# Revitalization Strategy Of Acceleration Program

**Yuli Utanto, Luluk Elyana, Ghanis Putra Widhanarto, Yoris Adi Maretta**

**Abstract:** This study revealed various obstacles in the implementation of an acceleration program. Based on research findings it can be seen that, the main causes of various distortions in the implementation of the acceleration program are the teachers' lack of understanding of the talent and gifted children concept, differentiated curriculum, creative learning models and authentic evaluation models. Teachers need some kind of training and workshops to improve their understanding of gifted concepts and gifted children, differentiated curriculum, creative learning models and authentic evaluation models. The main concept of the pillars of the acceleration program implementation needs to be improved so that teachers are able to carry out the acceleration program correctly. Based on the empirical findings, it is suggested that related parties, especially the Directorate of Special Education, Provincial & District or City Education Offices continue to hold workshops and training according to the needs of teachers that organizing the acceleration programs.

**Index Terms:** Differentiated Curriculum, Revitalization Strategy, Acceleration Program.

## 1 INTRODUCTION

The Acceleration Program is intended to provide special services for gifted and talented children so that they get educational services that are in accordance with their talent needs and according to the pace and rhythm of their psychological development. Gifted and talented children cannot be treated the same as ordinary children. The number of special gifted children is indeed not large, around two and a half percent of the total population (Kitano, 1994). Although being a minority, but if their potential talents are developed optimally, they can make an enormous contribution to the nation and country. Special talented children in various parts of the world appear as personal inventors who change world civilization. Conversely these special talented children do not receive proper education services that match their needs they tend to be failed. Talented children like Bill Gate chose to drop out of the famous campus, Massachusetts Institute of Technology (MIT), to later develop the Microsoft company; then Larry Page and Sergey Brin who discovered the Google search engine, Jerry Yang, the inventor of Yahoo, and then Mark Zuckerberg, the inventor of Facebook, who is now a terrific social networking media, they are talented people who can actualize themselves[8]. The Indonesian Government strengthens the implementation of the acceleration program as mandated by Law No. 20 of 2003 National Education System in article 5 paragraph (4): Citizens who have potential intelligence and special talents are entitled to get special education. This was confirmed by Law No. 20 of 2003 National Education System in article 32 paragraph (1). Although the set of laws is quite clear, its real implementation still leaves a number of problems. The implementation of acceleration classes in Indonesia has been going on for almost decades. Various assessments and pros and cons continue to evolve in the community. At the bureaucratic level itself there is no clear understanding about the implementation of the acceleration program, it is indicated by a war of opinion in various paper or electronic media. Therefore this text is straightforwardly focused on the study of the following things, namely: the teacher's understanding of the basic concepts of the acceleration program implementation. And it focuses on how to improve the implementation of the acceleration program. In organizing the education of talented children there are two benchmarks used as the basis, namely uni dimensional references directed at the general intelligence of the Terman model, which finally identifies talented children, among others, referring to their IQ (IQ score 125 or above in the Wechlsler scale). While the multidimensional reference refers to the Three Ring Renzulli theory which emphasizes besides IQ, gifted children need to be identified from the aspect of Task Commitment (TC scores set in sufficient default values) and creativity (CQ scores set in sufficient default values). Research in the field of brain function and mechanism carried out by Clark (1983); Strongman (1996); LeDoux (1996) and Levinger, J. S. (1997) show that rational life is always preceded by emotional life, in a meaningful emotional life able to ignite and strengthen the life of a rational brain. In talented children there are a number of emotional life conditions that need serious attention. Clark (1983) states that talented children are easily attracted to various fields of life; tend to be more autonomous and difficult to compromise with others, easily attracted to humanitarian and justice issues, and easily associate with more mature people. These emotional characteristics should ideally be accommodated in learning so that the atmosphere of the learning process is surrounded by a pleasant emotional atmosphere. This is very important in which Salovey, P. and Meyer, J. D. (1990) said that it can foster a "mood directed attention". A learning atmosphere that is surrounded by positive emotional energy can be built if the teacher is able to accommodate all the talents needs of the students. The various potential talents of these students can be accommodated in the creative learning process if the teacher is able to develop a differentiated curriculum. Without a differentiated curriculum learning process will be too conventional, not challenging and poor of emotional stimuli; especially if the evaluation model still relies on paper and pencil tests. The learning practice of talented children which is not based on the implementation of the principles and concepts of talent, differentiated curriculum, creative learning and authentic evaluation has a negative impact on children. Research conducted by Herry (1996) shows that talented children who do not receive proper educational services have the potential to become problematic children and become underachievers. Herry (1996) found that 22% of elementary school students who possessed the potential for intelligence and special talents were at risk of staying in the classroom (not graduating). Yaumil's study of smart and talented high school students, 30% of them are performed below their real potential. The same thing also happened in the United States, according to research by Utami Munandar, 25% of intelligent and talented children in the US experienced dropouts and underachievers. Marland's research (1971) states that one of the reasons why intelligent and gifted children experience dropouts or underachievers is because they do not get an appropriate education program. Based on the study of theories

