

Gifted Innovation Education: New Perspective in Identification and Development of Gifted Student in Inclusion Education Setting

Eka Sakti Yudha¹, Sunaryo Kartadinata², Nandang Rusmana³

*Indonesia University of Education
Bandung, Indonesia
eka_bk@upi.edu¹, skartadinata@upi.edu², nandrus@upi.edu³*

Abstract—The purpose of this paper is to provide a new perspective in the identification and development of gifted students in Indonesian inclusive education settings. Education recruitment system of gifted children that are currently used to attract gifted children requires three things: IQ above average, creativity, and high task commitment. They are considered inapplicable for application in Indonesia because, in addition to high costs, their implementation is difficult to reach remote area of Indonesia. The new models that are developed by using non-test instrument is expected to answer problems and challenge of identifications and development of gifted children in Indonesia. The concept to recruit and to develop gifted children is social-emotional competence of gifted children those are confirmed by using intrinsic motivation. The meeting of these two variables is believed to be theoretically able to attract gifted children in inclusive educational settings that carry the education for all. Therefore, the development of gifted children can be more humane and does not deprive the child from social community.

Keywords: *Gifted education; social-emotional competence; intrinsic motivation; inclusion.*

INTRODUCTION

Inclusive education is the current trend of education. It has been a consensus of more than 160 countries set out in the vision of education 2030 (UNESCO, 2016; Choate, 2004; Suherman, 2014). The vision of education 2030 that is carried out mentions “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. It means that the world has committed to unite spirit to reform education to become holistic and comprehensive, leaving no one behind.

New vision of education commits to promoting quality lifelong learning opportunities for all, in all settings and at all levels of education, with due attention to quality assurance. Therefore, inclusive education is very close to the high-quality education. In other words, the trend of high-quality education is education that carries the philosophy of inclusion.

Inclusive education, obviously, cannot be separated from the philosophy of inclusion. Fundamentally, the philosophy believes that every individual can learn, grow, and work with everyone in the school and community (Suherman, 2014; G & Puri, 2004). The philosophy of inclusion sees human as a unique individual and is created for the

community. Therefore, a normal society is characterized by diversity. Consequently, the principle of respect for diversity becomes a basic principle in the implementation of inclusive education.

In Indonesia, an inclusive school is understood in narrow sense: a regular school that includes children with special needs. Inclusive Schools indeed includes children with special needs. In fact, in broader sense, an inclusive school is a school that seeks help in recruiting and providing educational services to all children without exception, including gifted children. The goal is to increase the participation of every child in learning process. Empirical facts demonstrate that many children are excluded in learning process, based on their capacities, due to various reasons, for example: (1) children who speaks different languages from the language of used textbooks and reading books; (2) children who have never given active opportunities in the classroom; (3) children with impaired vision, hearing, etc.; (4) children who never get help when experiencing barriers to learning; and (5) gifted children with above average ability (Choate, 2004)

Gifted children became one of the populations who are marginalized by the school system that does

not accommodate the needs of individuals. The needs of gifted children that are not facilitated by school system led to a variety of behavior disorders, such as becoming troublemaker in the classroom, or even considered as a naughty.

One of the problems that arise is that the model to identify gifted children in Indonesia currently uses the triadic model of giftedness initiated by Renzulli (1978; 2012). It requires the interaction of three components: an above average IQ, creativity, and high task commitment. This model has many obstacles in its implementation, including the high cost of psychological testing and it is not able to serve schools in remote areas.

GIFTED CHILDREN IN INCLUSIVE EDUCATION

At the beginning, the terminology ‘giftedness’ refers to children who show unusual development, or children who have an above average IQ (Feldman, 2003; Tannenbaum, 2000; Sternberg, 2005). Up to now, there is single definition of gifted agreed by all experts, because of differences in viewpoints of each expert in defining gifted. Some experts refer to process (Ziegler, 2005; Ziegler & N.Philipson, 2014). Some others refer to factors causing giftedness (A.Heller, Perleth, & Lim, 2005), or criteria (Callahan, 2005; Feiffer, 2008) for gifted children, or education for gifted children.

