Development of Early Childhood Education Teachers (Paud) Skills in Story Activities Using Natural Material Media Potential of Local Wisdom in Tulang Bawang District

Agung Cahya Karyadi\textsuperscript{a}, Uswatun Khasanah\textsuperscript{b}, \textsuperscript{a}Universitas Trilogi, Indonesia, \textsuperscript{b}Universitas Nahdlatul Ulama Lampung, Indonesia

Email: \textsuperscript{a}cahyo@trilogi.ac.id, \textsuperscript{b}uswatunkhasanah@unulampung.ac.id

The purpose of this study was to determine the process of developing the storytelling skills of Early Childhood Education teachers by utilizing the natural media potential of the local wisdom of Tulang Bawang District, Lampung Province, Indonesia. The research in this study used the method of research and development of Borg and Gall which adapted ‘The System Design of Instructional’ and called it the ‘Steps of System Approach Model of Educational Research and Development’. The results of this study include learning materials in the form of appropriate print modules for Early Childhood Education teachers. The data shows that the natural media potential of local wisdom can develop the storytelling skills of Early Childhood Education teachers. Storytelling skills that can be improved through the natural potential of local wisdom include: the appearance of the teacher in raising local cultural stories by using the natural potential of local wisdom whether being able to convince children, high self-confidence when telling stories, and interesting storytelling skills for children. Teachers can develop their skills in storytelling by understanding storytelling techniques which consist of the ability to practice volume, diction, tempo and mastery of the stage, and mastery of the material. In mastering the content of the story, the Teacher showed appreciation, improvisation and imagination that was integrated with the contents of the story so that the storytelling skills of Early Childhood Education teachers developed and improved well by utilizing the natural media potential of local wisdom.

Key words: Storytelling Skills, Early Childhood Education, Natural Material Media, Local Wisdom Potential.
Introduction

Storytelling is an effective strategy of using aesthetic ways to promote instruction. In addition to improving students' academic performance in the field of reading and writing, storytelling also has the ability to improve skills in education and motivate children to connect with their learning (Sara Miller and Lisa Pennycuff, 2008). Storytelling is a special skill that must be possessed by an Early Childhood Education teacher, to convey knowledge and instil character values to early childhood. By telling stories, teachers will more easily convey messages to their students. Thus, storytelling is the right activity to build children's character from an early age, by storytelling the teacher can stimulate cognitive development, language development, social emotional, psychomotor development and other developments. But in reality, there are still many Early Childhood Education teachers who cannot master the storytelling technique.

Learning is still done conventionally by giving paper and pencil for drawing and writing. This is still very far from what is expected, because basically children like to listen to stories for character formation and cognitive stimulation which can develop according to their age. By telling stories in learning activities allows students to provide real experiences in everyday life from the concept of the themes they learn. Storytelling activities are mostly done in learning in preschool and elementary school. Nuala Sweeney-Burt in his article suggested that the use of a structured approach to digital storytelling as a tool for meaningful technological integration with children at the elementary level. In this study, researchers developed a structured approach to implementing digital storytelling with elementary school children and collaborated with classroom teachers in Irish elementary schools to prepare for applying the storytelling approach.

Aside from being a teacher and educator, a teacher of Early Childhood Education is also an agent of change that can bring deviations and progress to education in a better direction. Teachers can initiate innovation in learning by using a lot of learning strategies. Storytelling is not just talking and reading a story book but there are techniques that must be learned in storytelling. Storytelling is a universal method of communication that is very influential on the human soul, especially for early childhood. Listening to teacher storytelling interspersed by questioning creates the closeness of the teacher and students psychologically as well as natural and useful interactions for the absorption of learning material. This is because students feel they are in a comfortable and pleasant area so that the teaching and learning process can succeed as desired. P. K. J. Tobin in his article explained how to explore the potential uses and benefits of storytelling that are briefly included and analysed to illustrate how a story can be used; he also reported his own experience of using stories in his teaching activities.
Many benefits can be obtained from telling stories for both the teacher and the students including: first, it can build emotional closeness between the teacher and students. Second, as an effective message delivery media. Third, as a place of education by training imagination and fantasy. Fourth, to channel and develop children's social emotions. Fifth, help the process of identifying imitations of the good deeds of the characters in the story. Sixth, giving and enriching inner experiences. Seventh, as a means of entertainment and attention to students. Eighth, can arouse children's interest in reading or literacy. Ninth, as a means of building the noble character of children from an early age.

