



## CREATIVITY AND INOVATION AS AN INDIGENOUS PEDAGOGY METHOD

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### Abstract

#### Abstract

*This research was carried out to study the pedagogical understanding among teachers serving in indigenous schools in Pahang. Qualitative method was applied in collecting the data for this research and 12 respondents who were teachers in the indigenous schools were the respondents. The data collection was done through interviews and questionnaires, which dealt with the improvement of teaching and learning courses attended by the teachers under the supervision of The Centre for Indigenous Pedagogy. The findings showed that teachers serving in the indigenous schools worked constantly to improve and gain new knowledge in pedagogy as the best practice in schools. The study also showed that the teachers were always ready to improve knowledge in understanding the appropriate pedagogy to increase understanding among the students, particularly in teaching and also to attract and to increase the number of enrolment at these schools. The implications of this study showed that the willingness and effort of these teachers to gain new knowledge regarding the improvement of pedagogy applied in schools were positive, and thus the effort of organising these types of courses must be implemented continuously. The teachers had experimented with various teaching methods to suit the abilities and intelligence of the students based on a nature-friendly environment that must be understood as a precondition to serve in the indigenous schools.*

Keyword: Innovation; Pedagogy; Best practices; Jungle-friendly



## **Introduction**

The fourth shift National Education Development Plan (2013-2025) touched directly on the competence of teachers to mount up the national educational excellence. According to Wan Mohd Zahid (1993), education is the primary footstep to achieve national development towards a developed country. Therefore, teachers must be willing to shift to a new paradigm in order to guide the students, whether in urban or rural areas through social welfare. Harbinson and Myres (1964) reviewed that education must be in line with what exists in the community. Education, as defined in a national context, as referred to the National Education Philosophy, aims to ensure students achievements (*kemenjadian murid*) to create individuals who are well-equipped intellectually, spiritually and emotionally. This effort aims to produce knowledgeable, ethical and responsible Malaysian citizens who can contribute towards the harmony and prosperity of the community and nation. In order to ensure students achievements (*kemenjadian murid*), teachers as the educators have to transform in terms of attitudes, values and competence in order to ensure that the National Education Philosophy is in line between teacher excellence and students achievements (*kemenjadian murid*). The government, especially the Ministry of Education and the Department of Orang Asli (JAKOA) understand that education is an important element in determining their ability to achieve success. The path towards success relies on the ability of the headmasters, teachers, parents and the community as well as the students of the Orang Asli community, plus how far they are willing to change and be able to build capacity in ensuring the students' success, including mastering pedagogy among teachers at "Orang Asli" schools.

In practising an effective pedagogy in "Orang Asli" schools, multiple teaching methods, techniques and strategies related to indigenous pedagogy must be understood and mastered by teachers at the particular schools. Past studies showed that teachers must have pedagogical content knowledge to enable them to be effective teachers (Clermont et al., 1994; Cochran et al 1993; Shulman, 1987). Atef al-Tamimi and Munir (2010) stated that students-teachers good relationship can guide and help them in their academic achievement. The responsibility for improving the quality of learning and teaching is in dire need of a fresh approach and practicality to attract the students' interest. According to Arbaa and Abd Razak (2010), creative and innovative approaches in the learning process can ensure the delivery process to be more effective, interesting, fun and can stimulate the students' interest. The quality of the learning process had been described by MacNaughton (2005) in his study which found that the quality of the learning process can provide the students with positive, meaningful and enjoyable experiences.

In addition, a friendly attitude towards the students can also attract the students to learn. This can indirectly increase the students' motivation, comfort, excitement and attitude to learn. Teachers should also be able to manage their emotions by studying the background of the environment in order to arouse the interest among the students towards the subjects taught (Usman 2006). Therefore, teachers need to have certain qualities such as vast knowledge of that particular subject as well as mastering various skills as added values, which focus on thinking skills, multiple intelligences, cooperative learning and contextual learning (Ministry of Education, 2001; Abdul Rafie Mahat, 2001). Therefore, the innovation of teaching in "Orang Asli" schools not only requires creative teachers mastering the pedagogy,



but must also understand the concept of the 5 P (integration, absorption, assessment, uptake and recovery). The teachers' ability to master the pedagogy in learning is important to win over the hearts of their students, especially among the "Orang Asli" children.

