THE MODELS OF TEACHER TRAINING:
THE RURAL EARLY CHILDHOOD INSTRUCTION
BASED ON LOCAL WISDOM THROUGH PROJECT APPROACH

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ABSTRACT

The rural early childhood teachers have some problems of their instruction, like never do instruction planning, used worksheet more than play approach, applied the conventional instruction, never integrated local wisdom in the instruction, and more. They need opportunities for reflect on and refine their strategies, ideas and practice about the instruction planning, implementing instruction, and instruction media based on local wisdom. We can apply the teacher training with the project approach, because The project approach builds on natural curiosity, interact, question, connect, problem solve, communicate, reflect and more. It focus of knowing “How to do it in action” knowledge capable of mobility in appropriate ways and at the appropriate moment. This study aims to find models of teacher training for the rural early childhood instruction based on local wisdom through project approach. The research approach used for Research and Development (R and D) are modified in three steps, namely research: preliminary research, model development and model validation tests. Preliminary study contains literature study and field study from some villages in Selo, Boyolali, Central Java. Model development have a three-step model to developed three concepts. Model validation tests of the instruction product based on local wisdom of project approach. The result is a significant, effective and feasible. The findings of this study, cooperative teacher in project approach come to better understand the uses of different instruction planning, teaching methods and instruction media based on local wisdom. The study purpose give opportunities for the empowerment of all participant.

Keywords: Local Wisdom; Models of teacher training; the Project Approach; the Rural Early Childhood Instruction.

INTRODUCTION

Background of the Problem

Under influence of globalization communities are affected by culture from Western countries to the Indonesian culture. The children are forgetting tradition, foreign values spread and ruralness is ignored. But ruralness is well worth preserving and reviving. Villages or ruralness emphasizes relative relationships, respect for other peoples, and helpfulness even among strangers, because the rural is preserving local wisdom. We can preserve the local wisdom for a long time with education. The local wisdom has cultural values, which it Integrated in the planning and implementation of learning make learning
meaningful for learning laden. Early childhood was developing cultural awareness to preserve local wisdom, because we loss of these values causes moral and ethical problems.

We never want to loss of these value of local wisdom. Samiran Village is one of the villages in the Selo subdistrict, Boyolali. It located between Merapi and Merbabu mountain. Samiran village is tourism village, this village preserving local wisdom with the traditional ceremony and art. The traditional ceremony like the Metri Tuk Tradition, the Merti Dusun Tradition, the Nyadran Tradition, and the Nyapu tradition in Petilasan Kebo Kanigoro. The traditional art like the Black Mask dance, the Turangga Seta dance, the Prajuritan Turangga Seta dance, Karawitan, Reog dance, etc. We can integrated the cultural value of those Local wisdom in Learning to preserve it for a long time. But on the field study we find in Samiran Village Boyolali, Integration of cultural values from local wisdom has not been done in early childhood learning. The early childhood teacher never do instruction planning, used worksheet more than play approach, applied the conventional instruction with minimize children action, never integrated local wisdom in the instruction, and more.

The early childhood teacher need the training for make the instruction planning with the local wisdom integrated and make the media instruction based on local wisdom. The instruction planning and the media instruction is the knowledge base for early childhood teacher. We need the approach to foster the knowledge base of them. The research of DeJong about “Learning through Projects in Early Childhood Teacher Education” suggests that project learning has great potential to foster a comprehensive knowledge base for teachers. The specific design for implementing projects in any early childhood teacher education have five step include providing initial orientation, brainstorming, investigation of the topic, developing the final products, and student assessment (De Jong, 1999, 317). The project approach builds on natural curiosity, interact, question, connect, problem solve, communicate, reflect and more. It can applied in the rural early childhood instruction teacher training, because the teacher have opportunities for reflect on and refine their strategies, ideas and practice. The problem has motivate to do the research and development in models of teacher training for the rural early childhood instruction based on local wisdom through project approach applied in Samiran Village Boyolali.