The storytelling activities for Early Childhood Education teachers in learning are very effective for improving cognitive, language, social emotional, psychomotor and other developments of these students. The ability to tell stories when delivered properly will greatly support the transmission of a moral message to students. However, there are still many teachers who do not master and even do not understand the storytelling technique. In general, there are several reasons for the low aptitude of teachers in storytelling, including:

1) A low interest in reading; reading activities are closely related to activities of personal development skills to tell stories.
2) Currently the teacher is very preoccupied with teaching activities in front of the class, so that self-development through reading cannot be fulfilled.
3) Limited availability of media facilities for teachers in learning storytelling techniques.
4) Lack of confidence and lack of experience in undertaking storytelling activities.
5) Not understanding teachers in the basic techniques of telling stories so they are not skilled in telling stories.
6) Low motivation to listen to storytelling activities.

In the storytelling activity there are many forms of media that can be used. Some media forms come from nature which are called natural material media. Natural media available in abundant nature can be used to improve the storytelling skills of early childhood education teachers. Nature provides so much for all the needs of human life. Children can be introduced to the potential of nature in their area to increase their knowledge and care of nature from an early age. However, there are still many who do not realize the natural potential possessed by a very rich area that provides all human needs. These natural materials can come from plants and animals that are around human life. Besides being able to save costs, the use of natural materials can explore teacher creativity in creating and developing natural media in the learning process to improve students' knowledge and abilities and character formation early on.

Departing from this, the authors consider it very important to carry out research in improving the skills of storytelling for teachers of Early Childhood Education by utilizing the natural media potential of local wisdom; through basic technical training activities telling stories to
teachers of Early Childhood Education. Thus, it is expected that Early Childhood Education teachers can contribute to advance the early childhood education to the fullest and facilitate in instilling knowledge and character building from an early age.

**Theoretical Review**

**Storytelling**

Storytelling is a traditional mechanism for sharing knowledge about wisdom and culture in organizations (Sole and Wilson, 2002). Stories usually include characters, plot, twists, and narrative perspectives and reflect skills, organizational norms, values and culture (Hyde, 2008; Swap et al., 2001). The stories that are conveyed can convey knowledge, information and emotions, both explicit and covertly are influential ways to represent and communicate complex and multi-layered thoughts (Snowden, 2000). Furthermore, Swap et al. (2001) concludes that if a story can be understood it will almost always positively stimulate cognitive connections with listeners of personal experience, providing experiences that increase the likelihood of being remembered (Parry and Hansen, 2007; Sims et al., 2009).

Storytelling is part of a qualitative, narrative research method that studies a whole person in context, trying to describe a phenomenon in depth that contradicts documenting correlation (Josselson et al. 2002; Lieblich et al. 1998). By encouraging participants to tell their stories, researchers can take advantage of cultural patterns and structures that govern the context of success (Houston 2000). The story conveys information in creating a feeling of time and incorporating perceived feelings, giving new perspectives and clarity to understanding experiences, and showing pattern (Krueger, 2004). As Nelson (1998) says, through stories metaphorical knowledge is a map of life. These maps show the quality of what creates what events. Youth may also be more inclined to tell a story in a third person about their experiences since talking about other people creates distance and emotional security, rather than telling difficulties and personal success stories (Tafoya 1982).

Storytelling depends on the listener; this strategy utilizes elements of social language. The researchers have found that literacy is the most effective instruction when developed through social interaction and collaboration with others (Dugan, 1997). From several opinions above it can be concluded that storytelling is an activity of sharing knowledge, information and emotions to positively stimulate cognitive and personal experience.

**Natural Material Media**

Learning media for natural materials in question are materials that is in the vicinity. Whittaker (2004) reveals that natural materials are found in the ground as part of animals or plants. Natural materials are found in the nature and are found in the land or parts of animals
or plants. Natural materials are easily found around the child's environment. While, Isbel (1995) expressed his opinion about natural materials for early childhood learning namely, Young children are curious about the things that are in their world. Encourage questioning in the nature centre where children learn about materials they have seen or exploring their new capture of interest. This idea allows children to examine things closely, compare and contrast, and also draw conclusions about their activity. This can mean that early childhood has a curiosity about things in their world and this encourage children to ask questions about ingredients that they have never seen or examined, according to his interests.

Furthermore Pamela (2007) explains her opinion regarding early childhood learning by using nature as follows: "Young leaners are naturally curious, willing to explore and excited to share what they have discovered. Many young children have extensive background knowledge that is interested to them, such as nature and animals.” This statement means that early childhood has a natural curiosity, a desire to research and they love to share what they find. Children have a broad background of knowledge about topics that attract attention such as nature and animals.

