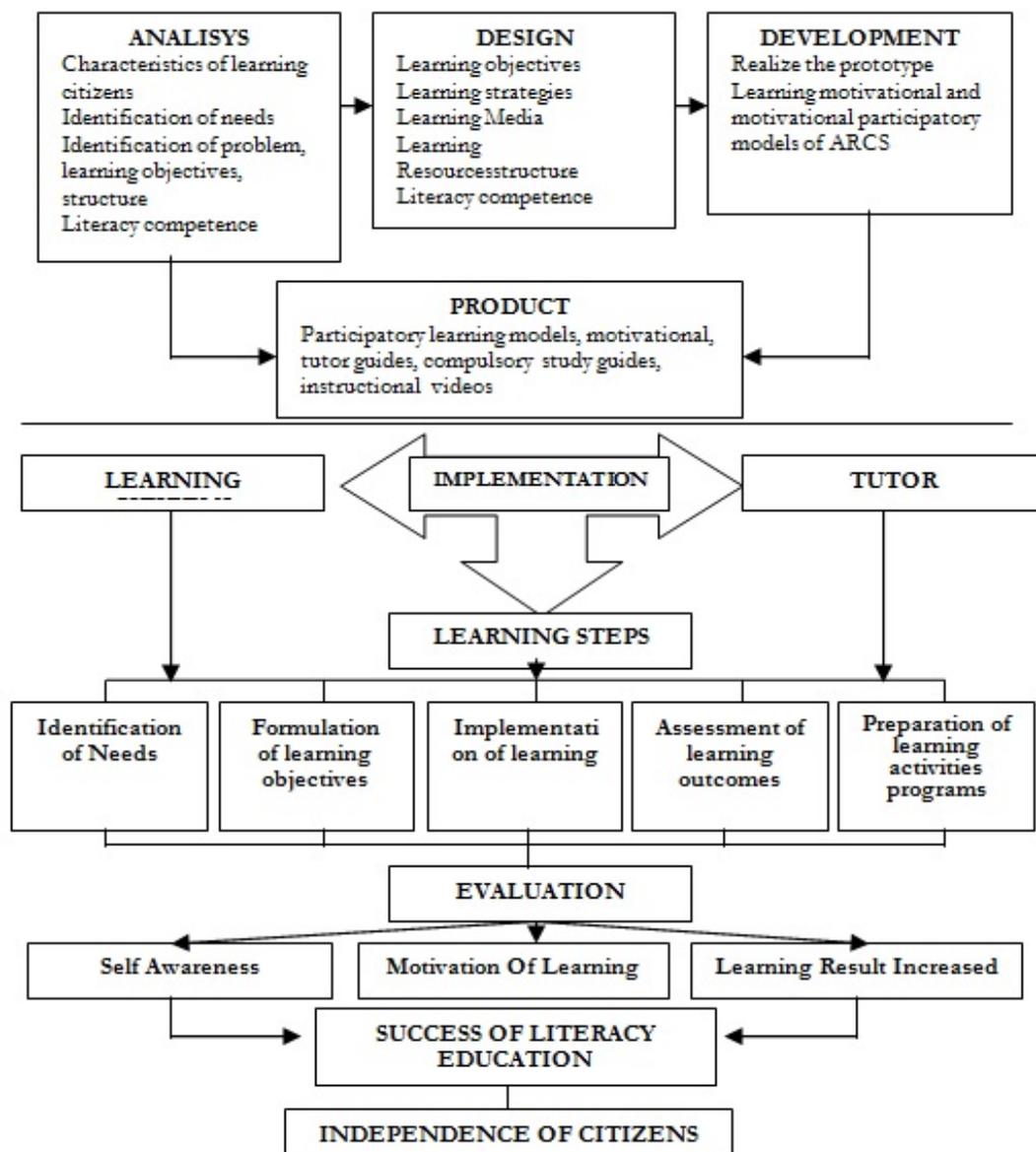
The components of the functional literacy teaching program here are related to the theme that has been determined, which covers the duration of learning, learning materials, methods, facility, and other supportive power.

**Step 4:** the implementation of learning activity

On the implementation of learning activity here, the learners participate fully in the processing of learning activity. In this step, the learning activity of functional literacy teaching here is using the learning method of "learning from experience" (BdPS), the technique of language experience learning, and Participatory Rural Appraisal.

