

EDUCATIONAL OPPORTUNITIES FOR CHILDREN WITH POVERTY IN MALAYSIA

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In achieving Malaysia's vision of becoming a developed country by 2020, Malaysia has to go through a massive reformation in education. It is always known that the main key to civilization and success is none other than education. It is not a myth; it is a fact that cannot be changed. Hence, the Ministry of Education has done a number of surveys to identify the enigma that our country faces. After many surveys and researches, it is identified that the main factor of school drop-outs is due to poverty. Besides that, the research done showed that education among most poor families is very low. The only way for a person to grow out of the vicious cycle of poverty is by obtaining better education. Poverty in the context of this study refers to two broad dimensions. Firstly, poverty refers to children who are likely to fail in school due to the psychological, social and cognitive drawbacks. The second dimension of poverty will explore a broader perspective of learning institutions i.e. schools as centers deficient in facilities, infrastructure, trained professional staff, professional practices, management and professional development opportunities.

Statement of Problem

As a developing country, it is a concern that poverty is still an issue in Malaysia. Among the effects of poverty in society are failures of the poor children to receive a good education. This will affect their future as education is an important tool of sustainable and equitable development.

Poverty is considered a major at-risk factor (Leroy & Symes 2001). The factors related to poverty places a child to be susceptible to academic failure due to low socio-economic background of parents, young parents, mobility and unemployed parents. According to Pellino (2007), high mobility is a symptom of poverty and this is an emotional event for children. They become aware of the social and economic differences at a young age in their social interaction with their peers.

Other problems of concern faced by rural schools are the lack of basic facilities such as books, AVA, workbooks, computers and internet access. Rural teachers face the problem of isolation and lack of professional development. Azizah & Sharifah (1993) found that almost half of the respondents had never attended in-service courses.

Objectives

The main objectives of the study are to identify the baseline data of the participants, such as the background information, health record, performance record, cognitive levels and psychological characteristics of students from poor communities. Specifically the study aims to:

1. examine the cognitive levels of students from poor communities in learning mathematics and science;
2. investigate the psychological characteristics of students from poor communities in learning mathematics and science;
3. investigate the socio-economic factors that are associated with the achievement of students from poor communities in mathematics and science;
4. examine the characteristics of teaching and learning of mathematics and science in classrooms with students from poor communities; and
5. determine the extent of support provided by the educational institutions in helping students from poor communities in learning mathematics and science.

Research Questions

1. What are the cognitive levels of students from poor communities in learning mathematics and science?
2. What are the psychological characteristics of students from poor communities in learning mathematics and science?
3. What are the socio-economic factors associated with the achievement of students from poor communities in mathematics and science?
4. What are the characteristics of teaching and learning of mathematics and science in classrooms with students from poor communities?
5. To what extent has the support been provided by the educational institutions in helping students from poor communities in learning mathematics and science?

Methodology

Research Design

This study takes place over a six months period, permitting a mixed-method approach, using the quantitative and qualitative methods. The design used was exploratory in nature, focusing on observing the baseline information.

Duration of the Study

The six months period had allowed the researchers to complete data gathering in selected urban and rural schools in Malaysia.

Instruments

The instruments used were:

- Science Cognitive Test
- Mathematics Cognitive Test
- Students' Psychological Characteristics Scale
- Students' Socio-Economic Scale
- Interview Protocol

Data Analysis

The data gathering had permitted the researchers to observe perceptions, plans, actions and implications (progress and problems) from the participants' perspectives. The data was analysed quantitatively and qualitatively. Quantitative data analysis utilising descriptive statistics such as frequency, percentages, mean and standard deviation while qualitative data analysis was by transcribing interview and observational data as well as observing the common pattern and the emerging of themes from the data.

Findings

Overall, in learning Mathematics, students show the highest cognitive level in procedural knowledge (77.5%), followed by reasoning level (54.1%), and understanding level (49.6%). The lowest percentage is obtained for problem solving level (36.2%).

As in learning of Science, comprehension level scored the highest percentage, with 50.7% while the lowest level is shown by application level (42.6%) and knowledge level obtained 49.6%. However, it is evident that all three levels scored between 40% and 51%.

As for psychological characteristics among students with poverty when learning Mathematics, results show that students do not understand mathematical questions (mean=3.09, $SD=1.63$) and they are not interested in learning Mathematics (mean=3.09, $SD=.93$). They were also shy to ask questions (mean=2.99, $SD=1.32$), also lacking in confidence in learning Mathematics (mean=2.94, $SD=.89$). To them, learning Mathematics is not important (mean=3.55, $SD=.77$). Having said that, students were determine to achieve good results in Mathematics" (mean=3.50, $SD=.76$); they did work hard in learning Mathematics" (mean=3.25, $SD=.81$).

For Science learning, results also show that students are not interested in learning Science (mean=3.07, $SD=.90$). They are also unable to read Science question (mean=2.98, $SD=.85$). If given the chance, they do not want to learn Science" (mean=3.37, $SD=.84$). They were also shy to ask questions pertaining to Science" (mean=2.96, $SD=.86$). To them, Science is not important" (mean=3.54, $SD=1.16$), and they feel bored in learning Science" (mean=3.30, $SD=.83$). However, these students were determine to achieve good results in Science" (mean=3.39, $SD=.84$), and they work hard in learning Science" (mean=3.22, $SD=.85$).

Discussion and Conclusion

This shows that students' understanding and problem solving levels in learning Mathematics need to be enhanced. If students can not understand the mathematical tasks, very unlikely that they can solve mathematical problems which are closely related to daily life. From the findings, it can be seen that the cognitive levels of students in learning Science are at the average. This shows that students need to put in more effort in applying the concepts in Science.

Students also need to inculcate more interest in learning both Mathematics and Science. Individuals with low self-esteem may journey through life feeling worthless, ashamed, and lacking self-efficacy. This will likely lead to chronically accessible negative schemas about the self, others, and the broader social world that lead to unsatisfying and even distressing interpersonal interactions and less adaptive achievement-oriented behaviors, such as giving up in the face of failure (Di Paula & Campbell, 2002). These social-cognitive processes may therefore impair the individual's ability to succeed in adult life (Trzesniewski et al., 2006).

References

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