Jahn Lighthart in Musbikin said that the learning materials that exist in the environment around the child are easy to remember, see and practice so that learning activities become functionally practical. Every ingredient in the environment around the child can be used to attract the attention of children. Kohen in Kostelnik (2007) says that, "Many cognitive and aesthetic activities may be developed for use in natural settings". Children develop a sense of respect and responsibility for the natural environment, which also contributes to their quality of life. This statement can be interpreted as cognitive and aesthetic activities can be developed by naturalizing activities. Children will develop respect and responsibility for the natural environment that contributes to their lives.

From the description above it can be concluded that natural materials are tools, materials and objects that exist in the natural environment, which include biotic and abiotic nature, directly available in nature which can be used as learning resources or learning media for early childhood.

**Local Wisdom Potential**

Paulo Freire (1970) explained about local wisdom, namely education, allows teaches and students to be concrete in what they face. Whereas, according to Keraf (2002), local wisdom includes all forms of knowledge, beliefs, understanding, insight, as well as customs or ethics that define human behaviour in their lives, within the ecological community. Furthermore, Mariane revealed that local wisdom is a value that is considered good and right so that it can last for a long time, it can even be institutionalized. The relevant concept of eastern local
Local wisdom is integrated into the curriculum in secondary schools including: local wisdom about caring for the environment, knowledge of classifications of plants, animals, knowledge of traditional medicines and health care (Andam, Muhammad, Yusminah, 2015). Integration of local wisdom in learning tools embodied in the learning process can develop a caring attitude towards environmental balance (Dewi, Poedjiastoeti, Prahani. 2017).

Local wisdom contains high values, truth and goodness, and becomes a guideline, making a pattern of relationships between people as a basis for the vision of life (Kuntoro (2012, p. 6). Local wisdom can facilitate character-based education (Suswandari, 2017). Local culture-based learning models are effective for developing basic competencies in knowledge of middle school students (Suastra and Nengah, 2010). Local wisdom values have the potential to develop assessment and improvement, it is not impossible to develop several learning models or methods (Toharudin & Kurniawan, 2017). Syafri Anwar and friends (Syafri. Et, al, 2019) explained about local wisdom as a learning tool and an attitude assessment instrument based on local wisdom to develop positive characters and preserve national cultural values. From some of these opinions it can be concluded that wisdom local knowledge is based on truth values that can actually be felt by humans for a long time.

![Figure 1. Media of Natural Material potential of Local Wisdom from Stems of Cassava Leaves](image1)

![Figure 2. Media of natural material of local wisdom from cashew](image2)

![Figure 3. Results of a mixture of colours from cashew, cassava extract and teak leaf tops.](image3)
Research Methods

This research was conducted in Tulang Bawang, Lampung Province, Indonesia. The research was conducted in September 2018 until March 2019. This research is a development research known as Research and Development (R & D). This type of research and development refers to Borg and Gall (2015) who adapted ‘The System Design of Instructional’ (Dick and Carey, 2015) and called it the ‘Steps of System Approach Model of Educational Research and Development’. Basically, research and development in education is a process for creating and validating educational products such as media, methods, and models that fit the needs in the field.

The steps in research and development developed by Dick & Carey have 10 steps, but this research only reaches the 9th step. The following are the 9 research steps:
1) Analysing the need to identify general learning goals;
2) Conduct learning analysis;
3) Identify the behaviour and characteristics of students and context;
4) Formulate specific learning goals;
5) Develop assessment instruments;
6) Develop learning strategies;
7) Develop and choose learning materials;
8) Design and implement formative evaluations (validity tests by experts, one to one test of students, small group trials, field trials);
9) Revise learning. Data collection techniques in this study used interview and discussion methods conducted with teachers and through One to One Evaluation (One-on-one evaluation with students and product experts), and Small Group Evaluation (small group evaluations of all students in class, documentation, observation and questionnaire).

Results and Discussion

Results

The results showed that the use of natural ingredients to improve and develop the storytelling skills of Early Childhood Education teachers in Tulang Bawang, Lampung Province, Negara Indonesia was very effective and efficient; after receiving training on storytelling techniques for Early Childhood Education teachers. In this study the teacher is the subject of training. Teachers are very enthusiastic and motivated to be able to provide the best learning so they can improve their students' literacy skills. The teacher makes stories based on the theme of local wisdom that will be learned on that day and makes learning media made from natural ingredients of cassava trees. Other natural media used in enhancing storytelling skills are cashew fruit juice mixed with teak leaf tops which are fed with grated cassava juice so that it becomes a natural dye that is safe to use for children. This natural dye is used for drawing
that will be used as a medium for storytelling. This strategy sharpens teacher creativity in creating the right media and in accordance with the development of their students.

