

Readiness for learning ability through experiences

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Abstract

Learning through experience is a process that facilitates the ability to experience in observing, thinking, feeling, doing and experimenting for the formation of a 4Cs-based student competency profile (communication, collaboration, creativity, critical thinking and problem solving) which is the basis for the needs of the 4.0 revolution era. The level of student learning readiness through experience is largely determined by the teacher's ability to implement pedagogic knowledge and pedagogical competency models. The purpose of this study was to examine the readiness of students' learning abilities through experiences that were formed through the contribution of the level of pedagogical knowledge abilities and pedagogic competence models from teachers. Quantitative research with data collection instruments using Likert scale questionnaires, data analysis techniques using smart PLS, the population is 220 teachers and 220 students of public and private elementary schools in the region which is in area II of the West Jakarta Municipal Education Sub-Department, DKI Jakarta Province. The sampling technique was done by purposive side. The results showed that: (1) there was a positive and significant contribution to the ability to implement pedagogic knowledge on the pedagogical competency model, (2) there was a positive and significant contribution to the ability to implement pedagogic knowledge on learning through experience, (3) there was a positive and significant contribution to the ability to implement the model. pedagogic competence on learning through experience, and (4) there is a dominant factor from each indicator as a construct forming variables that contribute to learning through experience.

Keywords: Readiness for learning ability, pedagogic knowledge, model of pedagogical competence.

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Introduction

Teachers and students become strategic key components for creating learning experiences that raise student competency profiles based on the 4Cs (communication, collaboration, creativity, critical thinking and problem solving)..(Rahayu and Susanto, 2018; Susanto, Agustina, et al., 2020; Susanto, Rachmadtullah and Rachbini, 2020; Susanto, Agustina, Rozali, Yuli Azmi, et al., 2021). Learning experience is a learning process that facilitates the ability to experience in observing, thinking, feeling, doing and experimenting to achieve learning outcomes and goals (Gurã u et al., 2018). Learning through experience allows students to have theoretical, conceptual and practical knowledge by using learning resources and fundamentally constructed understanding. (Calvin, 2012). Learning experiences characterize learning activities by optimizing mental processes of thinking that involve mental activities and effective learning readiness because learning begins with self-leadership to empower experience as a learning tool.(Calvin, 2012). Learning through experience is a learning feature that is

needed to support the 4Cs competency profile because it becomes an instrument in the formation of competencies and skills (Redding, 2014).

Learning through experience forms a cultural approach in interacting with various learning resources, both approaches to people, environments, materials, methods, media and backgrounds. (Brown, 2019; Moje and Lewis, 2020). The teacher as a facilitator provides opportunities for students to create what they want and will learn so that it becomes a theory of opportunities to form perceptions of how to learn and estimate the level of success and failure of learning and learning strategies for metacognition. The teacher as a facilitator provides opportunities for students to create what they want and will learn so that it becomes a theory of opportunities to form perceptions of how to learn and estimate the level of success and failure of learning and learning strategies for metacognition. (Ellis et al., 2006; Gurā u et al., 2018; Hinton, 1992; Soñ ta & Magala, 2020).

The role in facilitating the success of an interactive learning experience in the classroom cannot be separated from the pedagogic knowledge possessed by the teacher. (Susanto, Rozali and Agustina, 2019, 2020; Susanto, 2021a, 2021b; Susanto, Agustina, Azmi, et al., 2021; Susanto, Agustina, Rozali, et al., 2021). Pedagogic knowledge is the basis of knowledge and the foundation of teachers related to 3 indicators of the level of ability in implementing: (1) educational philosophy, (2) learning and learning theory (3) child development. (Susanto, Rozali and Agustina, 2019, 2020; Susanto, Agustina, Azmi, et al., 2021).

