

INDIVIDUALIZED LEARNING MODEL OF GIFTED CHILDREN IN ACCELERATION–INCLUSION SETTING

(Model Pembelajaran Individu Bagi Kanak-Kanak Pintar Cerdas
Dalam Tetapan Pemesatan-Inklusif)

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Abstract

This research aims to develop individualized learning model of gifted children in “acceleration-inclusion” setting. The problem is how the individualized learning model of gifted children in acceleration-inclusion setting could be effectively applied. This study uses a mixed method research design with research and development approach and sequential mixed method strategy. It includes a three-stage procedure by Borg and Gall (1989). The first stage entails conceptual and empirical study related to the learning context of gifted children in the acceleration-inclusion setting at Al-Mabrur Elementary School, resulting in the formulation of a hypothetical model of individualized learning of gifted children in acceleration-inclusion setting. This model is established based on the assessment and basic elements of independent study. By means of the validation of content and practicality that involved experts and practitioners and revisions, the overall model of individualized learning of gifted children in acceleration-inclusion setting is tested in the next two stages, the test of applicability and the test of effectiveness.

Keywords *Individualized Learning, Gifted Children, Acceleration-Inclusion Setting.*

Abstrak

Kajian ini bertujuan untuk membangunkan model pembelajaran individu bagi kanak-kanak pintar cerdas dalam tetapan “pemesatan-inklusif. Masalahnya ialah bagaimana model pembelajaran individu kanak-kanak pintar cerdas dalam tetapan pemesatan-inklusif boleh digunakan dengan berkesan. Kajian ini menggunakan reka bentuk penyelidikan kaedah campuran dengan pendekatan penyelidikan dan pembangunan dan kaedah strategi kaedah campuran turutan. Ini termasuklah prosedur tiga peringkat oleh Borg dan Gall (1989). Peringkat pertama melibatkan kajian konseptual dan empirikal yang berkaitan dengan konteks pembelajaran kanak-kanak pintar cerdas dalam tetapan pemesatan-inklusif di Sekolah Rendah Al-

Mabrur yang mengakibatkan formulasi model hipotetis pembelajaran individu kanak-kanak pintar cerdas dalam tetapan pemestaran-inklusif. Model ini dibentuk berdasarkan penilaian dan elemen asas kajian bebas. Dengan cara kesahaan kandungan dan praktikaliti yang melibatkan pakar dan pengamal serta semakan, keseluruhan model pembelajaran individu kanak-kanak pintar cerdas dalam tetapan pemestaran-inklusif diuji dalam dua peringkat seterusnya, ujian kebolegunaan dan ujian keberkesanan.

Kata kunci *Pembelajaran Individu, Kanak-Kanak Pintar Cerdas, Tetapan Pemestaran-Inklusif.*

INTRODUCTION

Special education for the gifted children is available in many options. The decision of special education provision for gifted children is influenced by considerations of philosophical, historical, and legal aspects. Along with the dynamics of education, empirical facts show that gifted children education choice is boiled down to “inclusion” setting. This choice has consequences that must be answered. One of the consequences is the development of program diversification. In the context of the diversification program, learning innovation through the formulation of “acceleration” in the Al-Mabrur Elementary School, challenging further study, especially with regard to the development of individualized learning model that is relevant to the uniqueness of each individual.

Gifted children, like other children, have to learn new things with a high standard. Lois (Sisk, 1987) proposes three options: lessons modification, modification of tasks, and scheduling. While the lesson is modified through acceleration, the task is modified by providing an alternative assignment. Meanwhile, scheduling option provides an opportunity of learning individually through independent study, learning together in homogenous groups, and participating in heterogeneous groups. Gifted children should be provided with an environment to grow, learn, and socialize. Gifted children learn at a faster pace than other children and as such, they should not be expected to wait for others to catch up.