Integration of subjects as an innovative teaching requires teachers to constantly pursue innovation in teaching and learning. The issue of student competence is closely related to the transformation of the curriculum which includes pedagogical knowledge. Curriculum transformation embodied the aspirations of a particular concern to "Orang Asli" students. Nicholas (2007) described some of the factors that lead "Orang Asli" students lag were due to the different pedagogical approaches that were less according to their understanding.

### **Problem statement**

The study specifically focused on the pedagogical understanding among teachers at "Orang Asli" schools. According to Battiste (2002) and Bierman (2008), indigenous pedagogy is learning through experience and observation in a fun and meaningful environment. Indigenous pedagogy prioritizes the student's learning process together with the teacher's involvement. Bierman (2008) stated that indigenous pedagogy requires efforts to explore and give value to the knowledges based on values system and philosophy.

In the Malaysian Education Development plan, the fourth shift on the quality of teachers should be enhanced, especially the teachers serving in "Orang Asli" schools. Major issues related to "Orang Asli" schools are student absences to the school and their limited literacy ability. The next issue is the ability of the teachers to understand the appropriate pedagogy for "Orang Asli" students with nature-friendly lifestyles or background. The Indigenous Education Transformation Plan is an initiative by the Ministry of Education in improving the quality of education to ensure that no group is left behind. One of the key results of transformation is the student's achievements with improved school attendance, which can increase the LINUS and school performance. Certainly, in securing 'students achievements', there will be questions about the ability to implement innovations in teaching pedagogy as value-added skills to overcome the teaching and learning problems at "Orang Asli" schools. Innovations that have been implemented can help in making teaching and learning more attractive, thus creating a positive interaction to improve the relationship between teachers and "Orang Asli" students in the classroom.

Casual and stress-free teaching processes such as singing, acting, story-telling, study and play, drawing and group activities can attract "Orang Asli" students (Tan & Maridah 2009). Hassan et al. (2001) found that student's absenteeism is related to difficulties in understanding the subjects, lack of interest in school-work and failure in the tests. While Maarof and Harbans (2008) explained that the reasons of absenteeism among "Orang Asli" students are due to their lack of competence in terms of knowledge and difficulty to understand the delivery process. The main problem is to determine the best and practical "casual and stress-free" pedagogy to be integrated in the teaching and learning process in "Orang Asli" schools, for example, hile playing, what kind of music is appropriate for the learning and teaching process.



Shaari et al. (2011) in their study found that the main reason why “Orang Asli” students do not master the lessons is because they can easily forget what they had learnt due to their poor memory. Shaari et al. (2011) through their research found that most “Orang Asli” students are having problems in mastering the 3M skills, namely reading, writing and arithmetic. This problem is shared by Dawi (2002), who found that the failure of students, especially “Orang Asli” students during UPSR, is due to the weaknesses of their 3M skills in the early stages of schooling. This weak reasoning power occurred because they do not understand the subjects taught (Shaari et al., 2011). “Orang Asli” students were also found to be easily bored and tired by the learning activities. According to Ahmad and Mohd Jelas (2009), through a mentor-mentee experience with “Orang Asli” students in Selangor, they were found to be easily bored and can barely focus for only 15 minutes. Hence, this study was carried out to determine the desired pedagogical needs for teachers who teach in “Orang Asli” schools and the suitability of courses that should be provided to them in a short training organised by the institute, state education department and the Ministry of Education itself.

We hope that this study will highlight some of the issues related to indigenous pedagogy, and not just on 3M (Reading, Writing and Arithmetic) but also activities that involve Plays, Musics etc. However, attention should also be given on how much the teachers at “Orang Asli” school were exposed to the courses on competence, the exposure of teaching and learning, teaching innovation courses and their willingness to serve in “Orang Asli” areas. Past studies had shown that the difficulties faced by the students to understand the skills had affected their ability to master the knowledge and skills in learning. Based on the results, we found that opinions, experiences and the sharing of ideas from the teachers at “Orang Asli” schools can be a guide in preparing an effective pedagogy for “Orang Asli” students in order to enhance the capabilities and competence of teachers for a fun and meaningful learning experience.