In general, there are four main groups of definitions of giftedness in the literature (Beranek, 1993; Maker, 2010). The first and the second are oriented to a psychological construction (model of trait-oriented and model of cognitive component) (Gagné, 2002; Feldman, 2003). The third focuses on achievements and accomplishments (Sternberg, 2005) and the fourth group considers the importance of environmental influences on someone’s giftedness (Ziegler, 2005; Ziegler, 2014).

Various understanding and opinions make the concept of giftedness difficult to define exactly. Nevertheless, the definition of giftedness that is often used in United States today comes from the Javits Education Act (1988) as follows.

The term gifted and talented student in inclusion education means children and youths who give evidence of higher performance capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided

by the schools in order to develop such capabilities fully. (Javits, 1988).

SOCIAL-EMOTIONAL COMPETENCES AND INTRINSIC MOTIVATION AS PREDICTOR FOR GIFTED

A. Social Emotional Competences

Competence briefly defined as a set of individual capabilities to behave and to understand the views of other individuals (Boyatzis, Goleman, & Rhee, 2000; Boyatzis & Saatcioglu, 2007). In the context of social-emotional competence, the ability is associated with intrapersonal individual and interpersonal individuals.

The linkage between social-emotional competences can be explained by how experts define competences based on their interrelationships with one another. Some experts have various opinions regarding the definition of the associated emotional competences as well in relation to the social competence. Boyatzis (2000) defines emotional competence as a person’s ability to (1) feel the emotions in self and others; (2) integrate emotion in mind; (3) understand the emotions in self and others; and (4) manage or regulate emotions of self and others.

The result of the development of Boyatzis and Goleman’s theory in 2006 reveals the relationship between emotional competence and social competence. Boyatzis and Goleman (2000) defines social-emotional competence is a set of capabilities that can be learned, an emotional intelligence as a basis or capital for individuals to thrive in social environment. Emotional competence contributes directly to individual work performance in social environment where people live.



Figure 1. Model of Social-emotional competences

Social-emotional competence model developed by Boyatzis and Goleman (Boyatzis, Goleman, & Rhee, 2000) involves individual competences in four areas: self-awareness, self-management, social awareness, and customer relationship management. All these four areas need to evolve together to produce optimum performance of individual.

The social-emotional competence is the linkage of two competences that cannot be separated. Based on the concept of emotional competence theory, it is the initial capital that comes from inner capacity to support individual performance in social environment where people live. Manifestation of social-emotional competence of individual is indicated by individual performance in four main areas: self-awareness, self-management, social awareness, and customer relationship management. Both competences, emotional and social, need to support each other and grow together to show self-performance that can be accepted by community based on norms and values. The emotional-social

...(a) participation in an activity purely out of curiosity, that is, for a need to know about something; (b) the desire to engage in an activity purely for the sake of participating in and completing a task; and (c) the desire to contribute.

Based on Dev's notion, intrinsic motivation is closely related to people's curiosity. When individual has a curiosity about an activity, the individual will involve to settle and to contribute in the activity, not because of other external motives. Such behavior indicates that individual has an intrinsic motivation.

Intrinsic motivation is defined as the doing of an activity for its inherent satisfaction rather than for some separable consequences. When intrinsically motivated, a person is moved to act for the fun or challenge entailed rather than because of external products, pressures or reward.

According to Ryan & Deci, individual who has intrinsic motivation performs an activity to achieve pleasure or satisfaction in the form of a challenge, not because of external things, pressure, and awards.