and empirical facts as mentioned above, it is very important to continue to carry out the acceleration class while continuing to evalate its implementation in order to find the ideal format expected. The implementation of acceleration class in principle has a strong theoretical base, especially the theory of compound intelligence proposed by Gardner (1999). Referring to the theory, there is no such thing as stupid child; because all children has their own intelligence. Gardner (1999) divides various intelligence into seven types, namely linguistic, musical, spatial, mathematical logic, kinesthetic, interpersonal and interpersonal. Besides of having diversity in terms of intelligence, talented children also have unique personality characteristics. Gifted children are easily attracted to various fields of life; they tend to be more autonomous and hard to compromise with others, easily attracted to issues of humanity and justice, and also easily associate with people who are more mature (Clark, 1983). The things mentioned above are what have been lacking attention in the regular class. Therefore accelerated classes are expected to be able to accommodate all the potential and diversity of talented children. Being unable to serve the different needs of talented children, all the potential talents will be in vain and even obstruct the development of the students[5]. Research conducted by Herry (1996) shows that talented children who do not receive proper educational services have the potential to become problematic children, and become underachievers by 22%, elementary students who have intelligence potential and special talents are at risk to be failed in class (fail to go to the next grade). Yaumil's study of intelligent and talented high school students, 30% of them are perform below their real capacity. The same thing also happened in the United States, according to research by Utami Munandar no less than 25% of intelligent and talented children in the US experienced dropouts, and underachievers. Marland Research (1971) states that one of the reasons why intelligent and gifted children experience dropouts or underachievers is that they do not receive appropriate education programs.

## 2 METHOD

The design of this research is Research and Development (R&D). The first step is undergo a mapping through descriptive research. The study population was the teachers who taught in the acceleration class. Sampling was taken with stratified random sampling technique to get teachers who teach acceleration class in schools of urban, suburban and rural areas. Data collection procedures and tools are carried out using Test procedures to reveal teachers' understanding of talented and gifted children concepts, differentiated curriculum, creative learning, and authentic evaluation models. At this stage there are also observations on the learning activities in the accelerated class. The Second Stage, designing and implementing workshops that are relevant to the needs of teachers and providing assistance simultaneously every 2 months. The types of treatment given include: (1) Increasing the understanding of talent concept and talented children. (2) Development of differentiated curriculum to treat talented children. (3) Development and practice of creative learning. (4) Development of authentic learning evaluation models. After getting the treatment as mentioned above, tests and observations were conducted to the teachers who became the subject of this study. The results were analyzed using tendency central analysis and compared the results before and after getting a workshop and mentoring.

## 3 RESULT AND DISCUSSION

### 3.1. Understanding the Concept of Talent

The research findings show that in general teachers do not understand the concept of talents which should become the basis for designing and implementing learning process in an acceleration program. The complete results are presented in the Figure 1.