The essence of an acceleration-inclusion setting is in its diversification program. The challenge is how to enable gifted children to learn more, at a faster pace, and with varying ingredients. To meet the needs of gifted children, the classroom environment should be a positive and conducive place. Gifted children tend to be critical, looking at the relationships and incorporating ideas. Acceleration is an educational practice that provides content and prepared activities so that gifted children are able to develop more quickly. Clasen and Clasen (as cited in Plucker & Callahan, 2008) reported that 66% of high-ability students cited peer pressure as the primary force for getting good grades.

Acceleration involves the understanding of children’s achievement to enable them to advance towards the natural rate (Wahab, 2009). Preliminary study of gifted children yielded the profiles of under-achievers. There are children who, despite achieving below the class average in certain subjects, managed to enter the

superior group when the overall achievement is taken into consideration. This is a challenge. In the context of inclusive education, a learning model of development, such as through individualized learning within the “acceleration-inclusion” settings, becomes a need so that the potential of gifted children can be developed optimally.

Providing education related to issues in the sociology of education, namely integration, segregation, solidarity, and equality of experience, is deemed important. Based on the concept of inclusive education, the concept of inclusive schools was conceptualized. An inclusive school emphasizes the development of collaborative school vision, looking at the pressure as an opportunity to reset priorities, creating conditions to learn, developing structures of collaboration, empowering individuals and groups, as well as developing a collective responsibility. Thus, the school should be a place where every child is accepted to be part of the class, as well as helping each other so that their individual needs are met.

The case of underachievement, experienced by some gifted children should not happen, because as stated by Dryden (2004), everyone can learn anything, if given the opportunity to do it with a unique style. This underlines the importance of researching and developing an individualized learning model of gifted children within the “acceleration-inclusion” setting. Therefore, this study aims to develop individualized learning model of gifted children in the “acceleration-inclusion” setting. In particular, this study aims to (1) formulate initial individualized learning model of gifted children in the “acceleration-inclusion” setting (hypothetical model), and (2) conduct validation and development of individualized learning model of gifted children in the “acceleration-inclusion” setting so as to obtain an operational model.

METHODOLOGY

This study uses a mixed method research design with research and development approach and sequential mixed method strategy. It includes a three-stage procedure by Borg and Gall's (1989). The first stage entails conceptual and empirical study related to the learning context of gifted children in “acceleration-inclusion” setting at the Al-Mabrur elementary school. The first stage resulted in the formulation of individualized learning of gifted children in “acceleration-inclusion” setting as a hypothetical model. The second stage is model development and validation which includes: revision and development of hypothetical model through theoretical conceptual validation as well as empirical contextual which involves experts and practitioners. Content validation has been done by qualified special education experts with Delphi technique. Meanwhile, empirical practitioner validation has been done through focus group discussion. Feedbacks are used for the basis in revision to convert hypothetical model as operational model. Operational model is used for the next stage (i.e., third stage).

Research subject and setting

The present study was conducted in Al-Mabrur elementary school which organizes “acceleration-inclusion” class. Research subjects comprised the “acceleration-inclusion” students in the classes at Al-Mabrur elementary school.

Data collection and research instrument development

The qualitative data were collected from appropriate data source in order to answer the research question. The researcher serves as the main instrument of the research. According to Miles and Huberman (1992), qualitative approach employs naturalistic enquiry which places the researcher as the instrument. The data were collected through interview, observation and documentation study.

Data analysis and validity

Data were analyzed descriptively by means of a qualitative inductive technique of critical thinking through data analysis interactive model of Miles and Huberman (1992) which includes data reduction, data presentation and conclusion. The research data were verified during the study. To obtain accurate results of the study, the techniques of data validity criteria, credibility, transferability, dependability, and confirmability were employed.

