

Innovative and Constructivist Digital-Based Learning Model in Increasing Adults' Learning Interest

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Abstract. Learning is a process where behavior can be changed, shaped and controlled to gain knowledge, experience and is required to work while learning, bearing in mind that the demands of needs are increasing, therefore learning must be conceptualized more broadly, innovatively, constructivist so that this goal is successful. The objectives of this research are: 1) to identify the implementation of innovative, constructivist, digital-based learning programs, and 2) to identify the effectiveness of digital use with innovative, constructivist learning models in increasing adults' interest in learning. The type and approach used in this research is an experimental type with an approach quantitative, research location at the Barru Regency Community Learning Activity Center (PKBM), data analysis used is development statistics, model testing with Independent-Samples T-Test analysis. The research results prove that the digital-based innovative, constructivist learning model learning program uses 2 methods, namely, offline and online. Group model offline learning, online learning using Google Meet. The innovative, digital-based constructivist learning model runs by actively involving learning citizens, with the characteristics of adults being able to develop their learning activities starting from planning, development and establishing collaboration, the positive impact of the innovative, digital-based constructivist learning model can provide solutions in overcoming problems, providing convenience, increasing adult learning interest in implementing innovative digital learning models is very effective.

Keywords: adults interest, digital based, learning model

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INTRODUCTION

Adult learning is learning how to understand adults in learning with optimal conditions for those adults. The adult learning process requires the presence of other people who are able to act as learning guides rather than tending to be lectured because adults tend to want to learn, not learn. Because adults grow as individuals who have a mature self-concept, experience psychological changes and dependencies that occur in childhood to become independent to direct themselves. Generating motivation that comes from themselves, adults have different levels of intelligence, adults learn to want to know their meaning in the study group.

Study groups that create learning can realize the ownership of an independent, creative and innovative spirit in order to produce results. Considering that demands are increasing, learning must be conceptualized more broadly than just learning conventionally. Learning styles need to be created in an efficient, fast, thorough, productive and enjoyable manner and continue to be encouraged throughout life. To gain knowledge, experience and new attitudes, individuals and society are required to work and learn or learn while working as a form of learning model. and shows the existence of renewal and efforts to increase

the active role of families and communities in learning.

Learning how to comprehend adults in ideal circumstances is known as adult learning. Knowledge is created via the transformation of adults' experience, and it is a lifetime process (Abedini et al., 2021). In order for adults to learn, they need to be among other individuals who can serve as learning guides rather than lecturers (Mehra et al., 2018; Mu'awanah et al., 2020). Adult education is the purposeful, methodical process of teaching and learning through which a person filling an adult position learns new discipline, values, attitudes, and skills (Prakash et al., 2019). Therefore, learning is a process where behavior can be changed, shaped, and controlled using innovative and constructivist models. Thus, the goal is to inspire students to create their own knowledge based on the interpretation of their own experiences so that they may solve challenges (Jirasatjanukul et al., 2021).

Learning is primarily a series of actions or processes designed to help learning citizens grow their abilities, interests, motivation, and potential in order to help them build their character, competence, and literacy (Harosid, 2017). Therefore, a tutor or instructor who is creating learning activities must be able to provide engaging, diverse, repetitious, and enjoyable learning experiences.

Based on behavioristic theory, an original

learning model that is a behavior modification model was created. According to this paradigm, learning is the process of altering behavior as a result of causal connections and reactions between people and their environment. A favorable reaction will serve as positive reinforcement for learning citizens. Each learning model is distinct from the others in terms of its design and specific focus. A learning model, however, may be created using a convergence of many learning theories (Alghazi et al., 2020; Asvial et al., 2021; Watanabe & Zhou, 2022). Currently, the learning model has evolved to be digitally based and incorporates a range of information and communication technologies that are thought to improve the quality of learning, both process and results.

Adults cannot be educated in a comparable manner as children because they age as people, have mature self-concepts, go through psychological transformations, and transition from being reliant as children to being autonomous and capable of making their own decisions. Because of this, the adult process of learning must concentrate on adult capabilities (Abedini et al., 2021); (Arghode et al., 2017); and (Palis & Quiros, 2014). In innovative and constructivist learning theory, namely, innovative learning, a teaching/learning strategy enables young students to think about the teaching experience differently and more successfully incorporate new cognitive domains (Michailidis et al., 2021). Thus, learners can internalize, reshape, or transform new information. Then these theories are combined in the implementation of learning activities.