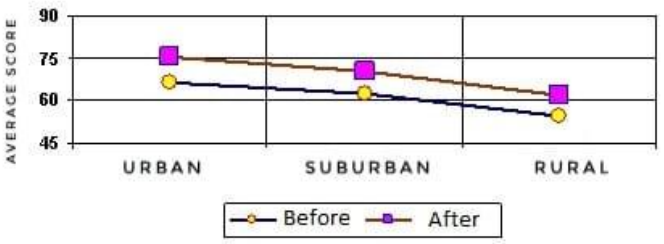


***Figure 1.*** *Comparison Graph of Talent Concept Comprehension Average Scores Before & After Training*

Observing the results of the research depicted in the Figure 1, it appears that workshops and training on "The basic concepts of talent and gifted children" given to teachers who teach accelerated classes are apparently able to significantly increase teachers' understanding. Increasing understanding of the concept of talent and talented children is very important for teachers so that they can identify the talents of children and map their learning needs. To explain this thing, the results of an analysis of variance of the average score of the talent concepts understanding are shown in the Table 1.

***Table 1.*** *Comparison of the Average Understanding Score of Talent Concepts*

| *School* | *Before* | *After* | *Total* | *Probability* |
|---|---|---|---|---|
| *Urban* | *66,60* | *75,50* | *71,05* | |
| *Suburban* | *62,70* | *70,30* | *66,50* | *p= 0,004* |
| *Rural* | *54,40* | *61,80* | *58,10* | |
| *Total* | *61,23* | *69,20* | *65,22* | |
| *Probability* | *p = 0,003* | | | *p = 0,039* |

From this table it can be seen that the average understanding of talent concepts before and after workshops and training at each school in urban, suburban and rural schools has significantly increased with a probability of 0.003 which is smaller compared to the significance level of 5%. Likewise when it compared between schools. Urban schools have a higher average score of understanding than suburban schools, moreover in rural area schools with p = 0.004. Meanwhile, when it was compared between cells it appears that the highest average score is the comprehension score in urban schools after workshops and training was 75.50 and the lowest score is in rural schools before workshops and training with score of 54.40, while the probability is 0.039.

### 3.2. Understanding the Concept of Differentiated Curriculum

Other findings in this study also indicate that teachers' understanding of the basic concepts of differentiated curriculum also increased significantly. This implies that the design of training - workshops, resource persons and delivery

methods - used as a means to increase teachers' understanding of differentiated curriculum has proven to be effective. Increased teacher understanding becomes the basic thing to be able to develop a differentiated curriculum not only on the conceptual but rather on the operational matter to serve talented children. The urgency of training and workshops in this research is to improve conceptual understanding while at the same time formulating an action program plan in the form of operational activities in serving talented students.

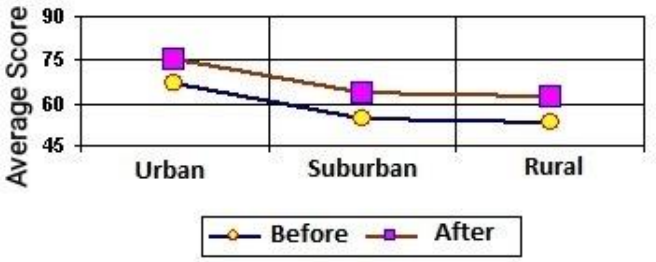


***Figure 2.*** *Comparison Graph of Average Understanding Scores of Differentiated Curriculum Concepts Before & After Getting Training*

To further explain the results of the analysis of average score variance of the talent concepts understanding as shown in the Table 2.

***Table 2.*** *Comparison of Average Understanding Scores of Differentiated Curriculum Concepts*

| *School* | *Before* | *After* | *Total* | *Probability* |
|---|---|---|---|---|
| *Urban* | *66,80* | *75,20* | *71,00* | |
| *Suburban* | *60,10* | *72,30* | *66,20* | *p= 0,028* |
| *Rural* | *54,80* | *64,70* | *59,75* | |
| *Total* | *60,57* | *70,73* | *65,65* | |
| *Probability* | *p = 0,012* | | | *p = 0,49* |

From the table it can be seen that the average understanding of the concept of differentiated curriculum before and after workshops and training at each school in urban, suburban, and rural schools has experienced a significant increase with a probability of 0.012 which is smaller compared to the significance level of 5%. Likewise when compared between schools, city schools have a higher average score of understanding than those in suburban schools especially inland schools with p = 0.028. Meanwhile, when compared between cells it appears that the highest average score of understanding in city schools after workshops and training is 75.20 and the lowest score is in rural schools before workshops and training with score of 54.80, while the probability is 0.049.