The ability of knowledge about pedagogy becomes the basis for teachers in providing humanistic and educative treatment of learning experiences for students. On the different side, each teacher has a pattern in applying their pedagogical competency model, and the essence of the pedagogical competency model is the teacher's level of ability in managing learning strategies with indicators: (1) the ability to implement reflective abilities, (2) the ability to implement emotional intelligence, and (3) the ability to implement instructional communication patterns.(Sofyani and Susanto, 2019; Susanto, Rozali and Agustina, 2019, 2020; Susanto and Rachmadtullah, 2019; Id, 2020; Susanto, Sofyan, et al., 2020; Susanto, 2020, 2021a, 2021b; Susanto, Agustina and Rozali, 2020; Susanto, Syofyan, et al., 2021; Susanto, Agustina, Azmi, et al., 2021; Susanto, Agustina, Rozali, et al., 2021; Susanto, Agustina, Rozali, Yuli Azmi, et al., 2021)

The linkage of the two dimensions in the form of the application of pedagogic knowledge and the model of pedagogic competence produced in sustainable research is applied in overcoming the problems of national education against the low pedagogic competence of teachers and is at the same time a tangible manifestation of the ability of teachers to design learning events through experience. (Susanto et al., 2018; Susanto and Rachmadtullah, 2019; Susanto, Rozali and Agustina, 2019, 2020; Susanto, Agustina and Rozali, 2020; Susanto, Sofyan, et al., 2020; Susanto, 2021a; Susanto, Agustina, Azmi, et al., 2021; Susanto, Agustina, Rozali, et al., 2021; Susanto, Agustina, Rozali, Yuli Azmi, et al., 2021).

Method

This study aims to analyze the contribution of the application of pedagogical knowledge and pedagogical competence models owned by teachers in creating learning through student experience. Quantitative research with data collection instruments using Likert scale questionnaires, data analysis techniques using smart PLS, the population is 220 teachers and 220 students of public and private elementary schools in the region which is in area II of the West Jakarta Municipal Education Sub-Department, DKI Jakarta Province. The sampling technique was done by purposive side. The research can be seen on the figure 1.

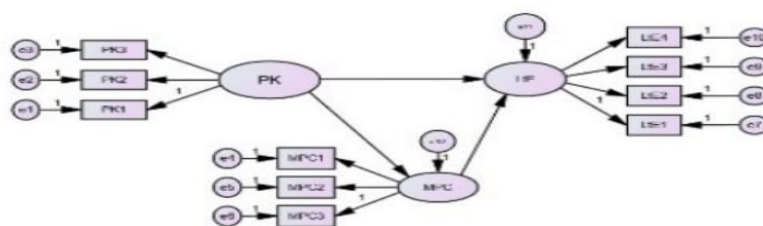


Figure 1. Research Constellation Model

Description:

PK = Pedagogical Knowledge
 PK1 = Level of implementation of knowledge of educational philosophy
 PK2 = Level of implementation of knowledge of learning and learning theory
 PK3 = Level of implementation of child development knowledge

MPC = Model of Pedagogical Competence
 MPC1 = Level of implementation of reflective ability
 MPC2 = Level of implementation of emotional intelligence
 MPC3 = Level of implementation of instructional communication pattern

LtE = Learning through Experience
 LtE1 = level of ability to identify components of th learning process
 LtE2 = Level of ability to identify key success factors and weaknesses
 LtE3 = Level of strategic management ability key to success and weakness
 LtE4 = Level of ability to achieve progress learning experience

Results and Discussions

The results of confirmatory factor analysis (CFA) were carried out on the research constellation model to confirm and at the same time test the model in which the constellation model was formulated based on the basic theory. -dimensional valid, and (2) determine the dominant indicators that form the research construct.

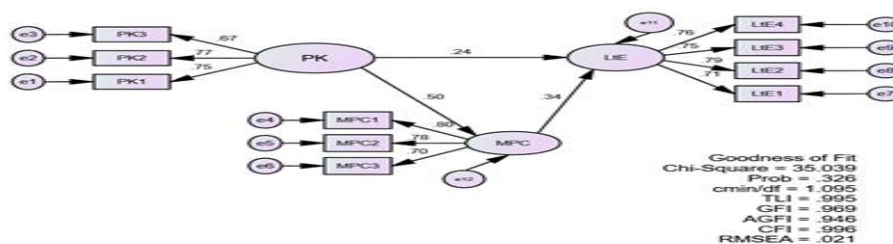


Figure 2. Redesign of the Research Constellation Model

The standardized regression values in tables and diagrams show the loading factor of each indicator to its construct with a value > 0.60 which indicates a valid indicator to measure the construct. Other information obtained is by using the Goodness of fit (GoF) of the model:

Tabel 1. Goodness-of-fit model

<i>Goodness-Of-Fit (GOF)</i>	<i>Hasil Analisis</i>	<i>Cut Off Value</i>	<i>Evaluasi Model</i>
Chi-square	$\chi^2 = 35.039$	Probabilitas $\geq 0,05$	Baik
	P = 0.326		
TLI	0.995	GFI > 0.90	Baik
GFI	0.969	AGFI > 0.90	Baik
AGFI	0.946	TLI > 0.90	Baik
CFI	0.996	CFI > 0.90	Baik
RMSEA	0.021	RMSEA $\leq 0,08$	Baik

The GoF criteria concluded that the model fit with the data, with the achievement of the results meeting the cut of value with the model evaluation as good as follows: (1) Chi-square criteria 35.039 0.05, (2) Goodness-of-fit test with TIJ 0.995 > 0.90, (3) GFI 0.969 > 0.90, (4) AGFI 0.946 > 0.90, (5) CFI 0.996 > 0.90, (6) RMSEA The RMSEA analysis as an index to compensate for the Chi Square statistics showed 0.042 0.08 represent acceptable Another test with Maximum Likelihood Estimates shows on Table 2.

Table 2. Maximum Likelihood Estimates Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
MPC<---PK	.452	.084	5.377	***	
LtE<---PK	.229	.092	2.495	.013	
LtE<---MPC	.367	.104	3.541	***	
LtE1<--LtE	1.000				
LtE2<--LtE	1.051	.103	10.231	***	
LtE3<--LtE	1.096	.112	9.818	***	
LtE4<--LtE	1.056	.106	9.960	***	
PK1<---PK	1.000				
PK2<---PK	1.086	.121	8.970	***	
PK3<---PK	.908	.108	8.435	***	
MPC3<--MPC	1.000				
MPC2<---MPC	1.189	.125	9.488	***	
MPC1<---MPC	1.151	.120	9.563	***	

Furthermore, the t-test is carried out as a variable test for endogenous variables or the effect of an endogenous on other endogenous variables. The significance of a variable that affects another variable is carried out on:

Hypothesis

H0: The influencing variable, has no significant effect on the affected variable.

H1: The influencing variable has a significant effect on the affected variable.

Decision Making Basis:

• If the probability value (sig value) > 0.05 or - t table < t count then H0 is not rejected,

If the probability value (sig value) < 0.05 or t count < - t table or t count > t table then H0 is rejected.

Decision:

- In the table above, the p value of the Pedagogical Knowledge (PK) variable = *** < 0.05 so that H0 is rejected and H1 is accepted, which means that the PK variable has a positive and significant effect on the Model of Pedagogical Competence (MPC) variable. The higher the PK value, the higher the MPK value and vice versa.
- In the table above, the p value of the PK variable = 0.013 < 0.05 so that H0 is rejected and H1 is accepted, which means that the PK variable has a positive and significant effect on the LtE variable. The higher the PK value, the higher the Learning through Experience (LtE) value. Vice versa

3. In the table above, the p value of the MPC variable = *** < 0.05 so that H0 is rejected and H1 is accepted, which means that the MPC variable has a positive and significant effect on the LtE variable. The higher the MPC value, the higher the LtE value.

Thus the structural equation is:

$$MPC = 0.452*PK + e$$

$$LtE = 0.229*PK + 0.367*MPC + e$$

The value of p = *** (meaning the number is below 0.001, so this is significant at the 0.01 level of significance, which is certainly better than the 0.05 level of significance).

The correlation between the variables is shown as follows.

