

## A Survey on the Effectiveness of Inclusive Education Implementation at Elementary School

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**Abstract:** Inclusive education is one of educational systems which allow all students to come into the system and disobey the condition of the students, normal or students with special needs, disobeys ethnics and languages back ground of the students, disobey social economic condition of the students, as well as, disobey geographical location of the students. In it's implementation inclusive education can be conducted to allow the special need children to enter public school. Therefore, the research is aimed to study the effectiveness of the implementation of inclusive education, especially in elementary school which included: (1) precursor to teaching (2) instructinal system and teaching approach, (3) teacher's behaviors and, (4) follow-up to teaching. The research is conducated in Jakarta, the capital city of the Republic of Indonesia. Population of the research are heterogeneous which consist of 166 persons, they are teachers, students, parents and professionals. The sample size is consisted of 60 persons, which was, 10 times bigger compared to the application of sample formula which required sample size only 4 teachers. The back ground the sample multiplication is because the method used in the study is survey. The instrumnt validity range from  $r$  0.35 to 0.6 while critical  $r$  in  $r$  table was 0.312 and the instrumen reliability is 0.92, meaning that the instrument used is the reliable instrument. The research results shows that 60% of the respondent agree and 20% strongly agree that the instructional implementation for special needs students at inclusive elementary school was effective. Therefore, the implementation of the inclusive education i elementary school fulfilled the requirement of instructional process. However, about 20% of the respondent disagree. Consequently, it was necessary to do some efforts which lead to the quality improvement of inclusive elementary school instructional process for children with special.

**Key words:** survey, educational system, educational approach, inclusive education, children with special needs, effectiveness, implementation, effectiveness

### 1. Introduction

Children with special needs are those who have special characteristics in their developmental process, in which, they develop differently from their normal pairs. Cross references analysis done by Jamaris (2011, p. 200) about children with special needs, among them are Greenspan & Weider (1998, p. 15), Kirk & Gallagher, 1986, p. 125; Heward & Orlansky, 1984, p. 87), Bloomquist (2006, pp. 22–23), Bloomquist & Schnell (2002), Schumann C. M., Nordahl C. W. (2008, pp. 137–145), come out with some conclusion which described in the following

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description. Children with special needs are ranged from mild to severe, such as, autism, cognitive delay and/or deficit, language delay and/or deficit, memory disorder, low muscle tone, sensory integration disorder, attention disorder, cerebral palsy, learning disabilities, the outstanding development, such as, gifted and talented, etc and they need specific educational system and approach in order to be developed as far as the the highest achievement that they reach.

**Hearing Impairment children** ranged from *deafness* up to *heard of hearing*. Deafness defined as sensory deficiency which prevent the related children from receiving the stimulus of sound in all or most of its form (Katz, Mathis & Merrill, 1978). Heard of hearing defined as children who has a significant hearing loss that makes some special adaptations necessary (Heward & Orlansky, 1980, p. 229)

**Visual impairment children** ranged from blind up to limited field of vision (have field of vision only ten degrees, while normal person is 180 degrees). Blind children, defined as children has visual acuity 20/200 even after the best correction with glasses or contact lenses.

Other forms of **visual impairment**, such as, *ocular motility* refers to inability to move eyes, *strabismus* refers to inability to focus on some object with both eyes, *nystagmus* refers to problem in accommodation, in which, the eyes cannot adjust properly for seeing at different distance, such as, in shifting from reading a book to looking at black board or back again.

**Gifted and Talented**, according to Kirk & Gallagher (1986, p. 70) is individual with extra ordinary abilities, therefore, he/she is able to produce extra ordinary performances in academic or in other specific fields such as: very high intellectual abilities, abilities in critical thinking, and productive thinking, creativity, leadership and art.

Based on the research result done by *The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, it known that 85% individuals with mental retarded have IQ 50–75, they classified as mild group of mentally retardation, 10% have IQ 35–55, the classified as *moderate* group mental retardation and 3–4% has IQ 20–40, they called as *severe*, dan 1–2% has IQ 20–25, they called as profound.

The research result done by Kirk dan Gallagher, 1986 indicated that the comparison of the amount of mentally retarded with unretarded individual are: mild is 10:1000, moderate is 3:1000 individu, severe/profound is 1:1000.

Among educational systems and approaches that can applied to promote the development of the children with special needs is inclusive educational system and approach which can be used to bring forward the solutions to promote the efforts in helping the special needs children to achieve their developmental goals. In accordance to UNESCO (2004) inclusive education is a global issue which contains important values which can accommodate the needs of the children with special needs.

