

**THE 2<sup>nd</sup> UPY INTERNATIONAL CONFERENCE ON APPLIED SCIENCE  
AND EDUCATION 2020**

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**PAPER REVIEW RESULTS**

PAPER ID : 023

PAPER TITLE : Being A Smart Parent: A Handbook for Educating Children Based On Multiple Intelligences

No	Review	Results
1	TOPIC. Is the topic relevant to the conference area of interest?	Very Good
2	ABSTRACT. Are all required components included in the abstract?	Good
3	GOAL. Is the goal explicitly stated in the Introduction? Is its formulation clear and unambiguous?	Good
4	STRUCTURE. Is the paper's structure coherent? Is it in coherence with the goal of the paper?	Good
5	TOOLS AND METHODS. Are methods the author uses adequate and well used?	Very Good
6	DISCUSSION/CONCLUSION. Is it related to the results presented before? Do you consider them as coherent?	Good
7	LITERATURE. Does the author utilize relevant literature?	Very Good
8	AUTHOR'S KNOWLEDGE. What is the level of author's knowledge? Does he/she utilize all recent contributions relevant to the topic?	Very Good
9	LENGTH OF PAPER. Is the length of the paper adequate to the significance of the topic? Do you suggest shortening the paper without losing its value?	Good
10	WRITING STYLE. Is the writing style clear and understandable?	Good
11	Further comments on the paper	Improve your grammar
12	Recommendation	Accepted with Minor Revision

# Being A Smart Parent: A Handbook for Educating Children Based On Multiple Intelligences

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**Abstract.** Recognizing the intelligence of children is an important thing to do by parents and teachers to determine the education that will be received by children. They also need enough information to find out how children's education can accommodate each child's intelligence tendencies. This research is a development study with a 4D floating model (Define, Design, Develop, and Disseminate). Based on the result of the handbook assessment, it can be concluded that the quality of the handbook, in general, is very good with the percentage of ideal reaching is 93.22%. This means that the handbook to be used to educating children based on multiple intelligences.

**Keyword:** *Handbook, Parenting, Multiple Intelligence*

## Introduction

Early age is a critical period of a human being. It is said to be critical because at an early age all aspects of development take place very rapidly. At this time, proper education is needed, so that children's growth and development can run optimally. The best education is one of the things that underlies a person's success and success in life. Therefore, the education given to children during this golden age of course must be following the potential that the child has. Early childhood education is an effort to provide the best possible stimulation to children aged 0-6 years so that all aspects of their development can develop optimally[1]. Education at this time must get great attention because it determines the next level of education and cannot be repeated.

The greatest responsibility for early childhood education lies with parents. This means that parents need to have much information about the science of educating children, both at school and at home. Parents need to know the achievements of the child's development and also the interests of the child. Also, it is more important to know the potential tendencies of a child's intelligence, because it determines how the child is acquiring new knowledge.

The potential for the intelligence of each child is different. Gardner [2] rejects the assumption that human cognition is one unit and individuals only have a single intelligence. According to Gardner, there is no human activity that uses only one type of intelligence, that intelligence includes: verbal-linguistic, logical-mathematical, visual-spatial, kinesthetic, musical, intrapersonal, interpersonal, and naturalist [2]. The most important aspect is that from more dominant development, the result reflects

individual progress [3]. The theory of multiple intelligences promotes the idea that each child is capable of learning through a variety of different intelligences [4]. All of these intelligence work together as a whole and integrated unit depending on each person. Overall, the most dominant intelligence will control other bits of intelligence in solving problems. This concept has the essence that each person is unique; each student is different because he has a different combination of intelligence [2]. The theory of multiple intelligences has broad implications for educational communication, so it needs to be studied in depth [5]. Child educators must learn how to "utilize" multiple intelligences to involve as many students as possible in the learning process.

Knowing multiple intelligence in children will make it easier for parents to get to know their children more deeply. In the context of multiple intelligence education, it is very useful because it helps parents and teachers understand holistic education [4]. After getting to know more deeply, parents will be able to provide educational activities that are following the child's learning style. Activities that are by the child's learning style will increase the child's motivation and self-confidence. Identifying children's learning styles according to the type of intelligence is very important. For children, knowing their learning styles and types of multiple intelligences will be very useful. Exploring these learning styles and some types of intelligence can enable them to identify their strengths and weaknesses for learning [6].

