ICT-based talent scouting in the 21st century

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Abstract. This article is based on research data in elementary schools (SD). This research is focused on a program called Talent Optimizing Program which is intended for students with special needs at Budi Mulia Dua Elementary School Yogyakarta. This school is one of the formal educational institutions with inclusion program facilities. This school implements inclusive education where education for normal children and children with special needs is held simultaneously regardless of their condition. Qualitative approach is used in this study by collecting data through in-depth interviews, participant observation, and documentation. Informants choosing is done with snowball technique. For checking data credibility, it is done by using triangulation technique. The results of the study show that this school believes each individual is unique, hence respect and tolerance for differences must be made. These are the learning bases available at Budi Mulia Dua Elementary School Yogyakarta. This school provides services for students with special needs through adaptation of school curriculum, learning, assessment, and infrastructure. This school is a means for students with special needs to develop their talents and interests. Educators and education staffs in this school strive for making innovation continuously so students with special needs can take part in learning activities by adjusting to their conditions, developing their talents and interests through Talent Optimizing Programs.

1. Introduction

The inclusive education system is intended for education to serve and include children with special needs to study together in ordinary classes and schools. Organizers of inclusive education provide opportunities and access for all children to obtain quality education without discrimination.

Inclusion education implies the importance of carrying out a social approach through formal education in schools which places the same value on knowledge and contributions, not for transferring children with special needs from special schools to ordinary schools [1]. Inclusion can be interpreted that every person in any community must be appreciated, respected, and accommodated. Basically, inclusion includes the challenge of providing the best learning environment for all children [2].

In accordance with the Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 70 Tahun 2009 Pasal 3 Ayat 1 which explains that every student who has physical, emotional, mental, and social abnormalities or has the potential for intelligence and/or special talent has the right to participate in
education inclusive of educational units certain according to their needs and abilities [3]. But in reality, Kementerian Pendidikan dan Kebudayaan (Kemendikbud) estimates that almost 70% of children with special needs do not get proper education. The latest data from the Central Statistics Agency (BPS) 2017 states that the number of children with special needs in Indonesia is 1.6 million people. This means that 1 million more children with special needs have not received education that is important for their lives. Of the 30% of children with special needs who have received education, only 18% of them receive inclusive education, both from special schools, as well as ordinary schools implementing inclusive education. The low number of children with special needs who get education is caused by several factors, ranging from lack of adequate school infrastructure, lack of special teaching staff, and also the stigma of the community towards children with special needs [4].

In 2014 in Rembang Regency, 1,194 children were included in the category of children with special needs, but only 439 could be accommodated for school. Many schools do not want to accept children with special needs for fear that school performance will decline. Whereas in the Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 70 Tahun 2009 it has been stated that each district must have an inclusive school. But in reality, many inclusion schools have not provided optimal service. The Secretary of the Rembang District Education Office said that this was due to the lack of special guidance teachers because not all teachers in schools could communicate with children with special needs [5].

There are many schools in Indonesia, especially in Yogyakarta, that have applied the inclusive education system. One of them is at the elementary school level, namely SD Budi Mulia Dua Yogyakarta. This school has an inclusion program called Talent Optimizing Program (TOP). It is a program for children with special needs which is useful for optimizing the talents they have. Every child with special needs in this school has their own program or curriculum that is tailored to the needs of the child. The school also provides guidance to students with special needs according to their talents and interests. With adequate infrastructure facilities and innovative educators and educational staffs, the school is able to develop the potential of its students, especially students with special needs. Therefore, researchers were interested in analyzing and revealing the Talent Optimizing Program at Budi Mulia Dua Elementary School, Yogyakarta.

2. Method
This research focuses on a program called Talent Optimizing Program intended for students with special needs at Budi Mulia Dua Elementary School Yogyakarta. Analyzing and revealing this program that exist in this school require deep observation with natural settings. For this purpose, a qualitative approach is used to explore meaning. This qualitative study consists of four procedures. First, the researchers observed the learning process by documenting and interviewing representatives of the School Principals in curriculum department, inclusion coordinators, and teacher inclusion teachers regarding inclusion curricula, Talent Optimizing Programs, teaching methods, and potential development of students with special needs. Second, collecting data by observation, in-depth interviews, and documentation. Third, analyze data by reducing and presenting data. Fourth, make conclusions [6].