RESEARCH OBJECTIVES

1. What models of teacher training had developed the rural early childhood instruction based on Local wisdom ?
2. How is the level ability of early childhood teachers to implementation instruction based on Local wisdom ?
3. How is to make the models of teacher training had developed the rural early childhood instruction based on Local wisdom through Project Approach?
4. How is the efective strategy to apply the models of teacher training had developed the rural early childhood instruction based on Local wisdom through Project Approach ?
5. What models of teacher training the rural early childhood instruction based on Local wisdom through Project Approach can improve the ability of early childhood teachers?
THEORY AND CONCEPT

The Concept of Early Childhood Instruction based on Local Wisdom

The Concept of Local Wisdom

The local wisdom is means wisdom or original knowledge a society from values of culture tradition for organize the system of life society (Sibarani, 2012, 112). Sartini say that the local wisdom is means local ideas that are thoughtful, full of wisdom, good value, embedded, and followed by the people (Sartini, 2004: 111-120).

Element of culture can integrate to National Curriculum and local curriculum (HARTILAAR, 1999). But, several early childhood learning plan made without the values of local wisdom in it. Therefore, the researcher tried to integrated the early childhood learning plan through the seven elements of culture that made Koentjaranigrat. Element of culture consists of language, Knowledge system, religion, Livelihood system, art, social organization, the living system equipment and technology (Koentjaraningrat, 1983). Gisca tried to specialize the contents of local content through the seven elements of culture that made Koentjaranigrat. The elements of culture does not necessarily give a positive story for students. But where the role of the teacher in selecting essential elements for socialized education aims to build character and culture of Indonesia (Gisca Saputra, 2013).

In anthropology, the term local wisdom has known as local genius. Moendardjito says the cultural elements as a potential area for local genius has proven its ability to survive to the present (in Ayatrohaedi, 1986: 40-41). Its features are: (1) Able to withstand foreign cultures, (2) Having the ability to accommodate the elements of foreign cultures, (3) Having the ability to integrate elements of foreign culture into the native culture (4) Having the ability to control (5) Being able to give direction to the development of culture.

Figure 1. Flow chart Concept “the element of culture in Local Wisdom”

Early Childhood Instruction Based on Local Wisdom

The early childhood instruction usually using integrated curricula, especially Webb model. Webbing is process through which teachers develop a diagram based on particular topic/theme (Gordon & Browne, 2014, 318-319). Webbed curricula represent the thematic approach to integrating subject matter (Robin Fogarty, 1991: 54). Several step Webbed model for learning plan made by Workman and Anziano. It’s steps are: (1) Identification
theme for starting point, (2) brainstorming theme to explore activity, and (3) Connect the activities with the aim from curriculum (Workman, Anziano, 1996: 180-183)

Bredekamp says theme have to adaptation with culture and individual variation every child. This theme can explore from child culture, relevant with child’s need, experience, interest, question, feeling, and behavior (Bredekamp, 1992: 126-127). Cultural theme can follow up and depth of exploration, don’t a quick visit culture because like a tourist approach (Derman S, 2010).

The Learning plan include a list of activities, goals for children learning experiences, method of instruction, the teacher’s responsibilities, the time of a day, a week, a month or a specific unit or theme (Gordon & Browne, 2014, 318-319). The project approach consists of exploring a theme over a period of days or weeks. They observe, question, estimate, experiment and research item and event related theme (Gordon and Browne, 2014, 324-325).

The Concept Models of Teacher Training through the Project Approach

In early childhood, projects can be defined as open ended studies of everyday topics which are the method of teaching children through project investigations. Project investigations promote in-depth understanding and cover a wide range of relevant subtopics. Teachers guide through a three phase process:

**Phase 1:** the teacher builds interest in the topic through encouraging them to share relevant personal stories of experience. They represent their current understanding of the topic; and the teacher assesses.

**Phase 2:** They learn about the topic, they go on field visits and interview, look at books, internet sites, videos, and so on. They use many forms of representation to illustrate what they have learned and to share new knowledge.