**Step 5:** the evaluation of learning result

In this step, the evaluation is not only on the learning result that is achieved by the learners but also the process of learning of functional literacy teaching. The evaluation of learning results is used to find out the improvement of literacy competence of the learners in terms of functional literacy of advance level. The final model is described in Figure 2.



**Figure 2. Final Model Motivational Participatory Learning Model in Advanced Functional Literacy Education** □

### *Learning Motivation*

The result of learning motivation between the control group and the experiment group is described in Table 1. The learning motivation in the aspect of the attention, the control group, scored lower (-0.12) than the experiment group (1.07). It indicated the improvement of learning motivation in the aspect of attention on the experiment group is higher than the control group, also, in the learning motivation in the aspect of relevance. The control group scored lower (-0.13) than the experiment group (0.82). Learning motivation in the aspect of confidence in the control group is lower (-0.21) than the one on the experiment group (0.54). It indicated that the learning motivation in the aspect of confidence is higher than in the control group. This also applied in the learning motivation in the aspect of satisfaction, the control group scored lower (-0.17) than the experiment group (0.67). It means that the improvement of learning motivation in the aspect of satisfaction in the experiment group is more significant than the one in the control group.

**Table 1. Learning Motivation of Control Group and the Experiment Group**

Mean of Motivation	Control Group		Range of Control	Experiment		Range of Experiment
	Pretest	Posttest		Pretest	Posttest	
A	3,28	3,16	-0,12	2,64	3,71	1,07
R	3,29	3,16	-0,13	2,73	3,55	0,82
C	3,35	3,14	-0,21	3,05	3,59	0,54
S	3,22	3,05	-0,17	2,86	3,53	0,67
Total Average	3,28	3,13	-0,16	2,82	3,59	0,77

### *Result of Learning*

The learning result between the control group and the experiment group in terms of difference is presented in Table 2. Table 2 gained the average score gap between the learning result of the control group with the experimental group from each the pretest and post-test. The average score gap between the pretest and post-test on the control group gained is higher (0.47) than the experimental group (0.57). It can be interpreted that the increase in the learning result of the experimental group is higher compared to the other group.

**Table 2. The Difference in Learning Result between the Control Group and Experiment Group**

Group	N	Mean		Range
		Pretest	Posttest	
Control	35	8,06	8,53	0,47
Experiment	34	7,82	8,39	0,57
Total Average		7,94	8,46	0,52

## Discussion

Functional literacy learning is a basic need that has the elevation ability for the development of rural society. The capability of functional literacy has a relationship with the basic need, which is very significant for various activities daily life through reading, writing, speaking, listening, and counting that is integrated with the daily functional needs. Rabušicová & Oplatková (2010) mentioned that functional literacy learning could fix the life of adults. It is also supported by Perry (2012) that literacy as the social practice is used in fulfilling the learning needs of the adults with the hope that the learners can use it in solving the problem in their daily.

The functional literacy attempted to build society through the change on the individual and social level with the presence of equality, opportunity, and global understanding. It is supported by Kagitcibasi, Goksen, and Gulgoz (2015) that literacy as the process that is empowering, especially on the female that most of them are illiterate in the world. Ziegler and Davis (2008) described the condition of adult literacy in rural in the context of society. The result of this research described the state of the economy, the opportunity of education, and the resource of the rural area, which are left far behind from the urban society.

The effort to change the domination of the tutors and the passive condition of the learners in the learning needs a change to be done soon by increasing the active participation of the learners. Refer to the theory of constructivism from Vygotsky (1978) that has the perspective that the knowledge is not gained passively, rather actively. It means that learning is an act based on finding out independently and in solving the problem. It is according to the learning theory from Vygotsky, which mentioned that there are four keys of principles in learning, those are: 1) the emphasis in the principle of socio-cultural learning; 2) zone of proximal development; and 3) cognitive apprenticeship and scaffolding. Vygotsky emphasises the importance of social interaction with others in the learning process. Vygotsky highlights the importance of the role of the cultural environment and the social interaction in the development of characters and the type of human (Slavin, 2000).