### **Purpose of the study**

This study aimed to examine the understanding of pedagogy among teachers serving at “Orang Asli” schools in Pahang. The ability to understand the pedagogical education geared to “Orang Asli” students is expected to generate a more dynamic knowledge based on the local background. However the teaching and learning ability is largely dependent on the ability of teachers to understand the language and culture of the indigenous peoples as an additional element of effective pedagogy.

This study was also expected to explain the curriculum that can increase or raise the interest among students to attend school and the best curriculum as desired by the teachers. The main conflict among the teachers was either to complete the provided syllabus in the given timeframe or to ensure the students to master particular skills first before moving to the next topic, which required a long periods of time. The study also aimed to identify the needs of the indigenous sociocultural courses that should be given to the teachers in pre-service and in-service as a basic preparation before being placed in “Orang Asli” schools. The ability to understand the sociocultural of that particular environment will allow the teachers to plan lessons that were line with the concept of indigenous cultural communities, e.g understanding



simple directions in the native languages. Thus, this will simultaneously be able to cultivate a sense of belonging, which by definition is "can be friends/ *boleh kawan*" or "acceptable/ *boleh terima*" because the students assume that the teachers understand their language, although not exhaustively.

Through this study, we had identified the styles used or carried out by the teachers before the learning session started. This is important because the willingness of students for the learning process is the key in ensuring smooth further learning. This is because the ability of teachers to implement nature-friendly elements enable them to "win the hearts" of the students and will encourage them to attend school and be involved in the teaching and learning sessions.

### **Objective of the study**

The objective of this study was to:

1. Identify the understanding of pedagogy teachers in "Orang Asli" schools in Pahang.
2. Explain the ability of teachers to implement the elements of indigenous culture in their teaching and learning in schools.
3. Identify pedagogical knowledge needed by teachers to teach "Orang Asli" students.

### **Research questions**

1. Do teachers in the "Orang Asli" schools understand indigenous pedagogy?
2. Are the teachers able to apply the elements of indigenous culture in the teaching and learning process in school?
3. Should the teachers be exposed to the knowledge of indigenous pedagogy in accordance with the "Orang Asli" students?

### **Limitations**

This study is a preliminary study conducted by the Institute for Environment and Development (LESTARI, UKM) for teachers who teach in 26 Orang Asli schools in 11 districts in the state of Pahang. However, in this study, the researchers limit the scope to 15 teachers representing different schools in the selected districts, namely Kuantan, Temerloh, Jerantut, Bera, Maran, Bentong, Cameron Highlands, Lipis, Pekan, Rompin and Raub and divided into three main groups which were Pahang Barat, Pahang Tengah dan Pahang Tenggara.

The selected schools consisted of 100% "Orang Asli" students from various ethnics of indigenous communities in the state. This is important because we believed that there was a difference in languages and cultures for each ethnic group. Thus, the findings of this research regarding the pedagogical proficiency required by teachers were very important in developing the pedagogy based on the local cultural context and background. This study looked at only one aspect of pedagogy through the GPILSEO model (Bishop et al. 2010)



### **Significance of the study**

The findings will identify how the knowledge of indigenous pedagogy should be applied to the teachers during the training period. Students should be exposed to the culture of indigenous peoples as a preparation before being placed in “Orang Asli” schools. Next, the teachers currently serving at “Orang Asli” schools should strive to improve their self-quality as an added value in enhancing confidence and to be accepted by the students.

The ability to understand the language and culture of indigenous communities can help the teachers, not only in schools but also in the community. In addition, this study was expected to help the Ministry of Education through the Institute of Teacher Education, Teacher Education Division to improve the trainings for pre-service and in-service teachers. The experience gained by teachers serving in “Orang Asli” schools can trigger the ideas in sense of the best practice to be shared with others.

### **Methodology**

In this study, two types of qualitative methodologies were used in collecting the data, namely by interviews and structured questionnaires. The respondents were 12 teachers having various specializations that were present during the training competence organized by the Institute of Teacher Education Campus Tengku Ampuan Afzan. The selected respondents were the teachers serving in the “Orang Asli” schools involving 11 districts in the state. The respondents were divided into three main groups based on their demography profiles, namely Pahang Tengah (Temerloh, Jerantut, Maran and Kuantan) Pahang Barat (Bentong, Raub, Lipis and Cameron Highlands) and Pahang Tenggara (Bera, Rompin and Pekan).

