"ASICT" Learning Model in Vocational Education in 3T AREA'S

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Abstract
The Result of this study are presented that the ASICT model are fit in vocational school in the remote area, and the best ways of teaching and learning in those kind of situation and place based on the study. Technological Use aspect are refuse and rejected to be implement, because of the knowledge about IT literacy and also the supporting infrastructure are not good in the 3T Place. The models also suitable to implement in the big city because of the supporting infrastructure are good. The comparative methodology are used as the method. It also the best ways to compare the model are found by the early research and compared to the implemented curricula, and measured to knows the best aspect that accepted and implemented to the subject of the research.

Keywords: ASICT model, 3T Area, Vocational School

1. Introduction

Indonesia with a wide and heterogeneous region, geographically and socio-culturally, requires appropriate efforts to overcome various problems, including educational problems in the 3T area (Frontier, Outermost and Disadvantaged). These problems include those related to educators, such as shortages of teachers (shortage), unbalanced distribution of teachers, under qualification, lack of competence (low competencies), and incompatibility between educational qualifications and mismatched areas, low school enrollment rates, inadequate infrastructure and infrastructure for easy access to education that are still lacking. As part of the Republic of Indonesia, the 3T area needs an effort to improve the quality of education that is managed specifically and seriously in overcoming the problems above, so that the 3T area with the development of the 3T regional learning model can advance together with other regions. This matter must be the government's attention especially the Ministry of Education and Culture and the Ministry of Research, Technology and Higher Education considering that the
3T region has a strategic role in strengthening national security and the integrity of the Republic of Indonesia.

One of the policies of the Ministry of Research, Technology and Higher Education in the context of accelerating education development in the 3T area, is the Forward Joint Program, Educate Indonesia (MBMI). This program includes (1) Undergraduate Educating Program in 3T area (SM-3T), (2) Integrated PPG Program and Additional Authority (PPGT), and (3) Collaborative PPG Program (Collaborative PPG). These programs are part of the answer to addressing various educational problems in the 3T area. Learning approaches and models are intended to help overcome the shortcomings of teachers in providing learning material, while preparing professional teachers who are strong, independent, and have a caring attitude towards others, and have the spirit of educators to educate the nation’s children, so they can advance together to achieve noble ideals.

2. Discussion

Some findings of educational problems raised by Kompasiana.com (April 4, 2014) [13], mainly in 3T areas include findings targeted at educator problems, such as shortages of teachers, unbalanced distribution of teachers. For each region, the standard qualification is still below the standard (under qualification), the lack of competency (low competencies) of the teacher, and the incompatibility between the qualifications of education with a capable field (mismatched) by the assigned teacher. Another problem in the implementation of education is that the dropout rate is still relatively high, while the school enrollment rate is still low. As part of the Unitary State of the Republic of Indonesia, improving the quality of education in the 3T area needs to be managed specifically in earnest, especially in overcoming these problems, so that the 3T region can immediately advance parallel to other regions.

Improvement for each policy, essentially is a change, which should be done from time to time. However, every improvements are often addressed as new things that can sometimes lead to different perceptions for every policy maker and policy implementer. Fullan (2001) [8] said, there would be differences in perceptions between policy makers and implementers policy for any changes in the education sector. From the side of policy makers, there is an assumption that teachers generally tend to implement policies less like the change. Conversely, teachers tend to believe that the intended change is for the benefit of policy makers and not entirely based on a strong and clear philosophy about the need for change. Teachers too believe that generally policy makers do not understand the facts that occurs when the learning process is carried
out. Bennie and Newstead (1999) [2] assert that every change always meets constraints in implementation. Related to changes in curriculum policy, several factors that led to the emergence of constraints included, among others, expectations from parents, scarcity of learning materials including books lessons during the implementation of the new curriculum, lack of clarity of concept new curriculum, and teachers lack the skills and knowledge associated with the new curriculum. Whereas Nolder (1990) and Snyder et al. (1992) [4] stated that another obstacle concerns the possibility of teaching burden increase, the role of teachers who change as facilitators, and reporting systems.