**Phase 3:** Finally, the teacher guides the conclusion of the study and the assessment by teachers (Gray, 2009)

Model Design

Model of Draft 1a “The Models of teacher training for the rural early childhood instruction based on local wisdom through project approach” consists of conceptual model, procedural model and physical model. The following is this model:
METHODOLOGY

Place of the research did in Samiran Village, Selo District, Boyolali, Central Java, with consideration it have several local wisdom like the metri tuk tradition, the meri dusun tradition, and pranoto mongso. The local wisdom always do with the gotong royong, it often do in Samiran village. The metri tuk tradition is the most frequently than the other local wisdom. Because Samiran village only three kilometers from Merbabu top, so the society have to looking for spring or tuk and keeping the springs.

The research used Borg and Gall design adaptation of Instructional Dick and Carey (The Systematic Design of Instruction) Steps of Systems Approach of Educational
Research and Development. The Step of systems consist of: (1) Identify instructional goal, (2) Conduct Instructional analysis, (3) Analyze learners and contexts, (4) Write performance objectives, (5) Develop assessment instruments, (6) Develop instructional strategy, (7) Develop and select instructional materials, (8) Design and conduct formative evaluation of instruction, it consist: (a) trying out prototype materials one on one, (b) a small group try out with six to eight students, (c) a field trial with a whole class of learners, (9) Revise instruction, and (10) Design and Conduct Summative evaluation (Borg and Gall, 2007 589-591).

The research didn’t do the summative evaluation and a field trial with a whole class of learners. It consist of: (1) Identify instructional goal, (2) Conduct Instructional analysis, (3) Analyze learners and contexts, (4) Write performance objectives, (5) Develop assessment instruments, (6) Develop instructional strategy, (7) Develop and select instructional materials, (8) Design and conduct formative evaluation of instruction, it consist: (a) trying out prototype materials one on one, (b) a small group try out with six to eight students.

In teacher training, Identify instructional same with identify training materials. Conduct instructional analysis, analyze learners and contexts, write performance objective same with identify detail of training materials. Develop assessment instruments same with develop pre-test and post-test. Develop instructional strategy same with develop training strategy with the Project approach. Develop and select instructional materials same with develop and select training moduls. Design and conduct formative evaluation of instruction same with Design and conduct formative evaluation of training, it consist: (a) trying out prototype one group training, (b) a small group try out with eight group training.
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Borg and Gall design
The pre-research to data collect

Planning
The elaboration of draft product

Revision draft product 1
Trial and Test 1

Revision draft product 2
Trial and Test 2

Revision draft product 3
Dissemination and Implementation

Picture 5. The step of research and development: (1) Borg and Gall design, (2) Borg and Gall design adaptation of instructional Dick and Carey for the Model of teacher training for the rural early childhood instruction based on local wisdom through project approach.

The following is the detail of steps. The literature study did to collect information about the local wisdom theme “the Metri tuk tradition”. After that the field study useful to need analysis about document of lesson plan and background of early childhood teacher study. Results of the field study used to determine sample of the prototype test and the small group test.

The model of draft 1 arranged from three phase, and than the model draft 1 did validation with expert judgement. Next the model of draft 1 trial with the prototype trial and analysis to make change the model draft 2. After that the model of draft 2 trial with the small group trial and analysis to make change the final model.

The Technic of data analysis used the Naturalistic inquiry Spradley. It did to have findings for revision model (David Williams, 1989: 111). Quantitative data in the form of categorization data analyse with Wilcoxon test. It did to determine pre-test data and post test data (Yusuf Wibisono, 2009: 638).
THE RESEARCH RESULT

The Literature Study

The literature study of local wisdom theme is Metri Tuk Tradition in Samiran Village Boyolali. The Metri tuk or practice of keeping the springs is a local wisdom to preserve water. Tradition metri tuk consists of: (a) the gotong royong to clean tuk tradition, (b) the festivity or kenduri tradition, (c) the art show tradition, and (d) tradition replant (Harian Joglo Semar, 2015). The metri tuk tradition theme can identification to many theme, the following is:

![Image of Metri Tuk Tradition](image.png)

The Field Study

The field study to document early childhood learning plan did for four indicator. The following is: (a) theme for kindergarten, (2) unit theme plan, (3) weekly plan or RPPM, and Daily plan or “RPPH”, look table 1. The field study did to collect the background of early childhood teacher study, look at the picture 6.