Inclusive education is one of educational systems which allow all students to come into the system and disobey the condition of the student, normal or students with special needs, and disobeys ethnics and languages back ground of the students, disobey social economic condition of the students, as well as disobey geographical location of the students. In its implementation inclusive education can be conducted to allow the special need children to enter public school (Wood, 1995, p. 5).

Inclusive educational system is implemented in from of inclusive instructional system or teaching and learning system. The system consists of system's components, which involve: need assessment, instructional goals, teaching and learning process, instructional evaluation, Dick & Carrey (1989, p. 10), and Jamaris enriched the instructional system components (2010, p. 200) which showed in Figure 1:

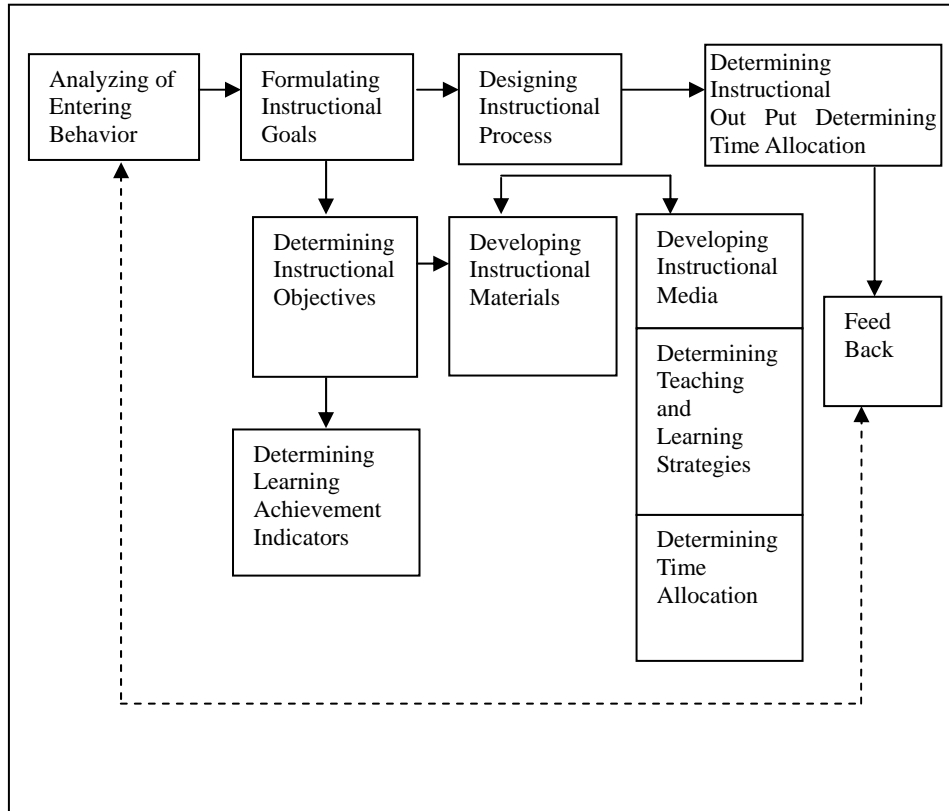


Figure 1 Inclusive Instructional System

In accordance to instructional process, Jamaris shynthezised some cross references concerned, among them are the Demark Special Education (2012), Dick and Carrey (1989, p. 10) and Polloway & Paton proposition about teaching and learning process consideration education (1993, pp. 466–467) as followed Figure 2:

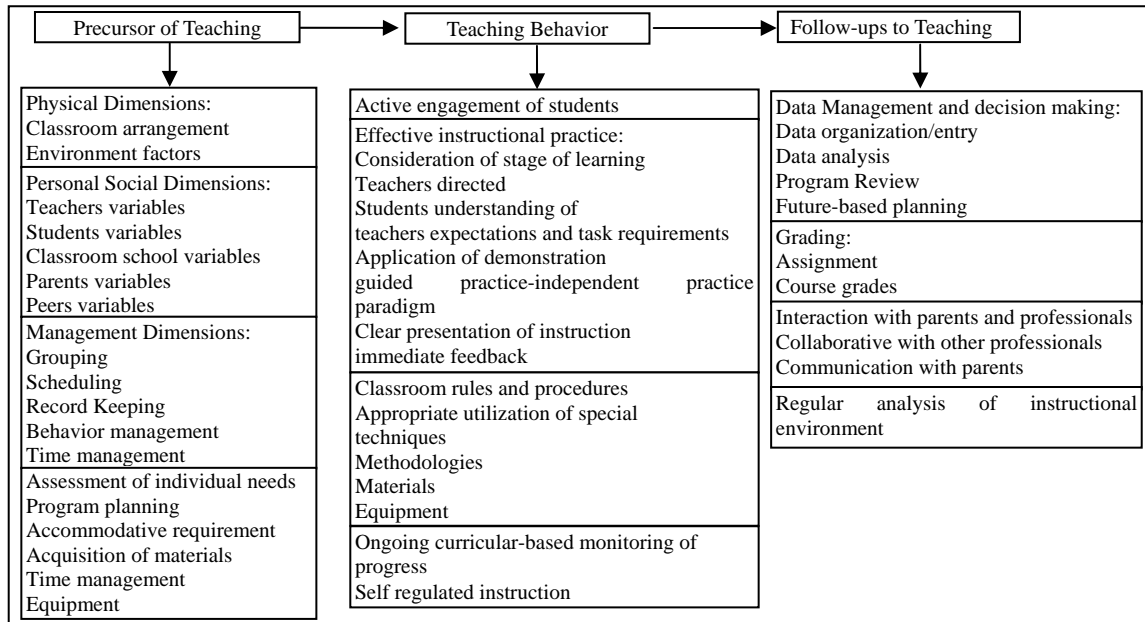


Figure 2 Teaching and Learning Process Consideration

Furthermore, Westwood (1993, pp. 2–5) explain his point of view about teaching process and procedure for students with special need, as followed: (1) giving maximum learning opportunities for the students which can be done by attaining task-behaviors, instructional time, student actively involved in their works; (2) focus on learning achievement which can be conducted by daily review of previous day's works, clear presentation of new skills and concepts with much modelling by teachers, guided students practice with high success rates and with effective feed back to individual students, independent student practice, applying the new knowledge and skills appropriately, systematic cumulative revision of work previously covered; (3) presenting instruction individually and inclusively which can be done by within a whole class lesson and develop individual instructional programs for special need children.

Until the present there are 796 inclusive education in Indonesia, which consist of 17 Kindergartens, 648 elementary schools, 75 junior high schools and 56 senior high schools. Preresearch done by the author reveal that the inclusive education implementation encounter many obstacles, such as lack of facilities, teachers' lack of skills, meaning that by various reasons they are not ready to teach in inclusive education, the normal pupils' parents reject inclusive education due to their uncompatable to have special need children in their children's class, and the like (an interview of parents and teachers which conducted by author during preresearch in Jakarta 2012) and the like.

Based on the empirical facts found during preresearch, it is necessary to do research, especially, dealt with the effectiveness implementation of inclusive education in Indonesia. Therefore, the purpose of this research is to find out the effectiveness of the implementation of inclusive education, especially in elementary schools, which are involved: the effectiveness of precursor to teaching, the effectiveness of educational system and educational approach used, the effectiveness of teachers' behaviors, and the effectiveness follow up of the implementation of inclusive education.

## 2. Research Method

This research is a based line research which aimed to be the foundation of the next research which deal with the model of inclusive education for children with special needs in elementary schools. Therefore, due to the purpose of the research, the research method used is survey, which located in Jakarta the capital city of the Republic of Indonesia, in which, the implementation of inclusive education presume relatively better from the other part of Indonesia.

The research population are from 26 inclusive elementary schools in Jakarta, Indonesia, which have 166 teachers and research samples are selected by random sampling technique, in which, size of sample is determined by applying sample formula (Glenn, 1996, p. 3), as followed:

$$n = \frac{N}{1 + N(e)^2} = n = \frac{166}{1 + 166(0.5)^2} = \frac{166}{42} = 4\text{teachers}$$

In accordance to the application of the size sample formula, this research can be conducted by using only 4 teachers. However, due to the type of the research method used in this study was survey, therefore, the sample size is multiplied or duplication 15 times, so that, as the result, the sample size becomes 60 participants, which consisted of teachers, students, parents and professionals.

Instrument used to collect data of this research is questionnaire. In order to have valid and reliable research

instrument, therefore, the instrument is tested, in which, 60 the research participants who are taken from the research population. The result of this action, reveals that the instrument have good validity, which  $r$  value range from 0.3315 to 0.749554, while  $r$  critical value is 0.312. Consequently, all the research instrument items are valid. Reliability of the instrument is 0.96239, consequently, the instrument is reliable.