Furthermore Charters and Jones (1973) [3] stated that every change in the education sector should be followed by efforts to observe various forms operational in the field as a follow-up and implications of policy changes that. Any constraints or obstacles must be anticipated before they arise big and complex problems. Inability to overcome these obstacles will cause a failure in the implementation of the policy or change.

A study shows that generally the obstacles encountered are in implementation of a curriculum is a lack of teacher competencies. Often happens that the implementation of a new curriculum is not followed by consideration of abilities teacher and action on how to improve the ability of teachers as the spearhead in the implementation of the curriculum in question This is supported by Fennema and Franke (1992) [7] who stated that good ability the skills and knowledge of a teacher will influence the learning process at class and determine the extent to which the curriculum can be applied.

According to Middleton (1999) [10], successful or not implementation of the curriculum renewal tends to be determined by the perception or belief possessed by the teacher. Curriculum changes are related to changes in learning paradigms. Change the paradigm either directly or indirectly will have an impact on the teachers at where do they need to make adjustments. Very possible adjustments made will provide an inconvenience to the learning environment for the teacher concerned. Some cases indicate that teachers will be supportive implementation is intended if they understand the new curriculum rational and practical. Bennie and Newstead (1999) [2] suggest for upgrading for teachers intensively to be able to understand the philosophy and substance of the new curriculum.

In order to succeed, they suggested that the curriculum changes not be implemented more first before factual belief was obtained that the teachers really knew what which should be done with a new curriculum. In other words, implementation a new curriculum requires time in the transition process.

Improving the quality of education in the 3T area is an important step to strengthen the national defense system in the region through education and culture. Increasing
access to education in the 3T area will erase the stigma of the national political gap regarding increasing resources and infrastructure, as well as making residents in 3T areas feel part of the Indonesian state.

In order to improve the quality and relevance of education, there is also an increase in the number and quality of educators and education personnel, including through the provision of auxiliary teachers, provision of teaching materials, especially textbooks and educational display equipment, strengthening life skills education and structuring relationships between educational institutions and the industrial world. Students’ interests and talents are developed through various student activities including scientific and Olympic work competitions, both at national and international levels.

Some of the implementation of education in Indonesia face problems in terms of unfavorable geographical location, natural disasters, and socio-economic and cultural problems. Education is still far from expected both from the availability of books, teacher quality, teaching and learning process, teacher absenteeism and so on. That is the phenomenon of education that occurs in the 3T area.

The issue of education can only be overcome if we also focus on overcoming the main problem, how education management is able to meet minimum service standards as determined by the National Education Standards Agency (BSNP). In its development, education providers in the Frontier, Outermost and Disadvantaged (3T) regions face their own complexities ranging from how to provide qualified educators, ongoing education with guaranteed quality, to equal access to education.

Although we do not discriminate, but in reality the implementation of education in the 3T area will always be left behind. Bringing teachers to the 3T area is not as easy as we thought even though many incentives were provided. The average teacher in the 3T area who does not come from the area is not ready to face the condition of the region, moreover not the same as the cultural background in which they grew up and grew up.

### 2.1. Education on remote area (3T)

Unlike the urban community in general, who have realized the importance of education for their children. In the Dayak community in the Region 3T the awareness of sending children to school is still low, their views or thoughts are very simple, which is limited to meeting the needs of their families and communities. Livelihoods as farmers and shifting fields need a lot of labor so that all family members are involved in farming and managing rubber plantations. Daily time for people in the 3T area is devoted to earning
a living in agriculture, and at certain times they cross into neighboring Malaysia to sell their agricultural produce.