In this study, the researcher acts as a key instrument with tasks and functions to determine the focus of research, choose informants as sources of data, collect data, analyze data, interpret data, and make conclusions. Sources of data in this study are informants, the observed environment, and documentation. Analysis of the data used is the data analysis technique version of Huberman and Miles.
3. Results and discussion

Budi Mulia Dua Yogyakarta Elementary School was established in 2004 and has become an inclusive school. Every individual is unique. These are the things that become the foundation for children who attend SD Budi Mulia Dua Yogyakarta having their own curriculum. Budi Mulia Dua Yogyakarta Elementary School is an elementary school that implements the inclusive education system in their teaching and learning activities which is called Talent Optimizing Program (TOP). TOP is a program for children with special needs that provides curriculums tailored based on the student's individual conditions.

- Every child with special needs has their own curriculum. The curriculum is tailored to their respective conditions.
- Has special academic programs and programs.
- Syllabus from the deputy headmaster of the curriculum field as a reference for modifying the curriculum according to the needs of the child.
- Complete and adequate facilities and infrastructure.
- Special companion teachers tailored to the number of children with special needs.
- Collaborating with a psychologist.
- Many extracurricular choices to develop students' talents and interests.
- Each class is: 1 class teacher-subject teacher; 1 assistant teacher; 1-2 special companion teachers.
- Regular teachers and special accompanying teachers accompanied by psychologists become teams to modify the curriculum.
- Special accompanying teachers receive training in a manner.
- Regular teachers and accompanying teachers specifically conduct regular monitoring and evaluation meetings.
- A special accompanying teacher accompanies students to

- In the 2018/2019 school year there were 48 children with special needs. With the number of students with special needs 2-4 children in each class.
- Parents participate in curriculum modification. Parents can monitor and follow the development of their
This program is designed for fostering those children to develop their potential. The learning programs are also made based on children's needs. The curriculum is adjusted following the child, not the other way around. Especially for students with special needs, the curriculum that is being developed is clearly not the same as the one for ordinary students. It also differs for each student with special needs. In developing a curriculum for students with special needs it has been agreed on that the curriculum must be distinguished from what is offered to other students, both ordinary students and students with other special needs. The curriculum for students with special needs has to be carefully planned, developed, evaluated and revised to maximize their potential [7,8]. This is done in order to prevent them become similar individuals as they following the same curriculum, because they have different special limitations. The potential and intelligence, also talents and interests they have are different. Therefore, the curriculum for children with special needs is made different from each other by adjusting to the conditions of students.

TOP has special academic programs and special programs. Academic program is about the conditions of student learning, where the accompanying teacher specifically collaborates with regular teachers in each subject. Special programs consist of additional or remedial programs for children with special needs. For example, children who have not been fluent in reading, writing, and counting will be given additional guidance for the remedial. The guidance that is done is not like therapy, but more about teaching.

Some things that distinguish between ordinary students and students with special needs are special programs, curriculum modification, and the existence of special assistant teachers. To modify the curriculum, initially in the new school year, a special assistant teacher received a syllabus from the vice principal of the curriculum department. The syllabus is used as a reference to modify the curriculum based on children's needs. The special assistant teachers specifically discuss it with classroom teachers and subject teachers to modify the curriculum for every child with special needs. Children with special needs can follow classical learning like ordinary children if in the lesson the child can follow it. But if in certain subjects the child cannot follow classical learning in the classroom, the child will be pulled behind the class to receive guidance from a special assistant teacher but still in the same class. Learning models that can be applied are tailored to the needs of students, namely:

- Regular/full inclusion classes, namely students with special needs who do not experience intellectual impairments following regular class lessons;
- Cluster, students with special needs are grouped but still in one regular class with a special companion;
- Pull out, students with special needs are drawn to special spaces for specific opportunities and lessons, accompanied by special teachers;
- Cluster and pull out, a combination of cluster models and pull outs;
- Special classes, schools provide special classes for students with special needs, but for certain learning activities students are combined with regular classes [9].