The success of participative learning has often be applied to various types of learning. Wen (2009) applied the participative learning on the students of tertiary education to improve the learning achievement. George (2011) applied the participative learning on the teachers and students to improve the generic skill. Bottomley and Denny (2011) applied the participative learning through the peer wise with the traditional learning to improve the learning result. Alam and Ihsan (2012) conducted the participative approach in improving the development of rural society. Obadiogwu (2012) applied the activity of participative learning through drama to improve the empowerment of children in the class. Kucukaydin and Cranton (2014) applied the participative learning for the formal courses for adults in improving the pedagogical ability. Ibnouf, Sheqwarah and Sultan (2015) applied the participative learning can improve the achievement of their workshop participants and the training on the regional implementation unit. From the two approaches, the motivational participative learning model needs to be developed in the level of functional literacy.

Related to the need for the improvement of quality of learning of functional literacy, then it needs the motivational participative learning model. The previous research can prove the strength of the motivational participative learning model by Duze (2010), Kim, Jeong, Park, and Kang (2011). Kim, Jeong, Park, and Kang (2011) discovered that the development of motivational participative learning model on the training of functional skill has a positive influence on the effectiveness of learning. That is measured from the achievement of the goal, activeness of participants, and the improvement of knowledge, attitude, as well as the skills. The research indicated that participative learning has a positive effect on the achievement of adult learning. It is supported by the research of Duze (2010) that indicated that learning technique.

Riegel and Kindermann (2016) emphasised that participative learning has the strength to influence the attitude of the students. It is according to the learning theory of constructivism that believed that learners could spot problems, construct the knowledge according to their thinking ability and the challenge faced, solving, creating concept about the entire experience through the interaction with the environment and social situation. The learners are actively constructing their knowledge and create their unique learning experiences. Student participation is their act upon the learning process, which covers the physical as well as the psychological aspect to achieve a goal that is a satisfying learning result. Various students who participated in the class will affect the learning process, in which high participation will create an environment of effective learning. The participation of the students in the learning process can help the students to get a more meaningful lesson. By participating, the students will have a role in the process of self-development so that in full awareness will guide the independence as well as the learning things in terms of social interaction with others.

The development of a motivational participative learning model to increase the learning motivation and the learning result of the learners, some materials need to be developed. The bases of the materials developed here are the data related to the initial condition of the



learning process that is done so far, which felt to be necessary to be developed further. Hinchion (2017), in the research, discovered that the participative approach that is based on reflection and investigation could change the learning habit to be better. That is based on Ibnouf, Sheqwarah, and Sultan (2015) in their research, which indicated that the participants of training agreed that the training program is very useful and interesting. The trainers are very friendly and helpful, as well as using various participative learning with the method and fieldwork technique. The training program covers the technical and professional competence, using the participative learning and action approach.

A series of steps of participative learning on the effectiveness test done by the learners as well as the tutors: a) identification of learning needs, tutor invited the learners to know each other. Saetan, Veerawattananom and Suttiaprapa (2015) concluded that effective participative learning is used to train rural society with the material of renewable household energy.

These steps are in line with the result of research by Knowles-Yáñez (2005), about the benefit of participative learning in increasing the active, participative learning for adults. It is in line with the statement of Piaget (1983) that the knowledge was not gained passively yet through the active interaction with the environment actively in creating various cognitive structures. It is also in line with Vygotsky (1978) that believes that learning and human development happened through the activity of mutual collaborative that is inseparable from the social and cultural activity. It shows that the learning process needs interaction with the social environment so that there is an interaction of interpersonal and internalisation as the new experience.

The motivational participative learning model on the functional literacy teaching here can improve the level of active participation of the learners, then increasing the learning motivation and the learning result competence that is according to the standard of literacy competence. The other impact from learning the functional literacy education with motivational participative learning model is that the learners can have various functional skills to develop the entrepreneurship that always 1) creates and protect the participative environment; 2) grow the effective participative and the skill of interpersonal communication, 3) respect and acknowledge the diversity of problem and ensuring the involvement of learners; 4) can process their learning group; and 5) developing the ability of learning group in being creative in their functionality.