The number of respondents interviewed was adequate, based on the study by Gredler (1996), which stated that the number of 7 to 12 respondents for this study is reasonable. Nixon (1992) also argued that interview is a way to provide important additional information, in-depth and detailed information on a matter not raised in the questionnaire and the achievement tests. The researcher believed that this data collection included the majority of the dominant ethnics in each district in the state of Pahang; for example, most inhabitants in the Pahang Barat area were from the Semai ethnic.

While in Pahang Tengah, the dominant ethnic was from Jahut and Semoq Beri, while in the Pahang Tenggara, they were the Jakun, Semelai and Temuan. The process of data collection was done through methods such as interviews and questionnaires (Merriam, 1998; Patton, 1990 in Abd Shatar, 2007) to achieve the objectives of the study. Meanwhile, the descriptive method was used to analyse the data, as suggested by (Miles and Huberman 1994 in Abd Shatar, 2007). This data was analyzed to identify the relationship between the understanding of the pedagogical knowledge gained through the respondents to help in the teaching and learning process in the classroom.

## Study framework

This study aimed to identify the criteria and elements of best practice for indigenous pedagogy as the added value skills that should be mastered by a teacher who served in “Orang Asli” schools. This added value skill in mastering the pedagogy is an important element in giving understanding to “Orang Asli” students to help them gain interests to learn and attend school. The qualitative approach was chosen because the data was collected through interviews and structured questionnaires. This study identified that the ability of teachers in mastering indigenous pedagogy was very important in attracting students to learn.

The ability of teachers to implement teaching and learning was by attracting the students; the teaching method used based on local pedagogical will help the students to understand and to experience and finally encourage them to enjoy the learning and teaching process. The study framework used was based on GPILSEO Development Model (Goals, Pedagogy, Institutions, Leadership, Spread, Evidence, and Ownership). Through the GPILSEO model, pedagogical was viewed as educational practices and how performance can be improved. Ball (1998) in Abd Shatar (2007) stated that a teacher needs to understand the mathematical concepts and procedures to provide a meaningful lesson plan and various activities for the students.

In the context of teaching in “Orang Asli” schools, the teacher’s understanding should start by identifying the groups of students who had a different background in terms of language and cultures. An understanding of the simple expression will help the teachers in the teaching process, since the “Orang Asli” will assume that the teachers understand their language, though not completely. In other words, students’ enthusiasm and willingness to learn depends on teachers’ understanding of the teaching and learning pedagogy.

This study focused on the pedagogical aspects only. Studies showed that the most important influence on student achievement is teacher pedagogy and teaching quality (Boskers and Witziers; Cuttance, 1998). We believed that an understanding of pedagogy and the relationship with environment will be able to stimulate learning and develop a sense of belonging between the “Orang Asli” students in the classroom. As a teacher, the ability to implement the teaching pedagogy elements was influenced by several key factors such as experience, the frequency of organising training programs, teamwork, innovation through research culture, appropriate teaching strategies and the ability of teachers to carry out fundamental studies of actions that will help to improve the understanding of indigenous pedagogy as required in “Orang Asli” schools.

Table 1: Elements in the GPILSEO Education Development Model

No.	Elements	Descriptions
1	Goals	Develop the school’s goals and vision and its objectives in developing educational attainment.
2	Pedagogy	Construction of a new pedagogy for change in educational practices and how performance can be improved.
3	Institutions	Developing organizational structure or changes in schools to support student learning.
4	Leadership	Establishing a responsible, proactive and effective leadership.
5	Spread	Spread the educational reform to the teachers, parents, community members and external agencies.
6	Evidence	Developing and using the appropriate tools to measure student achievement to improve



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7	Ownership	teaching. Creating opportunities for all to participate in education reform and understand what is happening.
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Source: Russel Bishop et al. (2010)