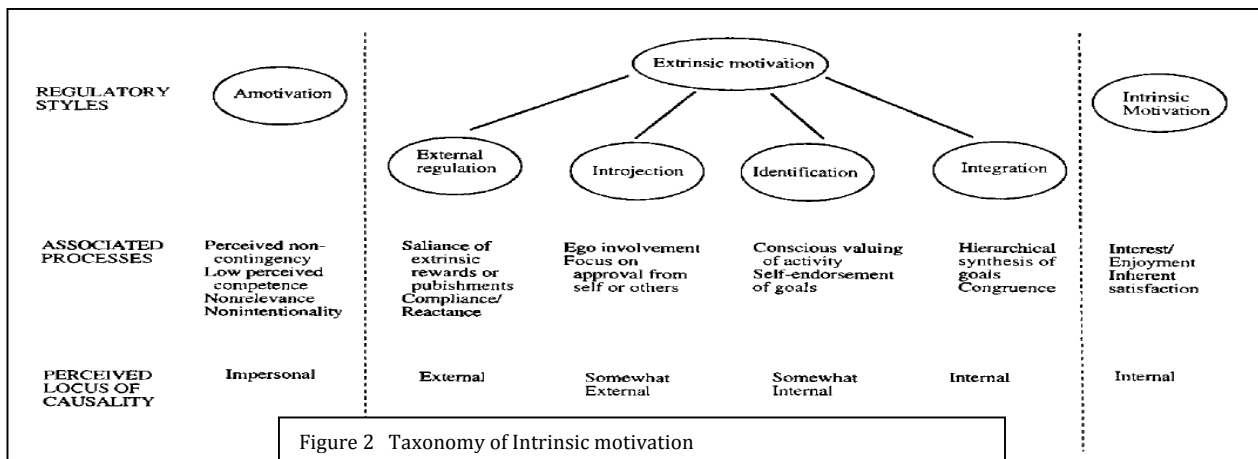


Figure 2 Taxonomy of Intrinsic motivation

competence can be learned. It is not only related to self-development but it is also associated with individual ability to develop positively and the ability to build other individuals to develop together towards an ideal environment.

B. Intrinsic Motivation

According to Deci (2004, p. 494), "intrinsic motivation is a type of motivation based on people's inherent interest in activities that provide novelty and challenge." Thus, intrinsic motivation towards individual activity is unique. It depends on the interest of the individual. Meanwhile, according to Dev (1997, p. 12) Intrinsic motivation is defined as

Meanwhile, according to Santrock, intrinsic motivation is internal motivation to do something for the sake of the motivation alone. According Djamarah (2002) the intrinsic motivation is a motif that occurs or functions without external stimulation because every individual has a motif to do something. Intrinsic motivation comes when the activity is fun, exciting, meaningful, or consistent with values, so that individual feels that thoughts and actions can be determined automatically, known as self-determined (Feiffer, 2008; Davis & Leslie, 2015; Feldman, 2003).

Based on the theory of Organismic Integration Theory (OIT), there are various forms of motivation and factors influencing motivation (Deci & Ryan,

1985). In Figure 2.1, the taxonomy of motivation is arranged from left to right according to OIT.

The first type is amotivation (lack of motivation), namely the lack of desire to act. Amotivation is the result of feeling not to appreciate an activity (Borland, 2005), not feel capable of doing an activity, or do not believe that the activity can deliver expected results.

The second type is the first type of extrinsic motivation; it is external regulation, which arises due to the low autonomy on extrinsic motivation. Individual with external regulation type performs an activity to meet external demands imposed or reached reward. The actions of individual of this type are usually controlled and have an external perceived locus of causality (Chan, 1996). External regulation is a kind of motivation that is contained in operant conditioning of Skinner and is very different with intrinsic motivation.

The second type of extrinsic motivation is introjected regulation. Introjection is described as a type of internal regulation that is still quite controlled for individual performing an activity accompanied by feelings of distress to avoid feelings of guilt or anxiety and improve ego or pride (Deci & Ryan, 1985; Deci, 1991). an example of introjection is ego involvement in which a person commits an act to increase self-esteem and self-valuable feeling.

The third type of extrinsic motivation is identification. In this type, individual has learned importance of an activity. For example, a child learns to remember new words because she/he understands that it is important to write well and she/he appreciates such activities as a learning activity required (Deci & Ryan, 1985).