The results of product validity tests were conducted on 4 learning media experts, Early Childhood learning design experts, linguists, and Early Childhood learning material experts. Based on the results of interviews with media experts, it was noted that the media used based on cassava tree stalks could not last long because they were made from plants that were still wet, advice was given on how to make natural media that could last longer so that they were not made before being used in activities learning to save energy and time to make it. However, on the other hand, natural media can be renewable and safe in its implementation. One to one student trials were taken from teacher participants who had high, medium and low storytelling skills. All three were asked to tell stories guided by researchers. The effectiveness of the use of development products is seen from the gainscore value and the percentage of speaking skills. The increase that occurs before and after learning is calculated by the N-gain formula which is determined based on the normalized score gain average (g), which is the comparison of the gain score. The normalized gain (N-gain) is expressed by the equation as follows.

\[
< g > = \frac{S_{post} - S_{pre}}{S_{max} - S_{pre}}
\]

Description:

\( S_{post} = \text{Average Post-test Score} \)

\( S_{pre} = \text{Average Pre-test Score} \)

\( S_{max} = \text{Maximum score} \)

Then to interpret the gain value data (Richard R Hake, 1998) the classification of gain values is as follows:

<table>
<thead>
<tr>
<th>Value (g)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>((&lt; g &gt;) \geq 0.7)</td>
<td>High</td>
</tr>
<tr>
<td>(0.7 &gt; (&lt; g &gt;) \geq 0.3)</td>
<td>Medium</td>
</tr>
<tr>
<td>((&lt; g &gt;) &lt; 0.3)</td>
<td>Low</td>
</tr>
</tbody>
</table>

The results of the development and improvement of teacher storytelling skills after the final assessment showed a better improvement, reaching 75.2%.

The one to one test results explained that:

a). Teacher's performance related to self-confidence, storytelling techniques, material mastery, and storytelling skills had not been mastered by the three teachers.

b). Mastery of material and storytelling techniques are not mastered by teachers who have moderate abilities,
c). Teacher's appearance of self-confidence and ability to tell stories and mastery of material are not mastered by teachers who have low abilities.

The trials of this small group still show up many teachers who have not mastered the techniques of storytelling as well as their low self-confidence, so the storytelling techniques, material mastery, storytelling skills and confidence of Early Childhood Education teachers needs to be improved. The results of field trials were carried out for all Early Childhood Education teachers from the Tulang Bawang area in North Lampung, Indonesia, with a total of 50 teachers.

**Storytelling Techniques**

There are several kinds of storytelling or storytelling techniques that can be used, among others, teachers can read directly from books, use illustrations from 120 images, use flannel boards, and/or play roles in a story (Nurbiana Dhieni, 2008). Asfandiar and Andi Yudha explain there are 3 kinds of storytelling techniques, namely:

1. The interpretation technique is to find the purpose, purpose, meaning, meaning and so on of a text or story text. The information that a storyteller must find is:
   a. Find the purpose, purpose, meaning and meaning of the text globally / as a whole.
   b. Finding the characters in the story, then able to turn on the character by giving the right character to the characters in question.
   c. Sort the parts of the text (show it or say it).
   d. Understanding the storyline well, the storyline is usually divided into:
      • Prologue, usually a prologue containing exposure / exposition. Identification of characters and settings both place and time settings.
      • The middle part of the story; usually contains an introduction to the problem, character development, conflict and peak.
      • Epilogue, the ending / closing story contains a solution, usually accompanied by a moral message. Moral messages can be integrated directly into the story or mentioned separately

2. Representation techniques, namely how to deliver text or text stories using the body as a tool / media storytelling. Parts of the body needed for presenting a fairy tale is:
   a. Vocal is how you can produce sounds that come out to show emotions in a sentence correctly. Vocal capabilities can be processed in several ways, namely:
      • Exercise enlarges vocal power by sounding out vocal letters alternately accompanied by good breathing techniques
      • Intonation training
      • Articulation exercises
• Sound colour selection exercises, character voice characters usually consist of two, namely the role of the antagonist and protagonist. The rest is influenced by the character's own body size, as well as the basic character attached to the character.

