Development of Portfolio based Learning Instrument for Early Childhood

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Keyword: Portfolio, Early Childhood.

Abstract: The study is a research and development research which aims at developing portfolio-based learning instrument in terms of teacher's manual, child's worksheet and daily lesson plan. The subject was teachers and students at PAUD Terpadu Alkhairat Skep Ternate. The instrument of portfolio was tested to 12 students of class B at PAUD Terpadu Alkhairat Skep Ternate. The development model used was thiagarajan model or 4D models consisted of four stages, namely defining stage, designing stage, development stage, and dissemination stage. The portfolio instrument was validated and revised by the expert which then produced feasible product. The result of the study showed that the portfolio-based learning instrument was valid, practical, and effective. The learning instrument was develop after content validation and empirical validation were conducted. Then, they were stated as valid based on Gregory's formulation (>75% or 0.75). The learning instrument was stated as practical because all of the aspects of learning was in completely conducted. The learning instrument was stated as effective because it has fulfilled the criteria of effectiveness with the result that teachers gave 80% of positive response toward the learning instrument based.

1 INTRODUCTION

Kindergarten provides guidance through stimulus in the form of learning. This task shows that through learning it is expected that children have readiness to enter further education and they are ready to learn in a broad sense. Therefore development is needed in the learning model to realize the learning objectives.

Learning functions is to direct students to design learning used as a guide in learning implementation in order to achieve effective, efficient, attractive, and humanistic learning. Joice, (1992) (in Yus, A: 2008) explains the learning model is a plan or a pattern used as a guide in planning classroom learning or tutorials and determining learning instrument and directing us in designing learning for students so that its objectives are achieved.

In learning activities there are several innovative learning models can be used by teachers. Innovative learning models can provide motivation for students to learn more actively so that they can improve achievement and one of the innovative learning models is portfolio-based learning. Learning carried out in kindergartens requires varied activities. One form of learning that fulfills the learning is portfolio-based learning which includes all aspects of child development to the assessment of children's work. Machado, (2002) (in Yus, A: 2008) states that portfolio-based learning provides a great opportunity for children to move according to their needs (Yus, A, 2008).

Portfolio-based learning is very possible to do in kindergarten because teachers and students always do certain products or works, for example, inviting children to draw, color, cut, fold, stick and so on. Meanwhile, activities to collect products or works of students and interpret the collection of children's products are sometimes forgotten. Some products or children's work collected by educators are often not evaluated again and at the end of the semester the product is returned to the parents.

The problems occur in portfolio-based learning start from the creation of student worksheets by teachers and what the teacher makes as portfolios are available magazines while the work of other children is not portfolio. There are still many shortcomings in the portfolio used in kindergarten. In fact, the portfolio has an advantage can be used to evaluate

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learning process of students, so teachers and parents can know children development from time to time. However, the success of a learning model depends on teaching instruments used to support the learning model. The instrument is something that supports the implementation of learning, therefore learning instruments must be in accordance with the learning model. In portfolio-based learning, learning instruments are needed such as manuals used by teachers in implementing learning, the role of students worksheets is used to test children's abilities and its results can be used as children's portfolios, and daily lesson plan are used to support learning models in accordance with activity portfolio based. Based on the explanation above, the researcher wants to conduct research on the development of portfolio-based learning instruments in kindergarten.

2 RESEARCH METHOD

This research is research and development/R&D method because researchers want to develop portfolio-based learning instruments for early childhood using the 4D development model includes four stages of development namely define, design, develop, and disseminate. It is expected to get products in the form of teacher guidebook, students worksheets, and daily lesson plans for effective activities. It was conducted at PAUD Terpadu Alkhairat Skep in Ternate City. The subjects were students in group B academic year 2018/2019, the reason is students were able to recognize letters, were able to read the beginning, were able to write and were able to understand the teacher's explanation. This research was conducted from September to October of the 2018/2019 school year. The instruments used in this study are: (1) teacher questionnaire on portfolio learning devices (2) learning implementation observation sheet (3) validation results sheet.