Last type of extrinsic motivation is integrated motivation. Integration occurs when identified regulation has been assimilated completely in individual (Ryan & Deci, 1985). Integrated motivation has many similarities with intrinsic motivation because they are both based on autonomy or freedom. Still, integrated motivation is still extrinsic because actions that are carried out based on integrated motivation are still done in order to get a result or outcome (although it is carried out individually and appreciated by self). Then the last type of taxonomy motivation is intrinsic motivation

that is characterized by freedom or autonomy, respect of activities, as well as an activity solely because the activity is fun (do not expect any specific results from the activity).

MODEL OF GIFTED CHILDREN IDENTIFICATION

In the current paradigm, educational research has focused on identifying a list of variables that can support the development of excellence. Such variables include interests, creativity, and attributions (see the overviews provided by Davis & Rimm, 2004; Borland, 2010; Heller, Mönks, Sternberg, & Subotnik, 2002, Tanenbaum, 2009). Indeed, the problem with these measures is that they usually focus on just one variable. In this sense they remain stuck in the tradition of analytic approaches going back to Descartes. The implicit hope accompanying such efforts was that a focus on precisely one or another variable should have a generally positive effect on learning ability. The problem, however, is that this hope has remained unfulfilled. A general improvement in performance based on the encouragement of any one particular variable has yet to be documented. Probably the single most unambiguous result is that, to the contrary, pedagogic support focusing on one particular variable or a small number of variables demonstrates little to no efficacy. In the few cases in which such measures have shown a salutary effect, the benefits have remained temporary and limited to the particular target variable.

Identification of gifted children should be seen as an integral development of individual that is integrated with the environment in which the individual grows and develops. Giftedness is not a personal attribute that is settled (Ziegler, 2005; Ziegler & N.Philipson, 2014). Giftedness is a result of interaction between traits of individual with environment that supports the optimization of giftedness.

Gifted children in this study are defined as output of interaction of social-emotional competence and intrinsic motivation as shown in the following picture.

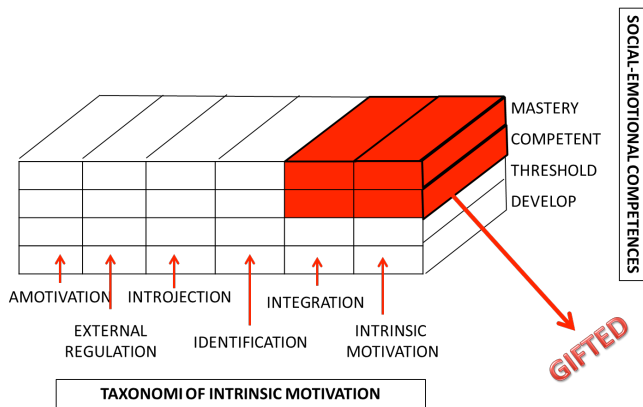


Figure 3. Model of Giftedness

The Figure 3 shows that gifted children are those who have social-emotional competence at the level of competent and mastery. Then, they have intrinsic motivation at the level of integration and intrinsic. The interaction of these two components can be understood theoretically as integral development of individual. Social-emotional competence is a miniature of the whole development of individual who excels in one aspect. The aspect, later, is confirmed using taxonomy of intrinsic motivation to ensure that the achieved competences are natural without any coercion or external intervention.

Social-emotional competence is deemed appropriate to represent individual giftedness because, essentially, talent is a condition that continues to grow and is an interaction between individual and environment (Ziegler, 2005; Ziegler, Stoeger, & Balestine, 2014). Giftedness is no longer seen as an attribute of individual but a system of interaction between individual characteristics and environment.

Intrinsic motivation is a variable that contributes positively to the identification of individual giftedness. Referring to the characteristics of individual giftedness, gifted children tend to be autonomous and are not dependent on external reward or compensation. Gifted children have their own purpose in doing something.

THE DEVELOPMENT OF GIFTEDNESS

In the context of the school environment, giftedness development efforts (Ziegler & N.Philipson, 2014), need a few things to note. (1) The

school should be a safe place for students to develop. Violence and bullying in schools should be abolished, a sense of justice needs to be fought for the success of every learner. (2) A school climate that builds friendships and connection among peers should be build. (3) Isolated learners should get more attention to obtain special assistance. (4) Direct instruction to the model of problem solving needs to be provided. (5) The family should be involved closer in school programs. (6) The perspective to build moral should be understood. (7) Skills in managing emotions and understanding emotions needs to be developed.