Andragogy is used for adult learners and pedagogy is used for young learners (Azmi & Noer Anggrainy, 2020). Andragogy is used as an approach that underlies all learning activities to create a pleasant learning climate adapted to the characteristics and assumptions of adults. Three experts in educational innovation examined the effectiveness of the constructive learning environment to assist the pre-administration teachers coordinate innovation improvement in creative educational plans, and they found that the content, media, academic plan, constructive learning situations, and evaluation were appropriate (Atisabda et al., 2019). Moreover, the progress of education not entirely settled by the methodology involved by instructors and educators in grasping ideas of training, teaching method and andragogy, and learning material (Eripuddin & Jufriзал, 2021).

To fulfill students' needs in learning, the process of learning must be conceptualized more broadly than conventional learning concepts. According to (Syaripuddin, 2022a) the education outcome is determined by the educators' approaches to educating

and giving appropriate informative materials to students. Therefore, learning styles need to be created effectively, efficiently, quickly, carefully, productively, fun and continue to be encouraged throughout life to meet the individual's need of learning (Üzüm & Pesen, 2020). Besides, to gain new knowledge and additional information, individuals and communities are required to work and learn or study while working as a learning model to find forms and show renewal and efforts to increase their competence (McCarthy et al., 2022; Steyn, 2015; Tian et al., 2023; Yang et al., 2019).

A creative and constructivist teaching model is required for the condition of learning program in order to create a curriculum (long-term learning plan), develop learning resources, and serve as a direction for education (Diep et al., 2019). This concept of teaching adults has an important role in knowing technology, especially in expected adult learning programs. The principle is digitalized learning model that can realize the ownership of an independent, creative, and innovative soul to produce outputs that are free, independent, creative, and innovative in the learning community in adult learning programs (Djumena, 2016). Additionally, digital learning is the most important facilitator for students to succeed in learning process because it has a positive effect on the relationship between students' competence and their academic performance (Lohr et al., 2021); (Mehrvarez et al., 2021).

Referring to the results of the research focus described above, an innovative, constructivist digital-based learning model can be used as a problem-solving solution that can realize the expertise of learning citizens in increasing digital-based adult learning interest. Thus, the general problem to be studied is "How to increase adult learning interest through digital". After doing this research, the results would be able to provide benefits both theoretically and practically. Theoretically, the findings in the research could provide benefits in increasing adult learning interest and digital use studies, not only strengthening learning programs but also being a source of creativity for the birth of new learning models in the realm of adult literacy education and digital development for community empowerment. Practically from the research results, benefits would be obtained; provide input to institutions that foster learning programs in educational units in terms of managing adult learning, in the form of skills, motivation, and interest in learning; and provide input to learning citizens in the context of empowering educational units.

METHODS

This digital-based innovative learning model in

increasing adult learning interest through digital was designed with a quantitative research and development approach (R & D) that aims to improve the quality of learning. Based on the research focus, namely increasing digital-based of adult learning interest using innovative learning models, constructivist research in this study included quantitative analysis used to develop products carried out through experimental methods applied to test the implementation of these products. The place and time of research were carried out at the learning community of the Community Activity Center of Barru Regency.

The procedure carried out in this study consisted of 9 (nine) steps, namely; 1) researched and collected information, 2) planned the prototype components to be developed, 3) developed initial prototypes 4) conducted the limited trial of the initial model, 5) revised the initial model, 6) conducted operational field trials, 7) revised the model, 8) revised the final model, and 9) conducted dissemination to various parties. The nine steps were modified into 3 (three) steps to be more effective and efficient, namely; 1) preliminary study, 2) model development and 3) model trial or model implementation.

Based on the results of the exploratory study, it was obtained data that the subjects in this study were determined purposively were 10 (ten) people who had special characteristics, namely learning citizens who had never participated in a learning program but wanted to take part in an andragogy-based literacy learning program and domiciled in Parepare. The information was gathered by utilizing a few methods, to be specific; 1) observation, interviews, instruments, then ordering the observation rules to quantify skill in educating, giving learning and composed test instruments to understand the capability of learning citizens utilized during pre-test and post-test which were then talked with a group of specialists. Next, test the validity and reliability of the test questions to ten residents learning that is not included in the treatment group, control group, and limited trial respondents; 2) interviews were used during the initial study to explore various information related to the problem of the study, 3) questionnaires/instruments for respondent identification and self-potential questionnaires for

innovative learning participants. The data was analyzed in three stages which included the preliminary, development, and model testing stages. At the preliminary study stage, the information was explored so that findings and facts about the need for innovative learning models in the learning process to increase business independence through digital literacy for learning citizens were obtained.