Data has been collected using these instruments will then be analyzed quantitatively to explain validity and effectiveness and the practicality of the learning devices developed. Data obtained from the results of validation by experts were analyzed to explain the validity of learning devices. The results of the trial data, namely the teacher questionnaire and student performance value data are used for the effectiveness of the learning learning device.

$$Content\ Validity = \frac{D}{(A + B + C + D)}$$

Analysis to calculate the percentage of the number of teachers who responded to each category listed on the teacher's response questionnaire using the following formula:

$Pr = \frac{\sum Rs}{\sum s} x\ 100\%$

Then determine the category of implementation of each aspect or overall aspect of the implementation of the learning device (Nurdin, 2007):

1.5 $\leq M \leq$ 2.0 all implemented

0.5 $\leq M <$ 1.5 partly implemented

0.0 $\leq M <$ 0.5 not implemented

3 RESULTS AND DISCUSSION

Portfolio-based learning is student-centered learning that is very effective in teaching and learning. This is in accordance with the constructivism theory according to Yager (1992), the application of constructivism means placing students in a central position in the overall learning. To support portfolio-based learning, supporting instruments such as daily lesson plan do not include all portfolio and portfolio-based learning scenario stages so that daily lesson plan are needed, then improper portfolio compilation and making portfolios are only a collection of students assignments that only cognitive and motoric development can be seen while in the portfolio all that is included or all aspects of development are in, that is why photos and videos are needed to find out the extent of language development, gross motoric, art and several other developments, in accordance with previous research deal with portfolio-based learning showed that portfolios contain work and activities of children in learning process so that teachers and parents can see child development, this is in accordance with Herman's theory, Gearhart and Ascbacher (1995) states that the use of portfolios in learning has two functions, that are used as a form of learning assessment as well as learning techniques.

Furthermore winter (1989) also emphasizes the use of a good portfolio must contain a number of learning experiences and should also be supported by documentation. Therefore it takes preparation and assessment handbook that summarizes how the portfolio and preparation of portfolio as well as ways to assess the portfolio. The process of developments instruments done through some stages such as define, design and develop and disseminate aims to produce learning instrument in this case teacher handbook, students worksheet, and daily teaching

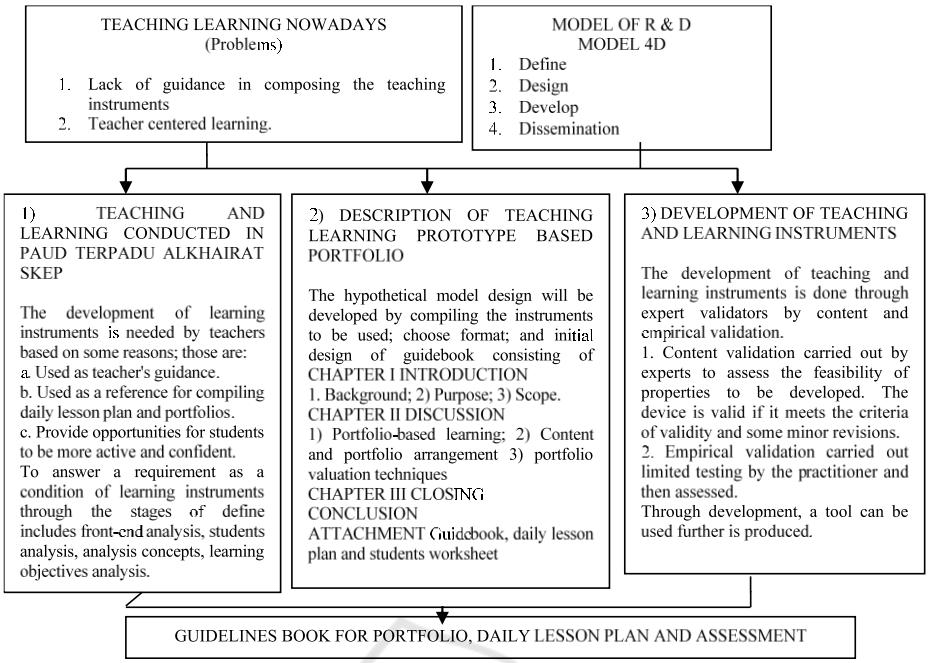

Figure 1.

plan to obtain valid and effective instruments used in PAUD Terpadu Alkhairat Skep in Ternate.

These results prove that learning instruments that has been revised based on input from validators are valid and reliable to be tested. The initial validator assessment for the teacher guidebook and daily lesson plan based on the results of analysis of all aspects was valid and reliable even though there was a revision of the preparation format.

Empirically the results of trials for practicality criteria have met the criteria, the practicality component of the teacher handbook and daily lesson plan is determined by observation of two observers on the implementation of portfolio-based learning that have been implemented, from the results can be considered adequate because all components that are assessed in the instrument are carried out entirely with a high level of reliability so that the instruments meet the criteria of practicality. Components that are considered to be in the category are fully implemented because the learning instruments used are easily understood by students. This shows that learning instruments that have been developed can be used in kindergarten in accordance with the themes and sub-themes that have been determined.

The effectiveness of learning instruments can be seen from the questionnaire of teacher responses that provide a positive response to the portfolio used. These shows the effectiveness criteria have been achieved. Thus the effectiveness criteria of assessment for teacher also achieved because teachers feels delighted in using portfolio so it indicates that the teaching instruments are suitable for use in kindergarten.