Pre-school education is principally a process with a developmental-based system, but the status quo signifies the fact that in many, not all, cases it has been transformed to a way of developing only primary schools, permitting us to argue that its essence and particular methodology are ignored to a large extent. Children need to be provided in pre-school settings with richly contented activities, for any judgment about the importance and necessity of this period depends upon the quality of its programming, activities, and contents.

## **Method**

This research is a Research and Development (R&D) research, which aims to compile a handbook for educating children based on multi-intelligence. The manual that is produced can be used by parents at home. The output of the research is in the form of a handbook that contains the implementation of learning as a whole, namely method syntax both conceptually and procedurally, development of teaching materials and materials, and learning media for parents. The model used for the basis of the development of this learning media is the 4-D model (define, design, develop, disseminate). At the Define stage, a field needs analysis is carried out. At the Design stage, designing a draft handbook. At the Develop stage, expert validation is carried out. And at the Deseminate stage, a presentation was made about the guidebook in the seminar proceedings. Data analysis was conducted qualitatively regarding the results of interviews and observations. This research was conducted in Patangpuluhan Village, Wirobrajan District, Yogyakarta City. The subjects of this study were children aged 5-6 years and their parents. This study involved 30 parents and children in a needs analysis.

## **Result**

### *3.1 Define (The need analysis)*

In the needs analysis, an FGD was conducted. In the FGD, 5 questions were presented regarding the parental understanding of multiple intelligence in early childhood. These questions include: 1) What is the meaning of children's intelligence in your opinion, 2) From the habits of children that you pay attention to every day, what are the tendencies of your children's intelligence ?, 3) What are the activities that you routinely do for your children every day? What intelligence does the child have? 5) In the opinion of the mother, every child's intelligence must be developed in the same way? From the five questions, it can be concluded that parents do not understand the exact meaning of children's

intelligence. Most of them interpret children's intelligence as academic intelligence at school, which is associated with mathematical logical intelligence only. From the FGD, it was concluded that parents need a guidebook to educate their children based on their children's intellectual tendencies.

3.2 Design

From the results of the previous needs analysis, to meet the needs of parents to educate children according to the tendencies of children's intelligence, a guide book for educating children based on multiple intelligence was formulated. The flow of book development can be seen in Figure 1.