RESULTS

Based on the results of the study, the initial formulation of individualized learning of gifted children in the “acceleration-inclusion” settings was specified, known as a hypothetical model. In general, experts argued that the content aspect of this model has met the eligibility. The experts also recommended that the individualized learning model of gifted children in the “acceleration-inclusion” setting should be developed and implemented. The component content was rated as adequate and operational. Based on the experts’ assessment and recommendations, the operational guidelines were developed to facilitate the understanding and constituted the integral part of the model. In general practitioners assessed this model and deemed as an interesting and potential solutions to stimulating learning practices in Al-Mabrur Elementary School.

Model Description

Based on the input of experts and practitioners, the individualized learning model of gifted children in the “acceleration-inclusion” setting was formulated, developed, revised, and implemented. This individualized learning model, referred to as operational model, and is visualized as follows:

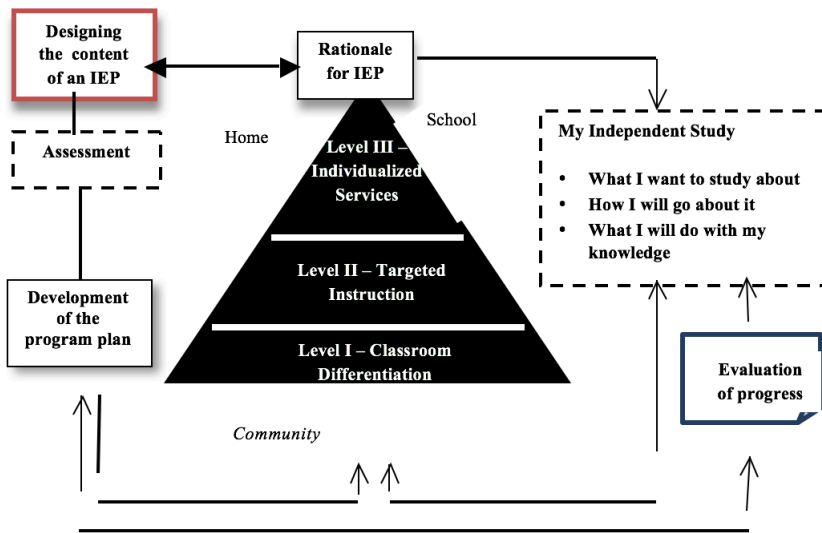


Figure 1 Individualized Learning Model of Gifted Children in “Acceleration-Inclusion” Setting (Operational Model)

Rationale

Differentiated education is defined as the process of instruction which can be integrated into the school program and adapted to varying levels of individual learning response for the education of gifted and talented students. It includes a differentiated curriculum, instructional strategies which accommodate the unique learning styles, flexible administrative arrangements for instruction both in and out of school such as special classes, seminars, resources rooms, independent study, student internships, mentorships, research, field trips, library, media, research centers, and other appropriate arrangements.

Designing the content

The process of planning includes assessing the individual gifted student’s needs, developing a profile or matrix, identifying or developing objectives, planning learning experiences, and deciding on how to evaluate the progress of the gifted students. Four levels of parental involvement: (1) informational, (2) participation, (3) interactive, and (4) deep involvement. The informational level is general sharing of information concerning the gifted student’s interests, early indications of giftedness, and strengths and weaknesses as seen by the parents or teachers. The participation level includes planning activities that teachers and parents think are worthwhile for the individual gifted students. The interactive and deep involvement levels include working with teachers regularly and closely on special concerns or problems such as underachievement.

Assessment

Several leading questions are helpful in compiling assessment information from a variety of sources: the availability of information concerning the gifted student's aptitude, achievement, interest, creativity, and self-concept. Objective data are very important, but many gifted students, particularly special populations, will not be identified if strict adherence to objective data is observed. Many tests were not adaptable to low income, disadvantaged, bilingual, handicapped, or other special populations of gifted.

Development of the Program Plan

Decisions about what materials and methods to use in reaching the objectives can be facilitated by using the Maker matrix or other compilations of matrix information. However, the primary emphasis is on content, process, product, and learning environment modifications.