### 3.3. Understanding of Creative Learning Concepts

After taking part in workshops, training and FGDs, the teachers achieved an increase in understanding of creative learning to serve talented children. This increase in understanding is not only seen from the increase in scores achieved in the post test but also seen from their work in preparing learning plans to serve talented children. In the learning plan prepared by the participants it has been seen how the learning design they are going to do is able to accommodate the learning needs of talented children (see Appendix).

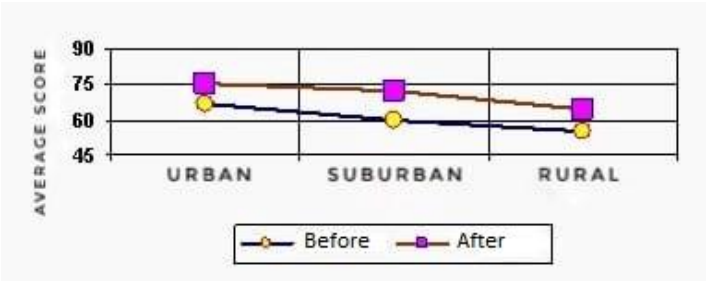


***Figure 3.*** *Comparison Chart of Average Score of Creative Learning Concepts Understanding*

The Figure 3 shows that the level of understanding of teachers towards the concept of creative learning has increased significantly. Although on suburban and rural areas does not have a big difference of its average score. To further explain the analysis results of the variance average score of the talents concept understanding as shown in the Table 3.

***Table 3****. Comparison of the Average Score of Creative Learning Concepts Understanding*

| *School* | *Before* | *After* | *Total* | *Probability* |
|---|---|---|---|---|
| *Urban* | *67,00* | *75,20* | *71,10* | |
| *Suburban* | *54,90* | *63,90* | *59,40* | *p= 0,002* |
| *Rural* | *53,10* | *62,40* | *57,75* | |
| *Total* | *58,33* | *67,17* | *62,75* | |
| *Probability* | *p = 0,001* | | | *p = 0,045* |

From the table it can be seen that the average understanding of the concept of creative learning before and after workshops and training at each school in urban schools, suburban schools, and rural areas experienced a significant increase with a probability of 0.001 which is smaller compared to the significance level of 5%. Likewise when compared between schools, urban schools have a higher average score of understanding than those in suburban schools especially rural schools with p = 0.002. Meanwhile, when compared between cells it appears that the highest average score is understanding in urban schools after workshops and training by 75.10 and the lowest score is in rural schools before workshops and training by 53.10, while the probability is 0.049.

### 3.4. Understanding the Concepts of Evaluation

The understanding of evaluation concepts of the teachers after the workshop and training turned out to have increased significantly, this is as shown in the Figure 4.

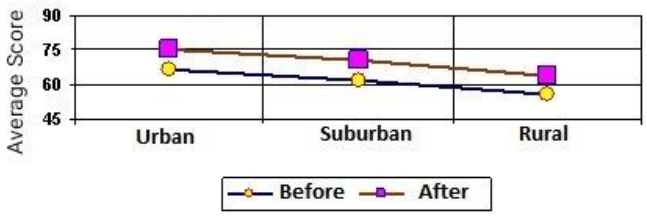


***Figure 4.*** *Comparison Graph of Average Score of Evaluation Understanding*

The Figure 4 shows that the level of understanding of teachers towards models of evaluating student learning outcomes also experienced a significant increase. The teachers are not only understand cognitively but are also able to design it in the student learning outcomes assessment program. To further explain the results of the analysis of average score variance of the of talent concepts understanding as shown in the Table 4.