### Willingness of Teachers in the “Orang Asli” Schools

Based on the questionnaires, from 29 respondents, 20 teachers had been teaching “Orang Asli” schools for less than 5 years, 7 teachers had been teaching for more than 5 years and there were also teachers who had been teaching for almost 10 years (10 year 9 months) and more than 10 years (11 years 7 months). However, only one person had been formally and professionally trained to teach “Orang Asli” children. Clearly, the majority of teachers who taught at the “Orang Asli” schools were not formally exposed and trained in ‘indigenous pedagogy’ that can help them in the learning process in the classroom, as well as other aspects of education outside the classroom. However, the ministry was aware of these problems, thus a series of courses and workshops were held for teachers serving in “Orang Asli” schools. Out of the 29 respondents, a total of 6 people said they never attend workshops / courses related to the education of “Orang Asli” students. Table 2 listed the names of courses attended.

Table 2: In- Service Courses/Workshop which are attended by teachers at “Orang Asli” schools

Locations	Themes	Organisers	Days
Institut Pendidikan Guru Kampus Bahasa Melayu SK. Limau Purut, K.Lipis	Hari Inovasi IPGM	IPGM	1
SMK Bawong, Perak	Motivasi	SK.Limau Purut	3
PPD Gua Musang	Konsultansi	JPN Perak	3
JPN Perak	Program Peluasan Kesedaran Kerjaya	IPGM/JPN	3
IPGKTAA	Konsultansi GB Sekolah Murid Orang Asli	JPN Perak	3
	Transisi murid tahun 6 SK Lanai dan SK Kuala Koyan	JPN Pahang	3

As a result of participation in the in-service courses / workshops, respondents mostly agreed that some key elements should be emphasized in order to improve the competence of teachers in the learning process at “Orang Asli” schools in order to achieve the realization of Malaysian indigenous pedagogy (*Pedagogi peribumi yang berlatarbelakangkan Malaysia*). Among their opinions are as follows:

- A balanced syllabus based on “Orang Asli” students ability and capability.
- A “Fun Learning” concept which is capability-oriented (*berorientasikan penguasaan*) and not exams-oriented.
- Integration with ICT support and facilities.
- P&P should be focused on socio-cultural elements of “Orang Asli” society, based on history, language, beliefs, and way of life.
- More effective communication - the teacher should have the “Orang Asli” language skills.



- Schools and communities need to be more aware of the advantages and disadvantages of “Orang Asli” students for recovery and consolidation (*pemulihan dan pengukuhan*).
- Teachers in “Orang Asli” schools require continuous motivation and support from responsible parties (MOE) for them to continue the struggle to educate “Orang Asli” children, since most of the schools are located in rural areas.
- The importance of developing special modules emphasized on teaching “Orang Asli” alone or in other words, “Indigenous Pedagogy”.

### **Suitability of the Mainstream Syllabus with “Orang Asli” Students**

It is well-known that the Malaysian education system is centralized and controlled by the Ministry of Education. Similarly, the syllabus adopted in all schools under the MOE are developed and determined by the Curriculum Development Division. This paper will not analyse or explain the existing syllabus, but will simply express the opinions of teachers in “Orang Asli” schools as the respondents in this study.

Of the 29 respondents, only one person believed that the existing syllabus was 'highly appropriate' to be used in “Orang Asli” schools. The respondent argued that the existing syllabus was consistent with the achievement and background of “Orang Asli” children, because the “Orang Asli” community needed to be educated parallel and equally with other students. Eight respondents thought the existing syllabus was appropriate for the students because it had met the “Orang Asli” student achievement while the curriculum only acted as a guide and it would be the teachers’ responsibilities to adapt based on the students’ background. While some considered the contents of the syllabus not applicable for “Orang Asli” lifestyle, the teachers must also be creative and aware to integrate the existing curriculum in their students’ daily lives. Without this modification, “Orang Asli” students will have difficulty in understanding the knowledge delivered.