![Table 1. Document of Lesson Plan in Kindergarten](image.png)
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The Model of Draft 2 and the Final Model

The prototype trial did with one group consist of four teachers from Samiran Village for sample. The result from the document study wrote in the checklist instrument. It analyzed on quantitative. The result used for model draft 1 revision to model draft 2. After that the small group trial did with eight group for one district, every group consists of four teacher from Selo district, totally thirty two teachers for one district. The result from the document study wrote in the checklist instrument. It analyzed on quantitative. The result used for model draft 2 revision to final model.

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Model of Draft 2a (Conceptual Model)

1. The teacher builds interest in the topic
2. They learn about the topic and represent it
3. They conclusion of the study and assessment

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Figure 7. Document of Lesson Plan and Background of early childhood teacher study
The models of teaching

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Picture 8. Model of Draft 2b for the Procedural Model

Picture 9. Final Model for the Conceptual Model
The revision model draft 1 to model draft two is the literature and field study process before identification of local wisdom theme. The revision model draft 2 to final model is: (1) Activity analysis process after identification of local wisdom theme, (2) Add the value of Pancasila on Learning plan process.

The following is revision of the physical model, it consist twenty training materials for the rural early childhood teachers.

Picture 10. Final Model for the Prosedural Model

Picture 11. Final Model of the physical model for phase one (teacher build interest topic)
DISCUSSION

The research findings, cooperative teacher in project approach come to better understand the uses of different teaching methods and opportunities for the empowerment of all participant. In group, the teacher can be identified theme to sub theme through the brainstorming process 4 until 6 teachers. The teachers can identified because the theme is natural and cultural potential of the village. They familiar with these theme. Before the training, the teacher never used these themes and they excited for integrate these theme to learning plan. So the effect of the training with the project approach, the teacher in group can improve the ability to understand different teaching methods and empowerment of all participant. The data interpretation of the ability early education teacher to understand different teaching methods consist of learn about the topic and represent it (identification theme to sub theme, make learning plan and make media from local materials) and they conclusion of the study and assessment (setting display and presentation product).

The product of the project like the document of learning plan and media with local materials from teacher can categorized in four stages ability: (1) the survival stage, (2) the consolidation stage, (3) the renewal stage, and (4) the maturity stage. The following is table of significant test:

Table 2. The Significant test for indicator ability of early childhood teacher make learning plan and make media

| Indicator evaluation | Sample (n) | Values of Wilcoxon Statistic (T) | Value p | Judgement |
|----------------------|------------|----------------------------------|---------|-----------|
| Theme planning        | 6          | 6                                | 0,091   | Significant |
| Content planning      | 6          | 6                                | 0,091   | Significant |
| Analysis activity     | 6          | 15                               | 0,030   | Significant |
The result from field study, researcher found the teacher didn’t make learning plan. They use Weekly plan from Education District (same for one district), and the level ability of Teacher in Selo District (especially Samiran village) to make learning plan can’t measure because they didn’t make it. In the research, the learning plan model make with Webbed model from Integrated curricula. The teacher use local wisdom or culture theme to make activity. The phase of the project approach is three phase: (1) The trainer and teachers builds interest topic together from Metri Tuk Tradition to eleven theme, (2) The teachers learn about the topic and represent it. They are identification theme to sub theme, make learning plan and make media from local materials, (3) They conclusion of the study and assessment. They are setting or display their media product and presentation product.

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