Specifically, the development of the individual giftedness, can be divided into five main stages, which can be explained as follows (Wagne, 1982; Callahan, 2005).

1) Stage 1: pre-school and early years of primary school

The first stage as individual enters the stage of formal education involves a lot of collaboration between parents and school, social-emotional competence needs to be developed, especially in terms of emotion regulation (example: to be calm down), and learns to feel comfortable in joining a group. Aggression behaviors exhibited by children need to be considered, both in home and school.

Action needs to be done in school environment, as an effort to develop giftedness at the first stage, among others, is to teach children to interact with environment positively. The examples, among others, are to practice self-control, to be given the understanding that difficulties exist and there is always a solution, to minimize hostility among peers, to provide protection to the rights of children, and to invite parents to participate actively in school programs.

2) Phase 2: The mid-years at primary school

Individual's mid-year at primary school (4th grade) was marked with more conflicts between group members: friends of their own sex, relationship issues with peers is a concern in this phase.

Action to be done in school, as an effort to develop children giftedness, includes building a cooperative culture in school. It demonstrates to students that bullying or other types of violence are

not allowed in schools. Socialization for program development of problem-solving to parents can be provided, as well as prevention of bullying in schools, managing emotions (especially anger), making learning process more enjoyable, and giving knowledge to the students about positive behavior and habits.

Some programs can be developed in the school refers to The Heart Masters (Fuller, Bellhouse, and Johnston, 2001). They are divided into four parts:

The Party Club, teaches the ability to make friends and join together in groups;

The Heart Masters, provides an understanding of feelings and emotions of self and others;

The Mind Masters, provides an understanding of internal and external dialogue; and

The Peace Makers, program which provides an understanding of competence, especially in the context of the prevention of bullying and friendship action.

3) Stage 3: transition from primary school to secondary school

The transition period occurs in 6th and 7th grades. In the stage of this ages, the things that need to be the focus are the self-esteem of learners, peer relationships, family relationships, school changes, puberty-related growth, and physic and psychic development.

Programs that can be developed in an effort to develop giftedness include the continuation of bullying prevention, working with teachers in transition period, developing ability to recognize basic emotions and self-definition, providing materials related to discussion of self-appraisal, coping strategies and problem solving, building children's reading culture, providing knowledge, training children to express anger appropriately, and management of aggression.

4) Stage 4: middle period of secondary school

Stage 4 is the time when children are in grade 9 and 10. In this age-level, some issues that need focus are associated with individuation, family conflict, success in peer environment, looking for an environment that can receive individual, drug abuse

prohibition, and involvement in a group that lead to negative actions.

Programs that can be given as an effort to prevent and develop giftedness include programs that contain materials on the analysis and discussion of the relationship, conflict resolution, and prevention of involvement in gangs, wilderness training/culture of friendship, etc.

5) Stage 5: Last year of secondary school

At the Grade 10, learner needs to build a relationship based on the ability to solve problems because at this time, people will face failure, seeking freedom, economic preparedness, and depression.

The programs that should be developed are to mature learners with skills and competences that have been owned previously. The learners should be geared to be able to manage stress and to build a more mature relationship.

REFERENCES

- A.Heller, K., Perleth, C., & Lim, T. K. (2005). The Munich model of giftedness designed to identify and promote gifted students. In R. J. Sternberg, & J. E. Davidson, *Conception of giftedness* (pp. 147-170). Ney York: Cambridge Univ Press.
- Abraham, G., & Puri, M. (2004). *Handbook of inclusive education for educators, administrators and planners*. New Delhi: Sage Publishing.
- Beranek, J. (1993). An international survey of definition of giftedness and procedures to identify and select student for gifted program.
- Borland, J. H. (2005). Gifted Education Without Gifted Children: The case for no conception of giftedness. In R. J. Davidson, *Conception of Giftedness*. United States of America: Cambridge University Press.
- Boyatzis, R. E., & Saatcioglu, A. (2007). A 20-year view of trying to develop emotional, social and cognitive intelligence competencies in graduate management education. 27.