As a consequence of shifting cultivation farmers, working in the rubber plantation sector owned by the people (Dayak people), and having to go far by foot to neighboring Malaysia, they did not have time to think about the education of their children. Sometimes their children are still students at school, but in certain seasons when farming or when they have to go to neighboring Malaysia to sell their agricultural products, parents will include their children to join together, so What happened? their children did not take part in the learning process in the classroom for a long time. Parents prefer their children to leave the learning process rather than being in class so that when the exam gets good grades.

Inequality of educational conditions in the 3T area is not new. The “face” of education in the 3T area is inversely proportional to what happens in big cities, and neighboring countries whose location is not so far and very clearly visible. In Malaysia for example, schools are well built, sometimes equipped with student dormitories. The teachers who were sent to teach there were young teachers who were able to teach and were given proper and appropriate salaries.

Improving the quality of education in the 3T Region is an important step to strengthen the national defense system in the region through education and culture. Increasing access to education in the 3T area will erase the stigma of the national political gap regarding increasing resources and infrastructure; also makes residents in the 3T area feel part of the Indonesian state.

2.2. Vocational education system

Vocational education as defined by Webster’s dictionary as “training for a specific vocation in industry or agriculture or trade” (Webster, 1993). This brings up the question as to when was this practice started, if it is still in practice today, in what form, and if it is a necessary practice needed in today’s advanced society.

This education practice dates back to the ancient Egyptians, Babylonians, and Orientals. In these times the ruling leaders or government felt little or no need for organized education, yet there was still a need for skilled tradesmen. Skills were learned in the form of an apprenticeship, usually from a father or master craftsman. The goal of the apprentice was to become skilled enough to prove valuable. Valued workers were able to attain secure jobs and were considered to be successful whatever their job may have been. This process continued for hundreds of years, making skilled tradesmen valued
and respected in their community. This was until the social marker known as the FIRST RIFT.

Vocational education seemed to be taking a less than predictable path throughout its evolution; As defined earlier vocational education is- “training for a specific vocation in industry or agriculture or trade”, but what was this trade? What were we training ourselves for? In the early 1800s America began to define itself as a country and over the next 100 years we had a pendulum swing like none the world had ever seen before. With the invention of the Newcomen steam engine, the locomotive and steam boat, and new manufacturing techniques, America began a change from farming to an industrial era. With this change we saw the growth of cities.

The small town farming communities were being replaced by large cities, mainly due to the ability to transport goods from one area to another. No longer did towns have to be entirely self-sufficient. With the change in lifestyle, we saw a dramatic change in education. An educated labor force was needed to fuel this growing industrial machine. Workers needed to know not only how to read and write, but how to operate the mechanical machinery of the time. Society believed that it was the public school’s responsibility to provide skilled workers to the new and growing industrial community. Many people believed that in order for our nation to grow and survive we needed to place more emphasis on vocational education.

The research approach used research and development with Borg and Gall (2003) [11]. The method used in this study is a descriptive research method that uses a Focus Group Discussion approach with resource persons from various circles ranging from the Office of Education, Principals and Teachers, College of Education, cultural figures, community leaders and parents totaling 29 people with the following distribution:

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinas Pendidikan</td>
<td>9</td>
<td>31.05</td>
</tr>
<tr>
<td>School Principe and Teacher</td>
<td>9</td>
<td>31.05</td>
</tr>
<tr>
<td>Society</td>
<td>11</td>
<td>37.9</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

