Strategy Of Curriculum Development
Based On Project Based Learning
(Case Study : SMAN 1 Tanta Tanjung Tabalong South Of Kalimantan)

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Abstract: Curriculum Development must be continuously assessed and developed appropriate to the circumstances by taking into account the challenges that exist so that the directions of development are aligned answer the challenges future. This research aimed: (1) to identification of school potential, mapping and grouping of school experiences, (2) making time line of activity and setting of development method, and (3) curriculum documentation. The subject of research conducted in SMAN 1 Tanta in Tanjung Tabalong South of Kalimantan. Techniques of collecting data used were observation, interview, and document analysis. The data analysis method employed was an interactive model of qualitative analysis. Results of collecting data through observation found unproductive land in the school yard, and there are several local potential that can be used as a basic for curriculum development, interviews with teachers and students that the school requires an integrated between the curriculums with teaching learning activities. Dokumen curriculum in the schools has not shown the existence of curriculum development. Facilitation is done in curriculum development through the implementation of project based learning. The data analysis method employed was an interactive model of qualitative analysis. Curriculum development results showed that: (1) the potential of the school and school experiences: the school garden and organic farming project activities, (2) the school has a distinctive curriculum documentation.

Keywords: School potential, project based learning, curriculum

1 INTRODUCTION
Curriculum is the heart of a school. Each school will attempt to create or compile a curriculum as possible so that it can accommodate the demands and the needs that must be continuously assessed and developed appropriate to the circumstances by taking into account the challenges that exist so that the direction of development will be aligned to answer the challenges ahead. Curriculum should be forward looking since a major objective is to prepare students for future employment. Curriculum must prepare students to work with current technologies, integrate new technologies and evaluate and apply emerging technologies over time (Donald and Douglas, 2004)

Schools can design a curriculum appropriate with the conditions of schools such as the school environment, school potential, the natural potential and others. Local potential possessed by schools in Tabalong very diverse among others: the potential of natural resources, human resources potential, besides cultural potential can be developed and promoted as a potential local knowledge can also be used as a source of teaching and learning in schools. The characteristics and potential of SMAN 1 Tanta, among others, the vast land but not productive, many plants around the school, the amount of trash that has not been properly managed.

Teaching and learning process in schools did not yet are fully engaging the students. By implementing Project Based Learning (PBL), the potential that exists in schools can improve student participation in learning activities. PBL is a student-driven, teacher-facilitated approach to learning. Learners pursue knowledge by asking questions that have piqued their natural curiosity (Stephanie, 2010). Teacher as a curriculum developer has to be able to translate, explain and transform the values involved in the curriculum to his/her students (Azhar, 2011). PBL also necessary for teaching systems to help students gain new skills in both learning and using new technology particularly for bringing 21st century skills into the school (Monchai and Sumale, 2013).

2 LITERATUR REVIEW
The modern opinion of curriculum covers all the learning experiences provided to students under the guidance or school responsibilities, which is not only limited to the number of subjects alone but a learning experience beyond the written subjects, such as habits, attitudes, morals and others (Azhar, 2011). Over the past two decades the study of curriculum has become an established part of

Curriculum Development must be continuously assessed and developed appropriate to the circumstances by taking into account the challenges that exist so that the directions of development are aligned answer the challenges future. Law of the Republic of Indonesia No 20 of 2003 on National Education System and the Indonesian Government Regulation No. 19 of 2005 on National Education Standards mandated that the Kurikulum Tingkat Satuan Pendidikan (KTSP) levels of primary and secondary prepared by the education unit in order to achieve the goal national education, as well as the purpose of education. Curriculum development can be defined as the process of planning, implementing, and evaluating curriculum that ultimately results in a curriculum plan. Teachers need to be knowledgeable about curriculum and understand the processes by which curriculum may be developed (Afzaal et. al, 2011). According to Ramparsad (2001) defines curriculum development as an umbrella and continuous process in which structure and systematic planning methods figure strongly from design to evaluation. Change strategies in curriculum development for enhancing school improvement, teacher development, and pupil learning in the past several decades (Fai and Edmond, 2011).

According to Monchai and Sumale (2013) PBL is an instructional technique, as a learning context with the stimulus to construct knowledge and critical questions in teams to set goals, obtain information, and make decisions. Solving highly complex problems requires that students have both fundamental skills (reading, writing, and math) and 21\textsuperscript{st} century skills (teamwork, problem solving, research gathering, time management, information synthesizing, utilizing high tech tools). Students in PBL are engaged in active learning and gain multidisciplinary knowledge while working in a real-world context. The importance of student engagement is widely accepted and numerous researchers have provided considerable evidence to support the effectiveness of student engagement on a broad range of learning outcomes (Frank and Abigail, 2006).

The Curriculum Development/Planning Process four rules of engagement Schools and technology teachers would do well refer to Ronald (1995):
1. A successful program would always feature or be characterized as having a hard working student body;
2. Students participating in a successful program talk a lot;
3. A successful curriculum would be one in which students and instructors were genuinely engaged; and
4. The context in which performance is usually assessed should reach beyond the school or institution (e.g., technological education students design a computer program for a hospital in which they are volunteers).

3 RESEARCH METHOD
3.1 Location and Aim of the Study
The subject of research conducted in SMAN 1 Tanta in Tanjung Tabalong South of Kalimantan. Aim of the study are: (1) to identification of school potential, mapping and grouping of school experiences, (2) making time line of activity and setting of development method, and (3) curriculum documentation.