- Boyatzis, R., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insight from the emotional competence inventory. In J. Parker, *The handbook of emotional intelligence: Theory, development assessment, and application at home, school and in the workplace* (pp. 343-362). San Francisco: Jossey-Bass Inc.
- Callahan, C. M. (2005). A child-Responsive Model of Giftedness. In R. J. Davidson, *Conception of Giftedness* (Vol. 2). New York: Cambridge University Press.
- Chan, L. K. (1996). Motivational Orientations and Metacognitive Abilities of Intellectually Gifted Students. *Gifted child quarterly*, pp. 184-193.
- Choate, J. (2004). *Successful inclusive teaching, proven ways to detect and correct special needs*. Boston: Pearson Education Inc.,
- Davis, G., & Rimm, S. (2004). *Education of the gifted and talented*. Boston: Allyn & Bacon.
- Davis, W. L., & Leslie, P. J. (2015, November). A Comparison of Emotional Intelligence Levels between Students in Experiential and Didactic College Programs. *The International Journal of Emotional Education*, pp. 63-65.
- Deci, L. (1991, December). The self determination perspective. *Motivation and education*, pp. 325-346.
- Deci, L., & Ryan, M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Feiffer, S. (2008). *Handbook of gifted in children*. USA: Springer.
- Feldman, D. H. (2003). A Developmental, Evolutionary Perspective on Giftedness. In J. H. Borland, *Rethinking Gifted Education*. New York: Teachers College Press.
- Fuller, A., Johnston, G. & Bellhouse, R. (2001) *The Dreamers Club- A program for the promotion of resilience and emotional intelligence in the early years of primary school*. Inyahead Press. Melbourne.
- Gagné, F. (2002). *A Differentiated Model of Giftedness*. Canada: Universiti du Quebec Montreal.
- Kartadinata, S. (2014). *Politik jati diri: Telaah filosofis dan praksis pendidikan bagi penguatan jati diri bangsa*. Bandung: UPI Press.
- Maker, K. M. (2010). Ethnic and Gender Differences in Identifying Gifted Student: A Multi-cultural Analysis. *39* (2 Spring 2010).
- Renzulli, J. (1978). what makes Giftedness ?
- Renzulli, J. S. (2012). Reexamining the Role of Gifted Education and Talent Development for the 21st Century: A Four-Part Theoretical Approach. *National Association for Gifted Children, 3* (Gifted Child Quarterly).
- Sternberg, R. J. (2005). The WICS model of Giftedness. In R. Sternberg, & J. Davidson, *Conception of Giftedness* (pp. 327-343). Cambridge: Cambridge University Press.
- Suherman, Y. (2014). *Pendidikan inklusif dalam konteks reformasi sekolah*. Bandung: not published.
- Tannenbaum, A. T. (2000). A history of giftedness in school and society. In K. A. Heller, F. J. Monks, R. J. Sternberg, & R. F. Subotnik, *International handbook of giftedness and talent* (pp. 23-54). USA: Pergamon.
- UNESCO. (2016). *Education 2030: Incheon declaration and framework for action toward inclusive and equitable quality education and lifelong learning for all*. Republic of Korea: UNESCO.
- Wagne, R. S. (1982). *A Revolutionary Look at Intelligence*. London: Springer.
- Ziegler, A. (2005). Systemic Gifted Education. In T. a. giftedness, *Conception of giftedness* (pp. 411-436). Cambridge: Cambridge University Press.
- Ziegler, A., & N. Philipson, S. (2014). *Toward systemic theory of gifted education*. Australia: Monash University.
- Ziegler, A., Stoeger, H., & Balestine, D. P. (2014). Systemic Gifted education. In *The handbook of*

secondary gifted education (pp. 1-30). Austin:
Prufrock.