***Table 4**. Comparison of Evaluation Concept Understanding Average Scores*

| School | Before | After | Total | Probability |
|---|---|---|---|---|
| Urban | 66,,60 | 75,30 | 71,10 | |
| Suburban | 61,50 | 70,70 | 66,10 | p= 0,003 |
| Rural | 55,50 | 63,50 | 59,50 | |
| Total | 58,33 | 67,17 | 62,75 | |
| Probability | p = 0,002 | | | p = 0,042 |

From Table 4 it can be seen that the average understanding of the learning outcomes evaluation concept before and after workshops and training at each school in urban, suburban, and rural schools has significantly increased with a probability of 0.002 which is smaller compared to the significance level of 5 %. Likewise, when compared between schools, urban schools have an average score of understanding that is higher than in suburban schools especially rural schools with p = 0.003. Meanwhile, when compared between cells it appears that the highest average is the understanding score in urban schools after workshops and training by 75.30 and the lowest score is in rural schools before workshops and training with a score of 55.50, while the probability is 0.042. The research findings as described above are interesting to be deeply discussed in order to obtain a comprehensive understanding of the overall work of this research and its results. There are several important aspects to be discussed, namely: First: Preliminary research findings which show that teachers do not have sufficient academic readiness to manage the acceleration program. This is evidenced from the findings about the lack of understanding of the talent and gifted children concept; differentiated curriculum, creative learning models and authentic evaluation models. Even though the five aspects are the main pillars of the implementation of the correct acceleration program. Therefore it can be understood if the acceleration program in its implementation encounter distortion to the extent of compaction of the material and compression of the study period. Second; workshops have proven to be able to provide significant changes or improvements to teachers; in understanding and mastering the practice of implementing acceleration according to correct academic rules. This is inseparable from the workshop management strategy which relies more on the andragogy approach rather than mere theoretical approximations. The increase of teacher understanding of the nature of talent and gifted children is the basis for designing a differentiated curriculum; when the teacher is able to develop a differentiated curriculum it is easy for him to design a creative learning process to avoid monotonous, typical and boring learning process for students. The creative learning process provides broad psychological space for students and teachers to develop learning activities that are rich in emotional stimuli so that students enjoy the learning process and discover the context of reality they are learning. Igniting a child's emotional life becomes the most important part of creative learning because it refers to the opinion of Strongman (1981) which states that emotional life precedes rational mental life. The stimulation of emotional brain performance will stimulate the performance of the rational brain. Therefore Semiawan (1989) highly recommends the importance of managing learning that is rich in emotional nuances so that it can generate an energy field for creative and critical thinking processes. On the other hand, the role of the family play an important role; in this case parents of students is one of the parties whose contribution is quite large for the success of their children's education. Therefore it is understandable if in the organization of education for talented children the role of parents is very important. In psychological theories there are two important aspects of parents' role whose significantly influence on the success of their children. Louisa, M. et. al.(1989) called it the level of aspiration; Meanwhile coleman (1991) called it parent involvement. Level of aspiration refers to the degree of aspirations about the success and values of life instilled by parents to their children and it is consistently planted in the parenting process. Level of aspiration is an inspiration of success and a way of life that is given by parents through their parenting methods. So from the beginning parents already have a platform about the shape or form of success that is expected to be achieved by their children; and it is manifested in ways of parenting, guiding and facilitating children in accordance with their talents. Meanwhile parent involvement refers to the form of parent involvement in helping their children deal with the future. Parent involvement refers more to the form of parent involvement in their child's learning process, starting from the learning choices decided by the children, how parents take positions in helping children face self-chosen learning challenges and provide direction in overcoming difficulties.

## 4 CONCLUSION

Based on the findings as mentioned above, it can be concluded that: the causes of various distortions in the implementation of the acceleration program are the lack of understanding of teachers towards the concept of talent and gifted children; differentiated curriculum, creative learning models and authentic evaluation models. They (teachers) need training and workshops to increase their understanding of talent concepts and gifted children; differentiated curriculum, creative learning models and authentic evaluation models. The five main concepts of the implementation pillar need to be continuously improved so that they are able to carry out the acceleration program correctly. Based on the empirical findings, it is recommended that related parties (Dir of Special Education, Provincial & District/City Education Agency) continue to hold workshops and training according to the needs of acceleration organizing teachers.