In modifying the curriculum, the special assistant teachers are not alone, but there are teams that work together. Regular teacher, special assistant teacher, makes a team accompanied by a psychologist. These are the ones who plan, make, implement, and evaluate the curriculum. Parents or guardians of students also participate in the team. Parents can add or reduce the curriculum baggage for their children if it is deemed as necessary. Psychologists have task for helping to know the child's abilities cognitively, in the sense of Intelligence Quotient (IQ), obstacles, and appropriate learning methods. This team modifies the curriculum so that children with special needs can maximize their potential. Therefore, the curriculum for students with special needs has to be planned, developed, evaluated, and revised by this team [7,8].

Psychologists in education field serve a purpose to focus on the evidence base for their contribution. Psychologists are assigned to identify the character of the child. The school and parents of children will trust the result more when psychologists are the ones who do it because it is in accordance with their
fields, especially for the identification of children with special needs. Programs made by schools for children with special needs are also reinforced by the identification of psychologists. Psychologists can develop collaborative relationships with colleagues [10,11].

This school has complete facilities, both in terms of infrastructure and educators. These facilities can be used to develop the potential of students. Starting from singing, drawing, dancing, sports, and other activities which the students have their interest on. For students with special needs, the development of more potential is explored so that it can be developed and nurtured according to their interests. In this case, psychologists help directing the outline, for example towards art or something else. The rest is the task of the special assistant teachers, the actor of the program. In potential development, a special assistant teacher accompanies the child. This is the role of the special assistant teacher. Sometimes when needed, special assistant teachers also teach. For example, there is a child with special needs who has an interest in singing. When the extracurricular teacher has difficulty teaching the child, a special assistant teacher helps to convey it. Special assistant teachers become multitasking in this matter. Special companion teachers are required to be always close to the children they assist. Until now, many children with special needs from this school have excelled in various fields, such as dancing, drawing, and sports even on the international level.

The homeroom teacher or subject teacher has the task of giving material and teaching in the classroom. The accompanying teacher is tasked with helping the homeroom or subject teacher to supervise the children in learning, and help children if needed. Meanwhile special assistant teachers are assigned for fostering children with special needs in the class.

Special assistant teachers at this school receive training on program development, curriculum modification, and how to properly evaluate the program. The training is routinely conducted by special assistant teachers every semester to improve their ability and innovation. They also received training from a psychologist. Psychologists can contribute to training for special assistant teachers. In addition to training, there were also seminars and workshops that are attended by special assistant teachers. Together with special accompanying teachers from each grade, they hold discussions and meetings every week. There are also discussions and meetings with regular teachers regarding learning on a monthly basis. Inclusive education requires good teachers, has extensive knowledge and is competent so that it can foster moral values, self-confidence, and provide support for children with special needs, thus they can become children who are confident in their potential [12].

A good understanding and knowledge of the concept of inclusion is needed by the teachers, so that they can provide good examples to their students. The quality of education depends on the quality of the teacher who organizes, implements, and evaluates teaching activities. It is very important to apply the principles of inclusion teaching to develop new strategies that can help all children progress and to get performance in their learning activities. Optimizing student learning is the result of different teaching that can provide opportunities for each student to appreciate their full potential. The most important teacher's role is to identify the right strategy for each child and try to adjust the steps of the curriculum according to the level of development, needs, demands, and interests [13].

In this school there are 48 children with special needs with different conditions, including low vision, deaf, down syndrome, Intellectual and Developmental Disability (IDD), autism, and slow learner. At each level, there are 4 classes, making the total class is 24 classes. There are 2 to 4 students with special needs. Children with special needs are not differentiated from treatment with regular children. Children with special needs are considered, facilitated as well as possible. There is no standard for children with special needs to be accepted into this school. The admission is based on quota not the condition of the students. As long as the school is still capable and able to facilitate them, they will definitely be accepted. Because this school is under the Budi Mulia Dua Foundation, TOP's admissions are prioritized from TK Budi Mulia Dua. If the quota is still available, it will be opened to the public.