RESULTS AND DISCUSSION

The research findings showed an increasing interest profile in learning before innovative development. Constructivist learning models in the digital learning process did not yet have essential indicators that understand learning citizens with the principles of knowledge, skills, models, and learning methods. Besides, the teaching techniques and models used were not following the subject matter and had not been able to understand the learning culture that is fun, flexible, and diverse in learning culture.

The results of the initial study which was the increase of interest in the conventional learning process were still low or lacking. Lack of interest in learning with the use of digital in the learning process showed the potential of the learning citizens and developing innovative learning. The constructivists were still low/lack. Low interest in the conventional learning process indicated a lack of experience in teaching. The results of conventional learning were less effective than those using innovative learning models. Based on the constructivist paradigm, it could help citizens learn to internalize, reshape, and transform new information. Learners could also construct their knowledge and skills to overcome the problems they experienced through innovative learning models.

Based on research data on innovative learning, constructivism showed that it was an effective model for increasing adult learning interest, especially in the digital learning process. Therefore, learning citizens could solve the problems they face. Innovative and constructivist studies on digital learning activities could provide solutions to overcome the problem and make it easier for teaching citizens to implement innovative learning models through digital

Table 1. Findings of Model Evaluation Results on the Trial of Innovative Learning Models

No	Questions	Category									
		Very Poor		Poor		Fair		Good		Very good	
		N	%	N	%	N	%	N	%	N	%
1	The relevance of digital-based innovative learning	-	0,0	-	0,0	-	0,0	4	80	1	20
2	influential increasing interest in learning	-	0,0	-	0,0	1	20	3	60	1	20
3	WB's interest in digital learning models & methods	-	0,0	-	0,0	-	-	4	80	1	20
4	The relevance of learning resource materials to the achievement of learning objectives	-	0,0	-	0,0	-	-	4	80	1	20
5	Benefits of teaching materials/modules used in learning	-	0,0	-	0,0	-	-	4	80	1	20
6	WB participation. in learning models & methods	-	0,0	-	0,0	-	-	4	80	1	20
7	WB's participation. in learning as a whole	-	0,0	-	0,0	1	20	3	60	1	20
8	The benefits of the applied learning strategies	-	0,0	-	0,0	-	-	3	60	2	40
Average		0,0		0,0		5,0		72,5		22,5	

Source: Results of data processing evaluation of the application of learning models and methods in increasing interest in learning in a limited trial.

Based on table 1 the number of learning citizens responses to the innovative learning model developed by trial shows that 95% of the respondents argued that the innovative constructivist digital-based learning model was positive and good. During the learning process, the findings were obtained from observations and interviews with several respondents, namely; 1) in general, the use of learning methods in the developed learning activities could run

smoothly and successfully, 2) the results of discussions with respondents reveal that in the material in teaching, some case examples were needed to provide material explanations, especially those that could motivate learning residents to be more creative in increasing interest in learning, 3) at the end of the learning process in the trial, learning residents expected continuous skill development/innovation through digital learning programs.

Table 2. Comparison of Mean Gain Results of Pre-test and Post-test Control Group and Treatment Group in Digital Literacy Mastery

		Control Class Post Test			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	83	1	5.0	10.0	10.0
	87	1	5.0	10.0	20.0
	90	1	5.0	10.0	30.0
	92	1	5.0	10.0	40.0
	93	2	10.0	20.0	60.0
	94	1	5.0	10.0	70.0
	96	1	5.0	10.0	80.0
	97	1	5.0	10.0	90.0
	98	1	5.0	10.0	100.0
		Total	10	50.0	100.0
Missing System		10	50.0		
Total		20	100.0		