2.2.1. Compatibility of the curriculum with community circumstances

The implementation of the current curriculum determines directly felt by the community. Based on the results of the research that has been conducted it turns out that only 10
TABLE 2: Grid Chart of Educational Organizing Instruments.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Statement Item</th>
<th>Number of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>1. School building</td>
<td>1,2,3,4,5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Classroom</td>
<td>6,7,8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Learning facilities</td>
<td>9,10,11,12</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>4. School library</td>
<td>17,18,19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Office space</td>
<td>13,14,15,16</td>
<td></td>
</tr>
<tr>
<td>Workforce</td>
<td>1. Complete number</td>
<td>1,2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Dedication</td>
<td>3,4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Level of well-being</td>
<td>5,6</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>4. Provision of facilities</td>
<td>7,8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9,10</td>
<td></td>
</tr>
<tr>
<td>Cost of education</td>
<td>1. Costs</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Subsidies</td>
<td>2,3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>3. Family sources</td>
<td>4,5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Scholarship</td>
<td>6,7</td>
<td></td>
</tr>
<tr>
<td>Graduate competence standard</td>
<td>1. Further education</td>
<td>1,2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. National Examination</td>
<td>3,4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Working Capital</td>
<td>5,6</td>
<td></td>
</tr>
<tr>
<td>National Curriculum</td>
<td>1. Development</td>
<td>1,2,3,1a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Benefits</td>
<td>4,5,6,2a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Profession</td>
<td>7,8,9,3a</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>4. Active</td>
<td>10,11,12,4a</td>
<td></td>
</tr>
<tr>
<td>Local Curriculum</td>
<td>1. Development</td>
<td>1,2,3,1b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Benefits</td>
<td>4,5,6,2b</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>3. Profession</td>
<td>7,8,9,3b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Active</td>
<td>10,11,12,4b</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>55</td>
<td>55</td>
</tr>
</tbody>
</table>

percent of the people stated curriculum suitability and easy implementation, 50 percent said it was normal and 40 percent stated it was difficult. This means that the existing curriculum is still not suitable for the conditions of the local community because the impact cannot be directly felt by the community.

Government support

The curriculum implemented in each education unit is a curriculum derived from the central and regional governments, so the education unit feels full of support from the government in its implementation.
Additional local wisdom content curriculum

The curriculum that is currently felt by the community is still inadequate, therefore it is necessary to add a curriculum on local content in the form of life skills and safeguarding the value of local wisdom which is felt to have eroded. Some people (54%) felt the need for...
additional local content curriculum, and 11 percent felt the existing curriculum did not need to be added to local content.

![Figure 3: Additional Curriculum in 3T Areas.](image)

2.2.2. Local content curriculum

Most of the 3T areas are regions with a geographical location having a sea area, so the community wants the learning of skills in local content that supports the livelihoods of the 3T area, namely cultivation and processing of marine products. This will greatly help the economy of the community and as a provision of skills that are directly beneficial to the family.

2.2.3. Competency of educators

In order to achieve student competency towards local content based on local wisdom it is very necessary for education personnel who truly understand and are competent about the culture and potential of the region, customs and wisdom values that apply in the area.
2.3. Suitability of the curriculum with regional socio-culture

The expectations of the curriculum community that need to be added to the content or content of the existing curriculum, namely the curriculum that accommodates religious values in each subject (54%) and only 11 percent include the regional social culture in the form of local wisdom. This is possible because the community considers religious values that can be a guideline for their children in every step that has begun to decline in quality with the penetration of outside culture.
Figure 6: Suitability of the Curriculum with Socio-Culture in the 3T Region.

2.4. “ASICT” model of teaching and learning in 3T remote area

Figure 7: ASICT MODEL In Teaching and Learning remote area (3T).
2.5. Asimilation principle

The term assimilation comes from the Latin word, assimilare which means "to be the same ".1 The word in English is assimilation (whereas in Indonesian becomes assimilation. In Indonesian, synonyms the word assimilation is assimilation. Assimilation is a social process that occurs at the advanced level.2 The process is marked by the efforts to reduce differences between individuals or human groups. When individuals assimilate inside a group, meaning that the culture of the group's individuals is fused. Usually in this smelting process there is an exchange of cultural elements. Exchange this can occur if a particular group absorbs culture other groups.

Assimilation can be defined as a marked social process with efforts to reduce differences exists between individuals or groups of people and also includes efforts to enhance action, attitude and mental processes by paying attention to interests and shared goals.