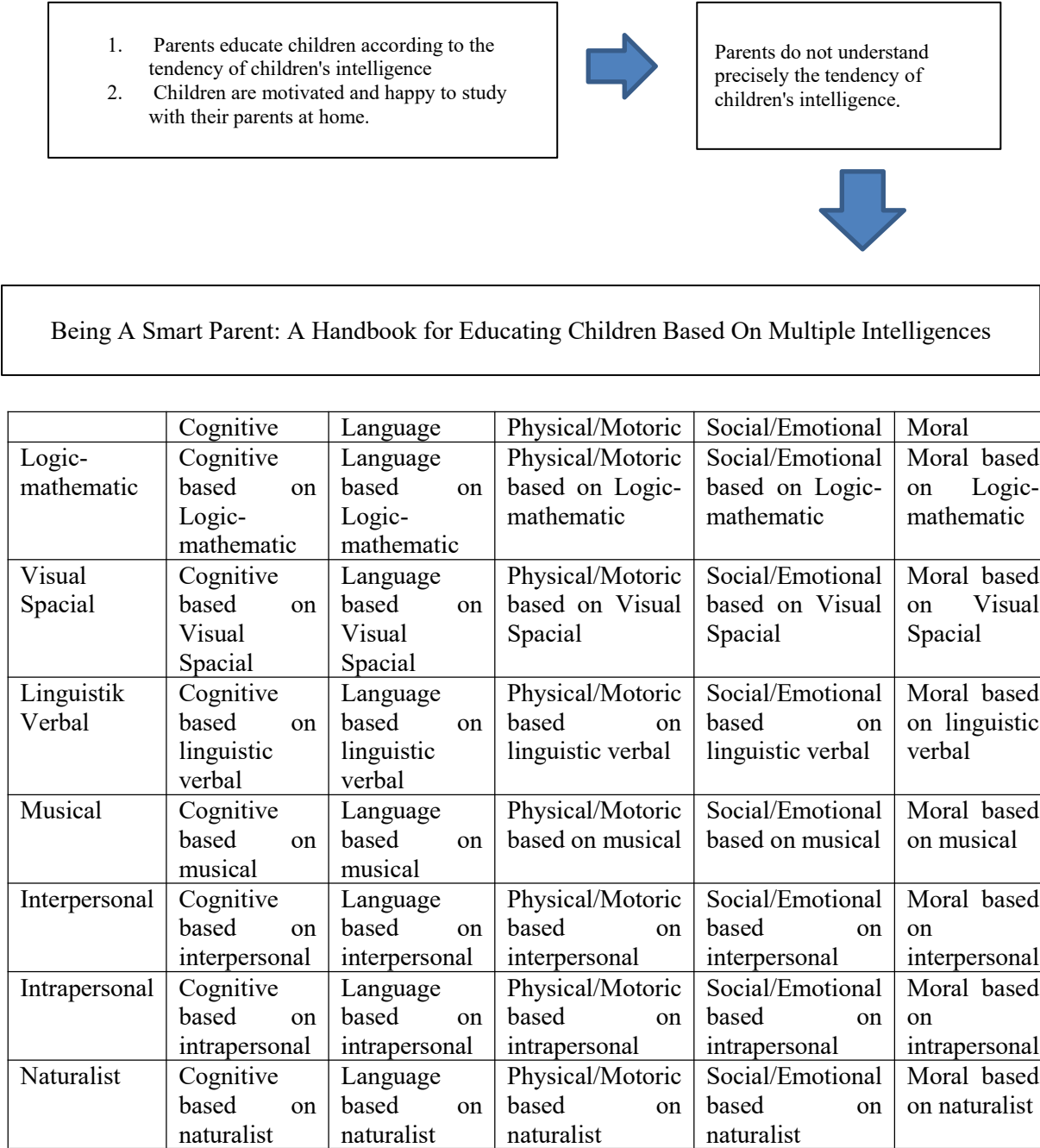


Figure 1. Developing Handbook for Educating Children Based on Multiple Intelligence

Each intelligence has special methods and techniques in child education. There are 8 types of books produced, according to the children's multiple intelligences. Every intelligence is strived to develop 5 aspects of development, namely cognitive, language, physical / motoric, social / emotional and also moral.

### 3.3 Develop

The completed draft manual is then validated by an expert. In this case the validation includes: validation of feasibility, validation of language and validation of presentation. The validation results can be seen in Table 1.

Table 1. Validation Result

No	Validator	Component Assessment Results			Total
		Appropriateness	Language	Presentation	
1	Validator I	83	50	55	188
2	Validator 2	79	43	43	165
3	Validator 3	82	52	50	184
<b>Total</b>		244	145	148	537
<b>Mean</b>		81	48	49	179
<b>Percentage of Ideals</b>		96,68%	92,94%	98,64%	93,22%
<b>Category</b>		Very good	Very good	Very good	Very good

Based on the table, it can be seen that the components of content, language, and presentation feasibility are included in the very good category with idealized percentages respectively 96.68%, 92.94%, and 98.64%. Based on the results of the model assessment, it can be concluded that the quality of the guidebooks in general is very good with the ideal percentage reaching 93.22%.

## Discussion

Parenting is one of the most complex jobs every parent expects to succeed. Parenting style plays an important role in all social and educational development, family. Many theoretical frameworks suggest that parenting plays an important role in child development [7]. Also, parenting is the basis of the family environment because without parental education parents can not fulfill their roles and obligations in the family and society. Parents need to educate themselves so that their children become good citizens in the future. So, parents need help to develop parenting skills [8].