## 5 REFERENCES

[1] Clark, B. 1988. Growing up gifted. Toronto: Charles & Merril Publishing Company.
[2] Clark, B. R. 1983. The Higher Education System: Academic Organization in Cross-National Perspective. California: University of California Press.
[3] Clark, R. E. 1983. Reconsidering Research on Learning from Media. SAGE Journals. Vol 53. Issue 4. 1983.
[4] Coleman, J. S.1991. Policy Perspective: Parental Involvement in Education. Washington DC: Goverment Printing Office.
[5] Elyana, L., Utanto, Y., Widhanarto, G.P. and Maretta, Y.A., 2018. Analysis of parent's discriminant partnership in the

success of implementation of good school governance. In MATEC Web of Conferences (Vol. 205, p. 00012). EDP Sciences.
[6] Gardner, H. 1993. Frames of mind. New York: Bantam Books.
[7] Gardner, H. 1999. The Disciplined Mind: What All Students Should Understand. New York: Simon & Schuster.
[8] Goleman, D. 1996. Emotional intelligence. New York: Scientific American Inc.
[9] Gunawan, D., Utanto, Y. and Maretta, Y.A., 2017. An analysis on indonesian teachers' reasoning in resolving moral dilemmas. Man In India, 97(2), pp.829-841.
[10] Herry, Y. and Darlene, A. 1996. The French Self-Perception Profile for Children: Score Validity and Reliability. SAGE Journals. Vol. 56. Issue 4. 1996
[11] Kitano, H. 1994. Speech-to-Speech Translation: A Massively Parallel Memory-Based Approach. New York: Springer.
[12] LeDoux, J. 1996. The emotional brain: The mysterious underpinning of emotional life. New York: Simon & Schuster Paperbacks
[13] Levinger, J. S. 1997. Application of Huang-Yang pseudo potential to a few-body system. Wiley Online Library. Vol. 509. Issue 5. 1997
[14] Louisa, M., et. al. 1989.Teachers' language and pupils' ideas in science lessons:can teachers avoid reinforcing wrong ideas. International Journal of Science Education. Vol. 11. Issue 4. 1989
[15] Marland, S. P. 1971. Education of the gifted and talented: Report to Congress. Washington DC: U.S. Government Printing Office.
[16] Mayer, John D., Geher, Glenn. 1996. Emotional intelligence and the identification of emotion. Intelligence. Vol 22 (2), Mar-Apr 1996, 89-114.
[17] Mayer, John D., Salovey, Peter. 1993. The intelligence of emotional intelligence. Intelligence. Vol 17 (4); Oct-Dec; 1993, 433-442.
[18] Mayer, John D., Salovey. Peter. 1995. Emotional intelligence and the construction and regulation of feelings. Applied & Preventive Psychology. Vol 4 (3), Sum 1995; 197-208.
[19] Munandar, U. 1987. Mengembangkan bakat dan kreativitas anak sekolah: penuntun bagi guru dan orang tua. Jakarta: Gramedia.
[20] Salovey, P. and Meyer, J. D. 1990. Emotional Intelligence. SAGE Journals. Vol. 9. Issue 3. 1990
[21] Semiawan, C. R. 1989. Process Skill Approach. Jakarta: Gramedia.
[22] Semiawan, C. R. 1997. Perspektif pendidikan anak berbakat. Jakarta: Grasindo.
[23] Strongman .1981. Emotional Experience: A Review. Springerlink. Vol.1. Issue 1. 1981.
[24] Strongman. 1996. Handbook of Emotion, Adult Development, and Aging. Pages 133-147
[25] Yaumil C. Achir. 1997. Reformasi Pendidikan sebagai Upaya Memaksimalkan Hasil Pendidikan. Dalam Keluar dari Kemelut Pendidikan Nasional. Ed. M. Dawam Rahardjo. Jakarta: Intermasa.