Table 3. Correlation

			Estimate
MPC	<---	PK	.500
LtE	<---	PK	.238
LtE	<---	MPC	.345
LtE1	<---	LtE	.710
LtE2	<---	LtE	.792
LtE3	<---	LtE	.751
LtE4	<---	LtE	.765
PK1	<---	PK	.748
PK2	<---	PK	.771
PK3	<---	PK	.674
MPC3	<---	MPC	.700
MPC2	<---	MPC	.782
MPC1	<---	MPC	.801

The close relationship between variables can be stated: (1) Pedagogical Competency Model has a strong and very strong correlation (0.700 - 0.801) on its forming indicators, (2) Pedagogic Knowledge has a strong correlation (0.674 - 0.748) on its forming indicators, (3) Learning through experience has a strong correlation (0.710 – 0.792) on its constituent indicators, and (4) the correlation of the pedagogical knowledge variable to the pedagogic competence development model variable has a moderate correlation (0.500), (5) the correlation of the pedagogical knowledge variable has a very low relationship. (0.238) on the variable learning through experience, and (6) the variable pedagogic competence development model has a low correlation (0.345) on learning through experience.

The total direct influence between variables and their constructs can be explained through the redesign of the model image constellation, that: (1) there is a direct influence of pedagogical knowledge on learning through experience, (2) there is a direct influence of pedagogic knowledge on the model of pedagogic competence development, (3) there is a direct influence on the model of pedagogic competence development. direct model of pedagogic competence development towards learning through experience.

From the data, the analysis of research studies formulates that the level of readiness of learning abilities through experience is very basic as a learning model. Learning through experience needs to be designed in a planned manner so that students experience learning events as an experiential learning that realizes real learning and focuses on building the potential and profile of the 4Cs characteristics. (Calvin, 2012; Gură u et al., 2018; Brown, 2019; Dellermann et al., 2019; Fatwassani, Fitriati and Bharati, 2019; Moje and Lewis, 2020; Soñ ta and Magala, 2020).

Students need to be facilitated and conditioned by teachers to learn through experience with 4 levels of ability, namely: (1) being able to identify aspects of the learning process, (2) being able to identify the keys to success and weaknesses in learning, (3) being able to perform strategic management of key strengths and learning weaknesses, as well as being able to achieve learning progress through the experience itself. (Gentry and Burns, 1983; Truran, 1998; Gură u et al., 2018; Fatwassani, Fitriati and Bharati, 2019).

Learning through experience is formed through the construct of teacher competence in the level of pedagogical knowledge, in the form of the level of ability in its ability to implement the philosophy of education so that students are treated as active subjects in the learning process who have needs, methods, interests and learning strategies. Teachers in this case must also be able to assist children's learning by adopting learning theory and learning to support experiential learning and adapted to the stages of development of elementary school children. (Susanto, Rozali and Agustina, 2019, 2020; Susanto, Agustina, Azmi, et al., 2021).

The contribution of teachers who need to support learning through experiential conditioning needs to be integrated with the implementation capabilities of the pedagogical competency model which is an indicator of the ability of the teacher's reflective ability in designing learning patterns and achievement profiles of children's characteristics in the learning process through experience, the teacher's emotional intelligence in placing epran and its functions. in mentoring and mentoring children's learning and how to communicate learning as a strategy that provides the key to the formation of the ability to receive material for the formation of critical thinking and problem solving skills, the ability to collaborate and the ability to be creative and focus on the ability to convey ideas through communication. (Nikoçeviq-kurti and Saqipi, 2001; Susanto and Rachmadtullah, 2019; Susanto, Rozali and Agustina, 2019, 2020; Ahmadi and Yanuarti, 2020; Bawaneh, Moumene and Aldalalah, 2020; Richards, 2020; Robinson Hutagaol, Abdul Hasan Saragih and Sahat Siagian, 2020; Susanto, Agustina and Rozali, 2020; Susanto, Rachmadtullah and Rachbini, 2020; Syamsuddin, Juniati and Siswono, 2020; Colomer et al., 2020; Holland, 2020; Karnieli-Miller, 2020; Kartini, Kritiawan and Fitria, 2020; McGuire and Lay, 2020; McLeod et al., 2020; Moses, 2020; Pantić, 2021).

Conclusions

Analysis of the results of the study provides data that the readiness of students' learning abilities through experience becomes an authentic thing with the contribution of the teacher's ability level in implementing pedagogic knowledge and pedagogical competency models. This provides a construct that the higher the teacher's ability to determine the level of pedagogical knowledge and pedagogic competency models, the higher the student's ability to learn through experience.

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