In this learning, it also taught about how to know the potential of the environment, using the potential natural resources that can be utilised in improving prosperity. The environment is the primary income source of the village so that the learners know well about their environment. The participative learning here is very effective because the context of the learning is very contextual, thematic, and very close with the learners. The type and themes of learning are entirely on the hand of the learners. The role of tutors is more as a facilitator,



in facilitating their learning need. The implementation of this model of literacy teaching is holistically able to create new entrepreneurship for the females of rural. The products of business skills that have been learned and is sold to the market are the initial capital to achieve economic family welfare. The results are developed able to empower women in rural areas.

## **Conclusion**

The motivational participative learning model on the functional literacy teaching in the advance level here is made using the model development design of ADDIE (analyse, design, development, implementation, evaluation). The motivational participative learning model here gives the process of realisation, inviting to making self-perception, fulfilling their need, and self formulating the goal that they wish to achieve as well as in telling or taking the decision of learning activity through the discussion between the learners and the tutors. The steps of learning cover: the identification of learning needs, the formulation of learning aim, formulation of a learning activity program, the conduct of learning, and scoring.

The effectiveness of the motivational participative learning model is proven to be effective in improving the learning motivation and the learning result of the students compared to conventional learning. The entire motive of the control group is lower than the motivation of the experiment group. The learning of functional literacy by implementing the motivational participative learning model is expected to improve the learning motivation of the students, improving the participation of learners, and improving the literacy competence, improving the functional skill, strengthening the learning group so that the success of literacy teaching can be achieved. The ability of functional literacy of advanced level that can be owned by the learners is expected to solve the problem in daily life.



## REFERENCES

- Akello, J. A., Lutwama-Rukundo, E., & Musiimenta, P. (2017). Functional adult literacy: An alternative gateway to grassroots women's improved income generation in Lango Subregion, Northern Uganda. *Adult Education Quarterly*, 67(2), 79-96. <https://doi.org/10.1177/0741713616685143>
- Alam, A., & Ihsan, S. (2012). Role of participatory rural appraisal in community development (A case study of Barani area development project in agriculture, live stock and forestry development in Kohat). *International Journal of Academic Research in Business and Social Sciences*, 2(8), 25.
- Arends, R.I., & Kilcher, A. (2010). *Teaching for student learning: Becoming an accomplished teacher*. New York: Routledge Taylor & Francis Group. <https://doi.org/10.4324/9780203866771> □
- Borg, W.R. & Gall, M.D. (1983). *Educational research: An Introduction*. New York: Pearson Education.
- Bottomley, S., & Denny, P. (2011). A participatory learning approach to biochemistry using student authored and evaluated multiple-choice questions. *Biochemistry and Molecular Biology Education*, 39(5), 352-361. <https://doi.org/10.1002/bmb.20526>
- Branch, R. M. (2009). *Instructional design: The ADDIE approach* (Vol. 722). Springer Science & Business Media. <https://doi.org/10.1007/978-0-387-09506-6>
- Chambers, R. (1996). *Participatory rural appraisal: Memahami desa secara partisipatif* (terjemahan Y.Sukoco). Yogyakarta: Kanisius.
- Direktorat Pendidikan Masyarakat. (2015). *Petunjuk teknis literasi fungsional*. Jakarta: Direktorat Dikmas.
- Dixon, C. N. & Nessel, D. (1983). *Language experience approach to reading and writing: Language-experience reading for second language learners*. California: Corwin Press.
- Duze, C. O. (2010). Effects of participatory learning technique on achievement and attitude of B. Ed. Students in educational research methods. *Journal of Social Sciences*, 22(3), 185-189. <https://doi.org/10.1080/09718923.2010.11892800>
- Freire, P., & Macedo, D. (2005). *Literacy: Reading the word and the world*. Routledge. <https://doi.org/10.4324/9780203986103>
- George, R. (2011). Fostering generic skills through participatory learning strategies. *International Journal of Fundamental Psychology and Social Science*, 1(1), 14-16.