Evaluation of Progress

A Comprehensive evaluation of progress will reflect a number of evaluation procedures. To help gifted students evaluate their own progress, it is useful to ask questions such as: if you were to conduct this study again, how would you do it? What do think were the strengths of your project? What weaknesses did you note? Are there new approaches you would use?

Independent Study

Teacher and the gifted student cooperatively assessed interests, established goals, and planned learning activities, learning materials, and instructional outcomes. The gifted student was encouraged to self-pace his/her work, self-evaluate by discussing areas for further study, and critically examine any need for adaptation. Teacher helps to provide both resources and support in the classroom. Individualization is a serious commitment for educators who work with the gifted. By identifying an area of interest and pursuing a project to its completion, gifted students take a significant step in the development of positive self-esteem, particularly as it demonstrates their knowledge and ability (Sisk, 1987). Differentiation is the process program that allows teachers improve student learning by matching the characteristics of learning.

Level I – Classroom Differentiation

This is intended for the majority of gifted children at the level of mildly gifted. Their needs are met through the service in a regular class with the class teacher. Differentiation includes instructional strategies that use an educator to meet learning needs. This strategy is not limited to flexible grouping, tiered assignments, tasks are modified, independent projects, extensions and enrichment.

Level II – Targeted Instruction

Level II represents a small number of the gifted children who need to be more unique and more specific (moderately gifted). Master class in collaboration with specialist teachers, and fellow teachers at higher grade levels to plan learning activities and

to meet the needs of students. Competition, programming and specific guidance, acceleration or independent projects can be used to meet their learning needs.

Level III – Individualized Services

The position at the top of the pyramid (profoundly gifted) consists of a very small number of students. This service is for students whose needs for academic and intellectual challenges go beyond the curriculum targets so much so that differentiation is estimated to be less effective. Strategies and instructional services for students with extra ordinary needs include all services in the Level I and Level II, plus the possibility of acceleration of grade level, a radical acceleration, and distance learning.

Development I: Math is Fun

Math can be used when guessing how long a road to walk to the house. Is used to estimate how much water fills a bucket and what is the price of three kilograms of potatoes in the market. Math can also be used when selling fish by the roadside, when dancing, when playing music and when singing. Math helps children make connections between math skills, concepts and ideas of mathematics and mathematics in everyday life such as those used in the market. Role playing in which the child pretended to go to the market, can be fun and meaningful to children when learning mathematics. It is also an opportunity for children to develop confidence when speaking in front of the class.

Development II: Learning Science

To make science fun, teachers have to balance between what is real with what is known. By starting with the real thing and linking science to what their children do on a daily basis, teachers can help children develop better communication skills. They will be easier to talk about science and “real life.” In the discourse to learn science, children can practise the skills of observation and investigation. Children can be introduced to the role in which science and the scientific method in the community. They can learn science well while looking for practical solutions to community problems.

Development III: Language Skills

Language skills is very important because it affects the child’s ability to learn other materials. Meaningful learning will occur if the language of instruction is meaningful. Some regional languages should be used so that all children have access to information, can communicate the idea, and can be understood in any meaningful way. Listening, speaking, reading, and writing are skills that need to be incorporated so that children develop language skills thoroughly. Language skills can be developed by creating opportunities to listen and read for the child to understand the information and building comprehension through the use of task groups or pairs to help children listen and express themselves.

DISCUSSION

Individuals are unique, and so is giftedness. Giftedness is an effort to discover and understand individual excellence, which also implies finding its uniqueness. Profile of excellence as a uniquely important thing was found in order to know their particular needs. Context specific needs that underlie the assessment, and based on the assessment diversification program through individualized learning model was developed so that the potential of gifted children can be developed optimally. The unavailability of gifted children who excel in all aspects proves the uniqueness of each individual. Assessment of equality implemented in Al-Mabrur elementary school produces three categories students, namely child with disability, the average child and the superior child.