The results of the needs analysis show that parents' awareness of their children's intelligence was still lacking. The lack of parental knowledge about multiple intelligences in children is because parents still think that intelligence is the child's ability to solve mathematical logic problems only. In fact, the intelligence of each child has different tendencies [9]. This lack of knowledge of multiple intelligence requires the right solution. Parents need clear guidelines in educating children according to multiple intelligence. Multiple intelligence represents the most effective theory for satisfying preschool teaching and education methodologies, developing culturally appropriate teaching modules that support the theory will help to cater to preschool children with a variety of individual differences [10]. The guide is then formulated into a handbook that is easily understood by parents at home. The developed handbook has achieved a very good percentage of ideals.

In early childhood education, 5 aspects of development must be developed every day [1]. This guidebook contains five aspects of child development, namely Cognitive, Language, Social Emotions, Moral and Physical Motor [11]. These five aspects of development are organized by the child's intellectual tendencies. Learning activities that are by the tendency of children's intelligence will increase children's motivation to learn with their parents [12].

In the handbook for educating children based on multiple intelligence, a series on each child's intelligence is provided. 8 types of books are based on children's intelligence tendencies. Each book contains a way to stimulate: (1) cognitive-based on multiple intelligence. Multiple intelligence seeks to provoke and produce deeper understanding, increase the ability to apply concepts, the ability to explore, discover learning, and creativity. They discourage their application of abstract concepts and one-dimensional testing, as is the case with cognitive approaches [7]. (2) physical and motor development based on multiple intelligence. There is a learning model that can be developed to stimulate children's physical motor development using a multiple intelligence approach, namely the smart and cheerful post game relay games model [13]. In the elements of environmental development and environmental health among students who use multiple intelligence-based physical education learning models (Multiple Intelligences), by using the learning model used by teachers in schools. The use of the Multiple Intelligence based physical education learning model is better than the learning model used by the teacher [13]. (3) Language and literacy development based on multiple intelligence. Language learning can be supported by optimizing music, visual-spatial, body-Kinesthetic, interpersonal, intrapersonal, mathematical, and naturalistic abilities because they are different frameworks for working on the same linguistic content. This presentation not only allows students to learn in their own best way, but can also reduce boredom because language learning requires repeated repetition of the same material if learning is to be maintained [14]. (4) Social and Emotional development based on multiple intelligence. Social and emotional skills when taught to students would facilitate their growth as individuals and collectively, these students would then be better positioned to contribute to the advancement of our society [15]. (5) Moral development based on multiple intelligence. It is impossible to raise children with high levels of virtue, respect for human rights, free speech, systems of choice and belief, law of order and democracy simply by preserving Linguistic, Mathematical, Spatial intelligence, etc. Therefore, moral intelligence, like other intelligences, must be activated and taught with very well planned activities so that individuals can be more aware of the potential of their moral intelligence and develop it if their level of intelligence is less developed [16]. Moral intelligence can be the source of compassion and it is clear that individuals lacking or not having certain level of moral intelligence would be not enough to help humanity no matter how developed logical and verbal intelligence level they have lacking or not having certain level of moral intelligence would be not enough to help humanity no matter how developed logical and verbal intelligence level they have [17].

The way of conveying knowledge that may not be in accordance with the abilities of students results in inefficient results and learning failure of children [18]. The concept of multiple intelligences frees children to use their own learning styles through either visual, auditory or kinesthetic to explore the world around them [19]. So, to improve learning and overcome learning difficulties, students must know their potential, strengths and weaknesses. Many studies related to this theory show that there are significant differences between students' multiple intelligences in their learning outcomes [18]. There has been research showing the integration of the concept of multiple intelligence in education respects different instructions and it is a great concept that allows diverse learners to show how they use their "intelligence" [20]. It enhances and builds children's strength and love of learning.

## **Conclusion**

Based on the results of the needs analysis, it was found that parents had difficulty in carrying out structured educational activities at home according to the tendencies of children's intelligence. Parents need a guidebook for educating children based on multiple intelligence that can be done at home. This problem requires the right solution. Being A Smart Parent: A Handbook for Educating Children Based On Multiple Intelligences which is formulated theoretically is expected to be a solution to the problem of educating children according to the tendency of children's intelligence at home to be faced by parents. Therefore, further research to test the effectiveness of this handbook on children's learning motivation needs to be done.

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