- Hinchion, C. (2017). Student english teachers: participatory learning and developing identities-in-practice. *English Teaching: Practice & Critique*, 16(2), 238-251. <https://doi.org/10.1108/ETPC-10-2016-0123>
- Hunter, C. S. J. (1982). Literacy for Empowerment and Social Change Conference
- Ibnouf, M. H., Sheqwarah, M. N., & Sultan, K. I. (2015). An Evaluation of the Participatory Learning and Action (PLA) Training Workshop. *Journal of Agricultural Science*, 7(12), 144. <https://doi.org/10.5539/jas.v7n12p144>
- Joyce, B., Weil, M. dan Calhoun, E. (2011). *Models of teaching*. Eighth Edition. Boston, New York, San Francisco: Pearson Education, Inc. □
- Kagitcibasi, C., Goksen, F., & Gulgoz, S. (2015). Functional adult literacy and empowerment of women: Impact of a functional literacy program in Turkey. *Journal of adolescent & adult literacy*, 48(6), 472-489. <https://doi.org/10.1598/JAAL.48.6.3>
- Keller, J. M. (2009). *Motivational Design for Learning Performance: The ARCS Model Approach*. New York: Springer Science and Business Media.
- Kim, J.R., Jeong, B., Park, K.S., & Kang, Y.S. (2011). Application of the participatory learning process in health promotion. *Journal of agriculture media community health*. 36 (2): 130-142. <https://doi.org/10.5393/JAMCH.2011.36.2.130>
- Knowles, M. (1990). *The Adult learner: Neglected species*. 4th Edition. Houston: Gulf publishing.
- Knowles-Yáñez, K. L. (2005). Children's participation in planning processes. *Journal of Planning Literature*, 20(1), 3-14. <https://doi.org/10.1177/0885412205277032>
- Kucher, S. (2005). *Dimension of Literacy*. London: Lawrence Erlbaum Associates-Publisher.
- Kucukaydin, I., & Cranton, P. (2014). Participatory learning in formal adult education contexts. In *Adult and Continuing Education: Concepts, Methodologies, Tools, and Applications* (pp. 1865-1877). IGI Global. <https://doi.org/10.4018/978-1-4666-5780-9.ch108>
- Obadiegwu, C. C. (2012). Participatory learning and student empowerment in the classroom. *African Research Review*, 6(1), 299-310. <https://doi.org/10.4314/afrr.v6i1.25>
- Omoyen, A. (2010). The United Nation Education, Scientific and Cultural Organization's (UNESCO) support for adult literacy education in Nigeria, 1946- 2010: Impact Assessment. □
- Perry, K. H. (2012). What is literacy?--A critical overview of ssocio-culturalperspectives. *Journal of Language and Literacy Education*, 8(1), 50-71.
- Piaget, J. (1983). *Science of education and psychology of the child*. New York: Orient Press.



- Rabušicová, M., & Oplatková, P. (2010). Functional literacy in people's lives. *Journal of Pedagogy/Pedagogický časopis*, 1(2), 29-51. <https://doi.org/10.2478/v10159-010-0008-3>
- Riegel, U., & Kindermann, K. (2016). The Impact of Participatory Learning on Attitude. *Journal of Empirical Theology*, 29(1), 1-23. <https://doi.org/10.1163/15709256-12341334>
- Rogers, J. (1994). *Adults Learning: third edition*. Philadelphia: Open University Press. □
- Saetan, S., Veerawattananon, V., & Suttiprapa, T. (2015). Development of renewable energy for rural economy households with the blended and participatory learning processes in Kalasin Province in Thailand. In *International Forum of Teaching and Studies* (Vol. 11, No. 1/2, p. 42).
- Singh, K., & Kamboj, R. (2016). Causes of adult illiteracy: A case study of Ferozpur district. *MIER Journal of Educational Studies, Trends and Practices*, 2(1).
- Slavin, R.E. (2000). *Educational psychology: Theory and practice*. New Jersey: Pearson Education.
- Sudjana, Djuju. 2005. *Strategi pembelajaran*. Bandung : Falah Production.
- UNESCO. (2003). *Literacy and empowering people*. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.
- UNESCO. (2013). *Understanding of literacy*. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. (Ed.) M. Cole, V. John-Steiner, A. Scribner, and E. Souberman. Cambridge. □
- Wen, M. (2009). The Dialogic spirit of advance literacy: Participatory learning of disciplinary content. *Journal of Research in Education*, Vol 18, fall 2008, 67-81.
- Ziegler, M. F., & Davis, D. C. (2008). Rural adult literacy in a community context: From the margin to the mainstream. *New Directions for Adult and Continuing Education*, 2008(117), 25. <https://doi.org/10.1002/ace.283>