Thus, it was clearly shown that indigenous pedagogy did not solely mean that there should be a new syllabus for students at the “Orang Asli” school, but also the teachers' presentation on how to deliver the knowledge to their students effectively. When the teachers were not exposed to 'indigenous pedagogy', then the majority of the respondents found that the existing syllabus was 'inappropriate' and 'highly inappropriate' for “Orang Asli” children. Among the reasons given by respondents were centred on three main aspects:

- High-level syllabus
- IQ / achievement of “Orang Asli” students was low
- The elusive contents of textbooks
- Language barrier (official languages used in the existing pedagogy. Meanwhile, “Orang Asli” students had difficulties in understanding formal everyday conversation and the “official sentences” in the textbooks)
- Not applicable for the “Orang Asli” background

Previously, these elements cannot be addressed by teachers in “Orang Asli” schools, thus, they need help in order to overcome the obstacles. Recently, the issues of “indigenous pedagogy”



had arisen and they should be exposed to the teachers serving at “Orang Asli” schools or even to those who will serve those particular schools.

### **Development of Indigenous Pedagogy in Malaysian Context**

This was a preliminary study to review and determine the problems and obstacles faced by teachers in “Orang Asli” schools. This study did not aim to draw up a framework of indigenous pedagogy, but suggested elements and concepts that should be emphasized in its development. The interesting fact found in the study was that almost half of the respondents (14 people) stated that they had their own rules of the learning process in the classroom. This clearly showed that teachers in “Orang Asli” schools had realized that they needed to be more creative in order to attract the students and make learning in the classroom more efficient. This had been done by these teachers, who were constantly working to ensure their students can increase their knowledge while they were in school. Among the rules and methods done were:

- Implement an element of love and praise, not to be angry or too firm towards very poor students
- Provide rewards by doing group matches and quizzes
- Doing more interactive / creative movement and singing and dancing because this method helped students to remember (edutainment elements)
- Increase the examples that were closely related to their daily lives because of their way of life that was very different from other communities (e.g the textbooks explained the kinds of rooms in a house while their house was an open space only)
- Repeating the same P & P for better understanding
- Take into account the existing knowledge of students and their family background
- Adopt the master learning method
- Alternate the learning process with the games so that students do not easily get tired and more focused
- Emphasized on 3M activities
- Linking the P & P on the environment by using the existing materials in their environment

### **Hope for Orang Asli Education**

Basically, the findings of the study suggested that the problems in the “Orang Asli” education were not solely due to their own disciplines, but also because the education system was 'somewhat less' in supporting or less sensitive to the “Orang Asli” disciplines and weaknesses. They had been stereotyped as weak, difficult to understand the lesson or as truants. We did not reject this view completely; however, we believed that the problems will be solved if measures were taken proactively, not only at the school but also by all the stakeholders. Indigenous pedagogy that considered all important aspects in the life of “Orang Asli” students will be an initiator or the driving forces that will help and support the efforts to educate the students so that they can be comparable with other people, if not better.



## **Implication of the Study on the Pedagogy Development of Teachers in “Orang Asli” Schools.**

Overall, the implications of the findings for the improvement of the teachers’ pedagogical competence through teacher development must be initiated at the Institute of Teacher Education. Various programs should be carried out in order to increase understanding in the socio-cultural background of the Orang Asli. These included practical training in “Orang Asli” schools. This can provide early exposure to trainee teachers on the language and culture of “Orang Asli” students so that they will be provided with experiences related to the life of the community. These activities can be expanded through community service programs, *Bina Insan Guru* in indigenous schools, as well as a host family program. Community outreach programs allow trainee teachers to reach out to the indigenous peoples and they can try to win them. The ability to win their hearts so that they feel appreciated will provide a valuable experience if they were placed in “Orang Asli” schools. Teachers must master the knowledge of anthropology of the indigenous communities in preparation to approach them. Friendly relationship or rapport is essential for reducing the social gap among indigenous peoples.

The increased competence for in-service teachers through courses in pedagogy related “Orang Asli” students should be organised continuously. Courses related to edutainment, i-think, Learning for Change, Learning at 21st Century, as well as computer applications should be ongoing. But in this case, the relevance of the material should be based on nature-friendly elements in the sense of contextual learning. Lessons will be more effective when the teaching materials or teaching topics are applicable in their daily lives. The courses received by teachers as edutainment can be customized with “Sewang” songs or songs often sung by “Orang Asli” students. This means that the knowledge acquired by teachers through courses can be tailored to the nature-friendly environment. Teacher Education Division in collaboration with the other parties will have to devise and implement courses for continuing a professional development as well as In-Service Training (LADAP) in the schools. Improving practices among teachers to try different methods and approaches will help them to develop their teaching and learning process.