In a different sense, especially relating to Inter-cultural interaction, assimilation is defined as a social process arise when there are: (1) different human groups culture, (2) individuals as members of the group are mutual get along directly and intensively in a relatively long time, (3) the cultures of the human group are respectively change and adjust to each other. Usually the groups referred to in a process of assimilation is a majority group and some minority groups.

A teacher must be able to explain various aspects related to the environment. The aspect of cleanliness of the home environment in a small scope is very important to be understood by students where students are expected to always help parents clean the house and yard. Besides talking about the environment, a teacher relates to beauty, because a good environment cannot be separated from the beauty factors that will be gained through reforestation. Reforestation is not only a matter of government but also at home. The use of land available for reforestation is important to create clean and cool air in addition to obtaining economic benefits.

2.6. Supporting principle

To carry out learning, there needs to be support from various parties concerned. area As an example in learning with an environmental theme. Because teachers who are placed as teachers who provide material do not master the local wisdom in the area, then involving community leaders who are more qualified in delivering material related to customs and cultural values. In addition to those related to learning material, of course
the availability of facilities and infrastructure needed is not only the responsibility of the government but can also involve the community and other institutions. An example for agricultural practicum is how to grow rice, students can practice in the fields owned by residents. In addition to the higher class, the introduction of science and technology was carried out in other institutions to discuss computer devices because schools did not have a computer. For health materials, for example, students were brought in by puskesmas doctors to explain the importance of washing hands before eating and how to brush their teeth.

2.7. Innovative principles

As a teacher the ability to be creative is very necessary because in the implementation of the placement of teachers in schools it is not certain that the school has adequate facilities to support learning. While the material taught must be achieved the learning objectives. The ability to innovate teachers is needed in this case. It aims to attract students’ interest in learning, making it easier for students to understand a lesson and help students in imagination.

In the implementation of numeracy learning, the teacher must not be fixated on tools that are not found in the school. Fast multiplication counting can be taught using ten fingers that every student must have. Or to calculate the addition, the teacher can use the stick or gravel that is available in the surrounding environment as a tool. This method makes students easy to understand multiplication and addition. This will be more attached to students’ memories.

2.8. Comprehensive assessment principle

This aspect is an aspect of assessment carried out on students in the learning process. The assessment conducted by the teacher is not only the end result of learning but also the learning process. In addition assessment also involves the cognitive, affective and psychomotor aspects of students that have been applied. The values contained in each subject matter must be absorbed in students. The learning model carried out by parents in the past in negajarkan recitation can be applied, such as repeating the verse until memorized and giving the meaning of the verse in the form of the song sung at each meeting.
2.9. Technological used principles

For regions 3T, which are generally more left behind in access and facilities and infrastructure compared to other regions in the regency city. This is not an obstacle in learning. A teacher or school can utilize the technology they have. For teachers in the 3T area it turned out to have a fairly modern communication device. This can be seen from the cellphone owned. While every school does not all have a computer. This is not a barrier to not receiving information or updating learning material. In addition, information from the ministry and ministry will be easily accessed by the teacher.

3. Conclusion

From the results of trials and research in the field in order to get a model of education implementation in the area of 3T which emphasizes local wisdom can be concluded:

1. The model developed can be used as an alternative model in implementing vocational education in the 3T Region.

2. The model of education delivery in the 3T area with local wisdom that prioritizes the principle of "ASICT" that is developed will be able to accelerate and improve the achievement of educational quality.

3. In the model of education delivery in the 3T area with local wisdom that puts forward the principle of "ASICT", the role of stakeholders in accordance with their respective authorities and abilities is very meaningful to improve the quality of learning.

4. In the model of education delivery in the 3T area with local wisdom that prioritizes the principle of "ASICT", the availability of various components of the education system and harmony of work relations accelerates and improves the achievement of educational quality.

The recommendation based on this study, that Model of education delivery in the 3T area with local wisdom that prioritizes the principle of "ASICT" is expected to be an alternative model in the implementation of education in disadvantaged areas.

References