b. Gesture is related to how you position your body movements that are tailored to the content/storyline, by relaxing and orderly to evoke the imagination of the audience.

c. Respiratory Technique how do you adjust the intensity of sound production when you find very long sentences in a fairy tale text.

d. Appreciation relates to how you live the sentences when you stage a fairy tale script. Living can be trained by practicing emotions, there are several categories of basic human emotions, namely:

– Angry
– Sad
– Happy

3. Good creativity is supportive creativity as storytelling is not debilitating. There are several ways to find the right creativity, namely:

• Find settings for the time and place of a fairy tale/text
• Selection of costumes
• Property

Skill of Storytelling PAUD Teachers Use Natural Materials Potential Local Wisdom

Storytelling can foster change and allow the exploring of organizational activities with power, plurality identity learning, sharing knowledge (Andrew D. Brown. Et, al, 2009). The researchers studied the effects of storytelling and read stories about language development and understanding, for children aged from three to five, the results showed that groups who heard stories experienced better understanding than groups who did not hear the story. This is because storytellers tend to use repetition of words and body language rather than just reading stories (Isbel, et. Al. 2004).

Mello (2001) conducted a meta-analysis of eight studies on the use of storytelling as a pedagogical strategy. The analysis included information from interviews before and after participants, students retelling, measuring fluency, and writing samples from students. Studies show that participants' literacy is improved in the academic field of fluency, vocabulary mastery, writing, and remembering. In addition, he found that storytelling functions to increase self-awareness, visual image, and cultural knowledge. The human factor that arises from the instruction in storytelling makes the researchers consider cultural elements. From some of these studies it can be seen that storytelling activities can foster emotional closeness between the teacher and students so that a comfortable and safe atmosphere is built in the learning process and so the parties do not feel fear and does not
allow students to become bored and not motivated in following the learning process. Students feel the calm that creates self-confidence to be actively involved in learning. Interest arising from storytelling activities can provide a very valuable and real experience that is directly experienced by students. Storytelling activities in the learning process are very well liked by children. Therefore, an Early Childhood Education teacher is required to be able to have the ability to tell stories by mastering storytelling techniques that can attract the attention of their students and motivate them to foster interest in and stimulate children's development according to their stages.

Storytelling activities can use media to attract students' attention. The storytelling skills that must be possessed by a teacher of Early Childhood Education are:
1). Teacher's appearance, things that can be assessed from this appearance are high self-confidence;
2). Storytelling techniques, including volume, diction, tempo and mastery of the stage;
3). Mastery of the material (how to master the contents of the story he brought, appreciation, improvisation and imagination integrated with the story),
4). The ability of Early Childhood Education teachers to tell stories. The media used can vary. One of the learning media that can be used in storytelling is a medium of natural materials that is very easy to obtain because it is available in the environment around us.

The potential of local wisdom is two parts, namely the potential of nature and cultural potential. While the media of natural materials is the potential of local wisdom that is of nature. With the media of natural materials teachers are required to be more creative in creating and developing learning media in stimulating the development of children at each stage, namely cognitive, social emotional development, language, psychomotor. Children are also introduced to the potential of local wisdom in order to be able to recognize the potential possessed by the area where they live to be able to maintain and preserve the surrounding natural environment as a source of human life.

**Conclusion**

Based on the results of field research analysis, the data shows that the storytelling skills of Early Childhood Education teachers can develop and experience an increase through the use of natural media and the potential of local wisdom used and found in the area of Tulang Bawang, Lampung Province, Negara Indonesia. The skills that can be improved are as follows:

1. the confidence of the teacher,
2. better storytelling techniques,
3. mastery of story material; and
4. an overall ability to tell stories.
In addition to increasing teacher storytelling skills, Early Childhood Education teachers are also increasingly creative in creating natural ingredients derived from cassava tree stalks. Teachers and students become more sensitive to the culture and natural potential that surrounds them so that people who appreciate the potential of local wisdom are created.

**Recommendation**

Storytelling activities have become a strategy in the learning process in the classroom. Many of the studies that have been carried out are related to storytelling activities and are still a trend among educators. Although the storytelling activities have been handed down from ancient times, there are still many who do not know how to tell stories that are decent and can attract the attention of listeners. They only read story books without understanding how the story can be well received by the listener. Not only do teachers need to be skilled in storytelling, but more so for parents who are very close to their children and responsible for their future. Because telling stories will build chemistry between children and parents, bringing them closer together. An aspect for future studies is to hold basic storytelling training for parents and elementary school teachers in preparing the golden generation of nation's successors.
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