4 CONCLUSIONS

The condition of learning instrument is still not perfect, there are still many things need to be addressed so that portfolio-based learning is as expected, so learning instruments such as teacher guidebook and daily lesson plan are needed to support the portfolio-based learning model because of lack understanding of teacher about the appropriate children's portfolio and how to compile and assess the student's portfolio.

The prototype of previous instrument was not in accordance with portfolio-based learning even though the portfolio used in PAUD Terpadu Alkhairat Skep in Ternate city had fulfilled some of learning aspects but it was not perfect, therefore the prototype instrument was developed to complement portfolio-based learning in PAUD Terpadu Alkhairat Skep in Ternate city through the stages of design to form a hypothetical prototype.

Based on the results, the instrument is feasible to use. The results of portfolio-based learning

development obtained through a 4-D model, including: 1) the defining stage consists of five steps, namely: initial analysis, students analysis, task analysis, concept analysis and learning objectives.2) design phase consisting of four steps, namely: test preparation, media selection and design of the format, and initial design. 3) The development stage, namely expert assessment and field trials, then all the initial designs are validated by experts and they are in the valid category then tested to find out its practicality and effectiveness, so it is feasible to use. 4) The stage of deployment, namely the stage that the product is distributed to other classes or other schools to further test the product effectiveness. However, in this study the distribution stage was not carried out.

REFERENCES

Anonim. 2010. Direktorat Manajemen Pendidikan Dasar Sekolah. *Pelaksanaan Penilaian dalam Implementasi KTSP di SMA.* Kementerian Pendidikan Nasional dan Direktorat Manajemen Pendidikan Dasar Sekolah Menengah Atas.

Anonim. 2010. Direktorat Pembinaan TK dan SD. *Pedoman Pengembangan Silabus di Taman Kanak-Kanak.* Kementrian Pendidikan Nasional dan Direktoral Jenderal Manajemen Pendidikan Dasar dan Menengah, Direktorat Pembinaan TK dan SD.

Arter, Judhit A. 2003. *Portofolio for Assessment and Instruction*. (*Online*) (http://www.Oxford.Org/ portofoliowahtis/ html). diakses tanggal 5 Maret 2015.

Boediono. 2002. *Pelaksanaan Kurikulum Berbasis Kompetensi.* Jakarta: Badan Penelitian dan Pengembagan Departemen Pendidikan Nasional.

Brewer, Jo Anin. 2007. *Introduction to Early Childhood Preschool Through Primary Grades Sixht Adition*, New York Pearson Education. Inc.

Dimyati&Mudjiono. 2006. *Belajar Dan Pembelajaran*. Jakarta: Rineka Cipta.

Essa, Eva, L. 2003..*Introduction to Early Childhood Education Fourth Edition.* Autralia: Thamson Delmar Learning,

Fajar, A. 2005. *Portofolio Dalam Pembelajaran IPS*. Bandung: Remaja Rosdakarya.

Fadlillah, M. 2012. *Desain Pembelajaran PAUD Tinjauan Teoritik dan Praktik.* Jogjakarta: Ar-ruzz media

Farida, A. S. *Implementasi Evaluasi Portofolio*. (*Online*) (http://staff.uny.ac.id/sites/default/files/artikel porfolio.pdf) diakses tanggal 23 Februari 2015.

Fitri, B. 2012. *Silabus PAUD nonformal (Online).* (http://Foemaherpepe.files.Wordpress.com/2012/10/ 02/) diakses tanggal 22 April 2016.

Isjoni. 2010. *Model Pembelajaran Anak Usia Dini.* Bandung: Alfabeta.

Mochano, Fransisko. 2002. *Portofolio Based Learning*, (*Online*) (http://www.wsu.edu/teaching.html) diakses pada tanggal 5 Maret 2015.

Putra, N. 2011. *Research & Development*. Jakarta: PT Raja Grafindo.

Ruslan. 2009. *Validitas Isi*. Makassar: Buletin Pa'biritta LPMP Sulawesi Selatan.

Sujiono, Y. N. 2010. *Mengajar Dengan Portofolio*. Jakarta: Indeks.

Sugiyono. 2009. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

Taniredja, Efi, Sri. 2012. *Model-ModelPembelajaran Inovatif*. Bandung: Alfabeta.

Trianto. 2009. *Mendesain Model Pembelajaran Inovatif-Pogresif*. Jakarta: Kencana

Winter, Richard. *Learning from Experience:* Principles and Practie in Action-Research. Philadelphia: The Falmer Press. 1989.

Yager, E Robert, 1996, *STS Science/ Technology/ Society As Perform in Science Education*, New York. United State of Amerika.

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