The phenomenon that occurs where there are still schools with the status of inclusive schools reject students with special needs because their condition and fear of influencing school performance does not apply at SD Budi Mulia Dua Yogyakarta. This is precisely the challenge and strength for the school. The school will strive to provide the best service for students with special needs. With this Talent
Optimizing Program students with special needs are well served and facilitated. Starting from the instructor or special assistant teacher who is competent, the curriculum is not equated, and the facilities are adequate. Recorded various kinds of achievements that have been achieved by this school, both by regular students and by students with special needs. With the inclusion program and students with special needs, it creates diversity and further enhances the enthusiasm of the teachers to guide and assist students with special needs in order to develop their potential, even achievement.

![Figure 3. Achievements of Budi Mulia Dua Elementary School Yogyakarta in various fields.](image)

There were 11 achievements in various fields, both academic, sports, and arts which were achieved by SD Budi Mulia Dua Yogyakarta students in the 2013/2014 school year. For the 2014/2015 school year there were 31 kinds of achievements, there were 22 kinds of achievements in 2015/2016, and the 2016/2017 school year had the highest achievement of 179 achievements.

This research shows that with a curriculum that adjusts the conditions of children with special needs, competent teaching staff, and adequate facilities, this school is able to assist students with special needs to develop their potential. The results of this study support the research conducted by Ediyanto, et al. regarding Inclusive Education in Indonesia from the Perspective of Widyaiswara in the Center for Development and Empowerment of Teachers and Education Personnel of Kindergartens and Special Education [14]. In the study explained that the curriculum used for inclusive schools must meet national education standards. Curriculum standards in Indonesia are 2013 Curriculum (K-13). However, in assessment, students with special needs have different assessment standards. Therefore a different curriculum is needed but still refers to the national curriculum, namely K-13. Budi Mulia Dua Yogyakarta Elementary School modifies the curriculum so that it fits the needs of students who have limitations so students can follow the curriculum to the national standards that have been set. The study also stated that ideally, teachers in the inclusion class should have at least four people consisting of one class teacher, two special assistant teachers, and one orthopediagogic teacher. Facilities in inclusive schools must be adapted to student disability. Teacher standards for each class at Budi Mulia Dua Yogyakarta Elementary School, namely 1 class teacher/subject teacher; 1 assistant teacher; and 1-2 special companion teachers. This is to create conducive classroom conditions during teaching and learning activities.

The inclusion program at Budi Mulia Dua Elementary School Yogyakarta shows that with the best services provided by the school, students with special needs can develop well. Not only in terms of academic and potential development. Regular students become educated about students with special needs in this school, they still play together, help each other, and tolerate each other. Educators in this school always emphasize the meaning of tolerating others, knowing and understanding the conditions of their friends. They educate each student to develop a positive attitude towards people who are different but equal in their rights and obligations, no matter their background or disability. With them studying in the same class, playing together, they will learn to mean to tolerate and not being picky about friends. Regular student become aware of the condition of their friends who have special needs, so they can be more tolerant and indirectly being taught about being grateful for their more perfect condition. The purpose of the importance of tolerance and not being picky about friends can guide the development of productive relationships and social involvement among children [15]. Social relations
become an important relationship, which can affect meaningful change in children in the school environment and society, because tolerance, loving each other, and respecting fellow friends encourage them to always do the same not only in the school environment but also in the community [16]. So with the existence of research on Talent Optimizing Programs or inclusion programs at Budi Mulia Dua Elementary School, Yogyakarta, supporting the research of Ediyanto, et al. which states that ideally an inclusive school can provide services to students with special needs with good funds can develop their potential.

4. Conclusion
From the description above it can be concluded that Budi Mulia Dua Yogyakarta Elementary School provides services for students with special needs through adaptation of curriculum, learning, assessment, and infrastructure facilities in schools. That is done by modifying the curriculum and adjust it based on the condition of the child. The reason is because the school believes that each individual has its own uniqueness, thus respect and tolerance towards differences must be made. This school is a means for students with special needs to develop their talents and interests. Educators and education staff in this school strive to continue innovating so students with special needs through Talent Optimizing Program can participate in learning activities by adjusting to their conditions and developing their talents and interests. Special assistant teachers in this school strive to continue to foster and develop the potential of students with special needs, one of which is with the presence of Genius Hour. Genius Hour is a specific study hour that is conducted once a week to explore and develop children's potential. Children can learn anything according to their interests. This is to help students explore what they enjoy and are interested in.

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