Profile of gifted child has many dimensions. It parallels the idea of Milgram (1991) who believes in multidimensional giftedness, in that children are gifted at different ability levels, ranging from the profoundly gifted, moderately gifted, to mildly gifted with three settings (school, home, and community). This leads to the need for adjustment and learning strategies which fit the profile of a gifted child. This is important because gifted children have positive personal and social characteristics which are prone to a large deviation. Deviations can be that of social isolation, social accommodation, and a search of social acceptance.

Acceleration becomes a necessity because it is the essence of fulfillment for diversification program. The philosophy of acceleration is intended for all children (Finnan et al., 2000). In the context of a gifted child, the challenge involves how to allow children to learn better and faster with varied materials. While the inclusion is seen as the most appropriate settings accelerated learning, because inclusion is a natural setting.

With regard to the applicability of a model that is required to provide confidence that the model is feasible and can be implemented, the principal aspect of the applicability of the model is: how elements involved in the mechanism of the activities are relevant to the conditions in Al-Mabrur elementary school, such as teachers, parents, and community. Analysis of the operational model is important not just to look at the possibility of applicability of the model but also to identify the leader and the key aspects that support adherence to the model.

Inclusion setting is a solution to the problem of education, and this in fact has become a national commitment which is in line with the international commitments to achieve the education for all (EFA). Times have changed in that all are geared towards inclusion, and that all must have the courage to change, to organize themselves to build 'a house together', named IEP (Individualised Education Plan) as a vehicle to build an inclusive society and nation. In this perspective, "acceleration inclusion" setting context of gifted children in Al-Mabrur elementary school has been on the right path.

On the implementation of the model, the teacher plays a central role. Gifted children became an integral part of teaching and learning activities in the classroom. Teachers can focus their attention to open-ended activities and create an atmosphere that encourages children to receive the realization that life does not need one correct

answer. Teacher can document students' partial progress in their lessons, with varying students' accommodations (Karten, 2005). Thus innovative approach to individualized learning of gifted children should be adopted. One way is to make learning more effective and efficient. Another way is to focus on the role of parents and other adults outside the school setting.

This empirical data when analyzed based on aspects that build academic achievement is known to vary. In the aspect of academic achievement, there is an extreme where some children scored below average in certain subjects while others obtained the lowest scores. This phenomenon occurs in children who have a total score above average, and some even above average top marks. The gap between the ability of gifted individuals and the actual achievement existed was due to various factors, such as a loss of interest or negative social consequences because he/she was considered smart. Underachievement can occur due to psychological factors, including depression, anxiety, perfectionism, and so forth.

Each learning activity requires planning, problem solving, strategic decisions, and the recommendations of the methodology, communication and use of experience critically. Thus, learning orientation must be achieved on the basis of the analysis of optimum education and plans for the future. The educational strategy of gifted children shows higher than extracurricular context. School is not possible to meet all the educational needs of gifted children. Gifted children have times when they are not able to solve a problem and need special encouragement. As a result, a special program is needed in these activities both in school and out-of-school. Extracurricular activities can offer an efficient alternative to stimulation and orientation of the gifted. Clubs in school and outside school can offer interesting activities where gifted children can find the right place for developing their potentials.

Mentoring method performed by the mentor will help develop special abilities and skills of gifted children. Mentor becomes an expert in a particular aspect and provider of information required. Mentors can also serve as a counselor who helps gifted and motivated to collect information and develop the ability. Acceleration is documented in the monitoring of the pre-test, namely the capacity of the child, academic achievement, what a child already know in terms of skills and content. Emotional and social development, the assessment criteria result in the acceleration mode that emphasizes high-level cognitive processes, independence and originality of thought, rather than the content, criteria and synthesis of data analytical approach.

The learning process is designed and carried out using a multi-strategy, oriented to the development principle of multiple intelligences and to develop a development environment as a learning environment. This approach is believed to be able to guarantee the learning process not only in promoting the cognitive aspects but also in other developments concerning diverse aspects in an integrated (holistic) manner. The assessment is done in various ways, including the assessment of equality, daily tests, midterm and final semester in the forms of portfolio and reports of child development. Excellent children are observed throughout the development process and not only through the "verdict" of psychological assessment.