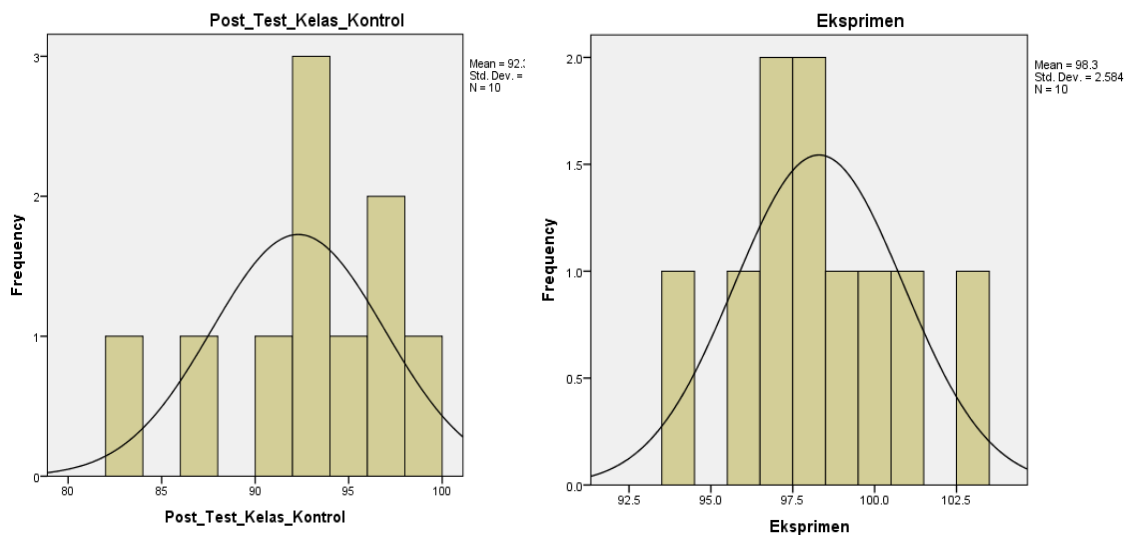


Figure 1. Students' Post Test of Experimental and Control Class

The description of the research results above was the result of research on innovative constructivist learning models in increasing adult learning interest. The research findings were grouped into two main categories, namely: 1) learning programs implemented in the study group of the Community Learning Activity Center of Parepare City, and 2) the development of innovative digital-based learning models in increasing adult learning interest. Learning programs conducted by the Center for Community Learning Activities, models, and learning strategies. The learning process that was still manual and conventional in increasing adult learning interest was inappropriate to make learning citizens less active, not enthusiastic about participating in the learning process, and tends to saturate so that learning residents do not take it seriously. It was demonstrated by looking at two strategies in learning found by (Nugraha et al., 2020); (Syaripuddin, 2022b); (Tseng et al., 2021); (Zeng et al., 2021)) that there is a tremendous distinction between the students who were educated by utilizing innovative learning strategy than the conventional strategy. As a result, learning outcomes are lacking, having a significant impact on the use of digital with innovative, constructivist learning models to increase adult learning interest as a learning goal.

Learners tend to lack understanding of the learning materials conveyed so they have difficulty increasing their interest in learning. Adults have a different way of learning from children, so it takes a model, and method, which is following the characteristics and assumptions of adults to learn (Dekker et al., 2022; Martínez & Olsson, 2022; Sadrizadeh et al., 2022). Moreover, they can have well-established 'ways of knowing', so a process of transformation represents learning that challenges them to discover new ways of thinking (Collins, 2004); (Schlomann et al., 2022); (Wang et al., 2021)). Digital development of adult learning through PKBM with innovative learning models in increasing interest in learning. Increasing adult interest in learning through the Community Learning Activity Center (PKBM) with a digital-based developed model consisting of input, process, output, outcome, and reinforcement components to obtain the impact of further learning by identifying increased interest in learning. It can also be done through innovative digital-based constructivist learning models and the use of digital for learning citizens (Budiwan, n.d.). In addition, constructivist model for teaching, learning, and research emerged, contributing to the discourse which advocates for the awareness and assessment of transformative educational contexts (Intolubbe-Chmil, 2011). The

input component of tests are everything that becomes the implementation of the learning program. These inputs included increasing interest in learning, adult characteristics, digital use, and innovative learning models.

CONCLUSION

Increasing adult interest in learning through innovative constructivist digital-based learning models involved learning citizens actively in learning process activities starting from planning, implementing, and developing digital learning activities. The concept of an innovative constructivist learning model is designed to include components of input, process, and output outcomes. The stages of activities include planning, organizing, implementing, and evaluating the learning model. Innovative and constructivist learning models are planned by considering the attributes of learning adults.

In order for the learning system's input, process, output, other input, outcome, and reinforcement to work effectively, the following steps must be taken: 1) identifying the different types of learning; 2) planning learning; 3) putting the learning process into practice; 4) assessing the learning model; and 5) creating learning activities. Development of a model of strengthening in the form of assistance in establishing cooperation to increase interest in digital-based adult learning through innovative and constructivist learning models.

Innovative, constructivist model learning programs in increasing adult interest in learning and studying digital use, not only strengthen learning programs but also become a source of creativity for the birth of new learning models in the realm of adult literacy education and digital development for community empowerment as well as providing input to program development institutions. learning in educational units in terms of managing adult learning. And also for researchers to find new learning models that are more enjoyable for adult learning

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