3.2. Techniques of Collecting Data
Techniques of collecting data used were observation, interview, and document analysis. The data analysis method employed was an interactive model of qualitative analysis.

3.2.1 The Research Process
Research process conducted by three stages of activities are : 1. mini project, 2. grand projects and 3. curriculum development. Mini-project activities and the grand project activities involving students through PBL. Mini project and grand project activities used as base for curriculum development. Chart of Research Process shown in Figure 1.

![Figure 1. Research Process](image)

4 DISCUSSION AND RESULT
4.1 Data From Observation, Interview and Collecting of Curriculum Documentations
Direct observations were made by observing the potential around the school, Tabalong river,
Tanjung markets and around Tanjung town. Results of collecting data through observation shown in Table 1.

<table>
<thead>
<tr>
<th>Table 1. Local Potential</th>
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<tbody>
<tr>
<td>Potential of Tanjung Tabalong</td>
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<tr>
<td>1. Rubber plantations</td>
</tr>
<tr>
<td>2. Fruit : Langsat, Tiwadak, Pampa kin</td>
</tr>
<tr>
<td>3. Fish : patin, baung, saluang</td>
</tr>
<tr>
<td>4. Coal mine</td>
</tr>
<tr>
<td>5. Tabalong River</td>
</tr>
<tr>
<td>6. Cultural and A traditional ceremony in Warukin</td>
</tr>
</tbody>
</table>

From the table above found unproductive land in the school yard, and there are several local potential that can be used as a basic for curriculum development.

Interviews with teachers and students shown in Table 2.

<table>
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<th>Table 2. Summary of Interview</th>
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<tr>
<td>Teachers</td>
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<tr>
<td>1. Teachers need update teaching learning method</td>
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<td>2. Schools requires the development of learning methods</td>
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<tr>
<td>3. Want to be environmentally friendly school</td>
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<tr>
<td>4. School Want to have a distinctive curriculum</td>
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From summary of interview, school requires an integrated between the curriculums with teaching learning activities.

Result from collecting curriculum documentations are:

a. School does not have a comprehensive curriculum documents
b. Not all teachers have an independent curriculum and good documentation
c. School has not been continuously developing curriculum
d. Schools using the curriculum from government.

4.2 Design and Implementation of Mini Project

Phases mini-project activities are described as follows:

a. Understanding of Learning Method based on local potential
b. Potential local inventory of Tabalong
c. Introduction of Project-Based Learning
d. Determination School Project
e. Making the Proposal
f. Project implementation in learning

Mini-project implementation, among others:

a. Extension of the importance of hygiene and the benefits of waste
b. Survey to the relevant departments of the empowerment of waste as compost
c. modeling a composting
d. Collection / depositing garbage by learners
e. Garbage grouping by students
f. Preparation and processing waste into compost
g. Packaging and sales

Composting process and sales activities through the market day in a mini-project activities are shown in Figure 2. and Figure 3.

Figure 2. Processing facility and initial Process

Figure 3. Market Day

In mini project activities, teachers are able to make a list of Tabalong potential are culture, natural resources and others then present the results. Next stage teachers make a grand project design.

4.3 Grand Project Implementation and Curriculum Breakdown

Consider to Ronald (1995) Grand project implementation is base of development curriculum. Grand project consist of: organic farming, and bussiness day. Organic farming activities encompass are:

a. Land clearing and farm processing,
b. Fertilization early and spacing / planting hole,
c. Seeding and planting plants,
d. Plant maintenance (watering, weeding plants, fertilizing advanced, and

e. controlling plant pests).

Preparation of organic compost and organic pesticides, Handling during harvest. In the activities of the business day includes: Survey the market price and market share, Post-harvest handling and packaging, Promotion and marketing of organic farm. Organic farm activity is an application of Project Based Learning, which in this activity all the teachers and students involved in the project activities accordance with their respective sections. Organic farm activities are shown in Figure 4 and Post-harvest handling show in Figure 5.

![Figure 4. Organic Farm](image1)

![Figure 5. Post-harvest handling](image2)

Activities in the curriculum breakdown comprises: Formulation project syllabus, Making lesson plans each subject integrated with project activities, and application of lesson plan, documents preparation of the distinctive curriculum SMAN 1 Tanta.

### 4.3 Curriculum Development

Development curriculum cover are: planning and make the stages of curriculum planning. Define and describe the curriculum a distinctive and independent then formulate joint curriculum a distinctive SMAN 1 Tanta, Develop vision and mission of the curriculum and formulate the vision and mission of the curriculum SMAN 1 Tanta, analyzing curriculum integration and non of the integration, curriculum planning and make curriculum planning stage (individual and group), making detailed assessment rubric, define and describe the a distinctive curriculum and then formulate joint independent a distinctive curriculum SMAN 1 Tanta.

### 5 CONCLUSIONS

PBL as a teaching method that supports, facilitates and improves the learning process allows. In addition, the teachers characterized PBL as engaging and motivating, allowing the students to work collaboratively. Furthermore, teachers used student-centered approaches in their implementation of PBL. Curriculums development based on PBL in SMAN 1 Tanta can increase student engagement in teaching learning activities. Begins with exploring the potential of local and school experience in organic farming demonstrate the school has been able to develop the curriculum properly documented. The school has a distinctive curriculum documentation.

### 6 ACKNOWLEDGEMENTS

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### 7 REFERENCES


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