Acceleration is based on a comprehensive assessment of the readiness of the individual. Underachievement can cause bad study habits, psychological and

behavioral problems and low self-esteem. Achievement patterns tend to evolve unless gifted children are given the opportunity to develop personally challenging task. Like all learners, gifted children need to experience success with tasks that go beyond what they already know, to develop the understanding and skills. Acceleration program can increase the enthusiasm of learning and life, reduce boredom, improve attitudes to school, improve self-esteem and success, and help children develop a realistic understanding as a result of their ability to work with colleagues of equal intellectual capacity.

Responsibilities of a principal include ensuring schools have the appropriate processes to consider the request acceleration, and connecting parents and teachers as partners in the process of planning and monitoring acceleration. Besides, the principal also approves the acceleration plan, collaborates with all primary, secondary and colleges to allow the progress of the subject, and helps teachers to access appropriate professional development. Social and emotional maturity assessment should include the input of parents and gifted education specialists. Sensitive management is needed to make sure the child does not feel ‘failed’. Care should be taken not to create excessive expectations. Failure to advance gifted children can lead to poor study habits, apathy, lack of motivation and inability.

Acceleration provides high-level learning of basic skills, and problem solving. Kids learn when new ideas are connected with what they already know and have experienced. Acceleration is based on high standards. Child engaged in active learning, participation, and understood the important ideas. The context of 5-year learning program, developed as a form of acceleration, the principle applies to every student. Individual learning services in the setting of acceleration-inclusion makes Al-Mabrur elementary school as an inclusive school. Setup program is done with the reorganization of the curriculum with equality pattern. A 6-year reorganization program curriculum integrated into the curricula of 5 years is conducted by considering: (a) sustainability capabilities that are developed in every lesson from one grade level to another grade level, and (b) the implications of the principle of accelerated learning for the content and the burden of student learning (Kartadinata, 2011).

Key to understanding the individual learning model in acceleration-inclusion setting is realized not only in the context of faster, but also in the context of a radical change. Individual learning in the “acceleration-inclusion” setting involves the assumption of differentiation, the role of adults in the school, the effectiveness of educational practice, value changes and precise communication. The model focuses on the intellectual quality, based on the strength of intellectual and based on the assumption that all children have potentials. Therefore, teachers need to make sure gifted children receive relevant experience which is challenging and interesting. The concept of learning leads to action taken by the school and the action is accelerated, authentic, interactive, inclusive, and sustainable.

CONCLUSION

The study produces an important conclusion: high intelligence does not always correlate with good learning outcomes. Due to the psychological profiles in particular, gifted

children face difficulties when taking part in school activities. In order to optimize the potential of gifted, the gifted child's individual learning model in "acceleration-inclusion" setting becomes very relevant. Context acceleration-inclusion is based on the premise that the school can reach a fair education. All children are challenged to think, solve problems, and communicate effectively. Individual learning in the "acceleration-inclusion" setting entails quality learning that is substantive, authentic, and relevant. A child is active and responsible when he/she is engaged in intellectual activity. This occurs when teachers are skillful in engaging students in meaningful discussions.

All children have a unique set of individual variation in learning. The need for individual learning model arises from its unique characteristics. While there is a universal impulse to improve standards of learning and achievement, there is no obligation to admit the principle of inclusion. This has contributed to the anxiety of teachers.

The learning model of gifted children in the "acceleration inclusion" setting allows for the implementation of various strategies. Consequently, gifted children become more receptive to the factors that contribute to the development of their ability in the domain of their interest. The effectiveness of the program depends on the human resources involved in the implementation.

This operational model should be applied on the basis of the diversification program as the essence of the context of inclusive education. The program was developed through the collaboration among mentor teachers, families and community so as to create a climate of psycho-social support. The results are seen in the performance exhibited cognitively and by means of skills and attitudes.

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