Administration and management at the school level play an important role in determining the rise and fall of a school as this depends on the leadership (Ibrahim Ahmad Bajunid 2000). Leadership is a sacrifice - it sets aside one’s own accord, love, nothing to fear, the desire of wanting to have the perfection of discipline, as well as an organization with a big heart. The role of a leader is for changing, guiding, protecting and creating excitement. Leading activities should be aimed for educating, contributing, guiding, teaching and advising while in the meantime, using the right tone, outcome and skills. "Tom Peters and Nancy (Passion of Excellence). The ability of headmasters and school staff to implement a research culture through action research and implement the improvements were strongly encouraged, for example, to find ways to improve student attendance. In this case, the headmaster and teachers have to implement a program to address the problem related to students’ attendance to the school. It is a casual program but the elements of teaching and learning for students are applied throughout the programs. In this regard, the school management must stimulate and



encourage the teachers to work together to give an idea of the pedagogy development in the schools.

Teaching innovation is very important to improve the quality of education. In teaching and learning, teachers must identify the learning problems in order to provide the appropriate teaching strategies and to increase the student's understanding. Teachers should have the awareness for the students that have different potentials and this will help them to organize teaching strategies that can attract the students. The teacher's ability to diversify their teaching strategies by introducing innovations in teaching materials and methods will help the students to focus and understand the concept of that particular lesson. The learning materials used should be related to the local culture as well as applicable in their daily lives. In understanding the problems of a certain subject, the assistant principals or head of that particular department should lead a team to perform actions to overcome the weaknesses and to find appropriate and innovative ways to address the weaknesses in teaching and learning.

In sharing pedagogical development, the success of the other "Orang Asli" schools should be the benchmark to share the best practices. This will provide knowledge to the teachers at "Orang Asli" schools to share their experiences on the success of their implemented programs. Symposiums, seminars, and dialogues involving all the schools and visits to that particular schools should be organised. This will help other school administrators and teachers to find out about the key success of that particular school. At the district level, schools that have "Orang Asli" students have to sit together to formulate strategies and implement measures to address certain issues related to "Orang Asli" students.

The Ministry of Education should also reflect on the curriculum that seeks to understand the concept of education that is based on nature-friendly elements. This is because the basic concept of teaching "Orang Asli" students is to recognize the environment and culture, before moving deeper into the other knowledge. "Orang Asli" students are more accepting in multi-disciplinary education which does not restrict them to pursue their education freely in their own way. Pedagogy that help to foster shared values towards the knowledge will be able to attract them to learning activities and school attendance.

Teacher's training also suggested creating special courses related to the learning culture of "Orang Asli" schools in order to provide the teachers with the knowledge of the environment and indigenous communities in Malaysia, as well as their differences in language and culture. This includes the introduction of ethnic language courses at the Institute of Teacher Education. This effort will also be able to develop ethnic languages as the academics language (*bahasa ilmu*) and can vary publications related to the language and culture, such as folklore books, dictionaries and other academic literature.

Ongoing studies related to pedagogy should be carried out with the use of local knowledge interspersed with their native language. This can help to improve the students' understanding and facilitate their interactions and communications in classrooms.



## Conclusion

It can be concluded that in order to increase pedagogical competence of teachers at “Orang Asli” schools, the key values in the education of “Orang Asli” students should be taken into account. The values embodied in this pedagogy included identity, connectedness, inclusivity, reciprocity, nurturing and respect. This was because the basic indigenous education focused on lifelong learning by applying shared values and close relationship with the environment. As a teacher, they need to have a sense of togetherness, a sense of belonging and appreciation practices values. These values included the attitude of patience, tolerance and solicitude of “Orang Asli” students through acceptance and recognition. The curriculum was also expected to emphasis on the ideas of what they know and like. Pedagogical education of teachers for “Orang Asli” students can be developed through researches and fieldworks without neglecting the values and principles that had been explained in this paper. In developing a curriculum related to indigenous pedagogy, the teachers who had been teaching at the “Orang Asli” schools or teachers in the “Orang Asli” communities should be involved, because according a local proverbs, “only the jeweler knows the precious stone”.

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