The effectiveness of inclusive education implementation is measured by quarrying the inclusive education research participants' perceptions about the four dimensions of implementation of the inclusive education, as followed: (1) the effectiveness of the precursor to teaching, which involved: (a) teaching tools and equipments, (b) the classroom conditions, (c) resource room, (d) availability of related experts for the resource room, (e) specific equipments matched to the need of the special need children, (f) management and administration which serve the need of students with special needs, (g) regulation which can be accommodate the needs of the special student, (h) library which can be accommodate the students with special needs, (i) space to display learning products, (y) the equivalent of precursor to teaching to the requirement of inclusive education; (2) instructional system and teaching approach, which involved: (a) the matched up of the instructional system for the need of the special need students, which included, goal, process, media and evaluation, (c) the special need students' learning achievement, (d) the individual education program, (e) instructional strategies, (f) the administration form of learning progress of the special need students, (g) the method up of instructional media for the instructional strategies, (3) teachers' behaviors which consisted of: (a) the ability to do instructional planning complement to the needs of students with special needs, (b) the ability of the teachers in implementing individual instructional program, (c) the ability to develop instructional media matched up for the need of the students with special need, (d) the ability to work in team work, (e) the ability to increase learning motivation of the students with special need, (4) followed up of the monitoring and evaluation of instructional implementation which consisted of: (a) to communicate the result of result of instructional system's implementation to the team which involved in inclusive education, (b) to use the results of instructional program's implementation in modifying the instructional system of inclusive education.

The research participants' perceptions on the effectiveness of inclusive education in elementary school were in the from their judgment expressions on the questionnaire statements which range from: not agree, agree and very agree.

### **3. Research Result**

As mentioned before previously that the purpose of the research is to know the implementation of the inclusive education in elementary school, which consist of three dimensions: (1) precursor to teaching, (2) educational system and teaching approach, (3) teachers' behavior, and (4) follow up of the instructional program implementation monitoring and evaluation

#### **3.1 The Effectiveness of Precursor to Teaching**

The effectiveness of the precursors to teaching is measured by of 10 indicators, as followed: (a) teaching tools and equipments, (b) the classroom conditions, (c) resource room, (d) availability of related experts for the resource room, (e) specific equipments matched to the need of the special need children, (f) management and administration which serve the need of students with special needs, (g) regulation which can be accommodate the needs of the special student, (h) library which can be accommodate the students with special needs, (i) space to display learning products, (y) the equivalent of precursor to teaching to the requirement of inclusive education. All of the research result on the precursor to instructional implementation are displayed in the following Figure 3:

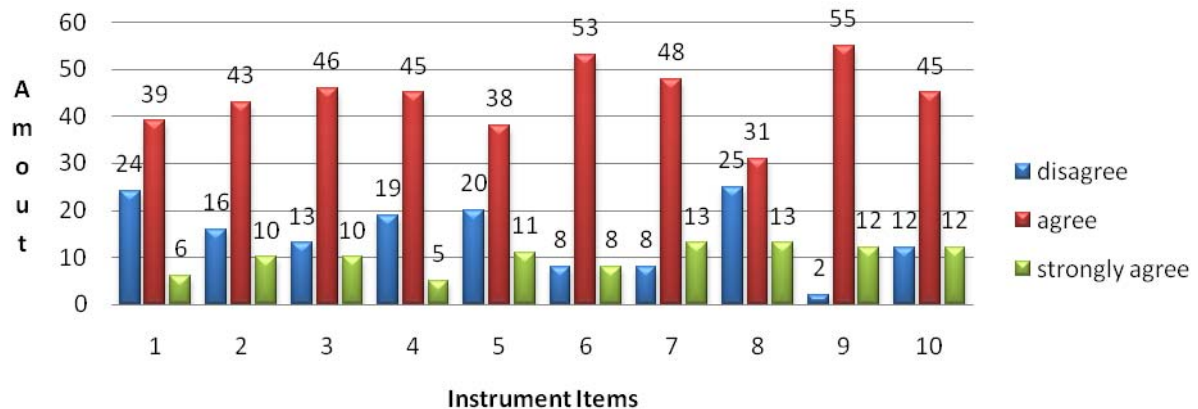


Figure 3 Precursor to Instructional Implementation

Based on the above diagram, it can be concluded that 68.38% respondent agree, 16.72% strongly agree that the precursor to teaching of special needs children at elementary school is effective, because only 21% of the respondent disagree. Therefore, it can be concluded that in general the precursor to teaching is suitable with the special needs students at inclusive class at elementary school.

### 3.2 The Effectiveness of the Instructional System and Teaching Approach

The instructional system and teaching approach consist of the following indicators: (1) the matched up of the instructional system for the need of the special need students, which included, goal, process, media and evaluation, (2) the special need students' learning achievement, (3) the individual education program, (4) instructional strategies, (5) the administration form of learning progress of the special need students, (6) the used of instructional media for the instructional strategies. All of the research result on the precursor to instructional implementation are displayed in the Figure 4:

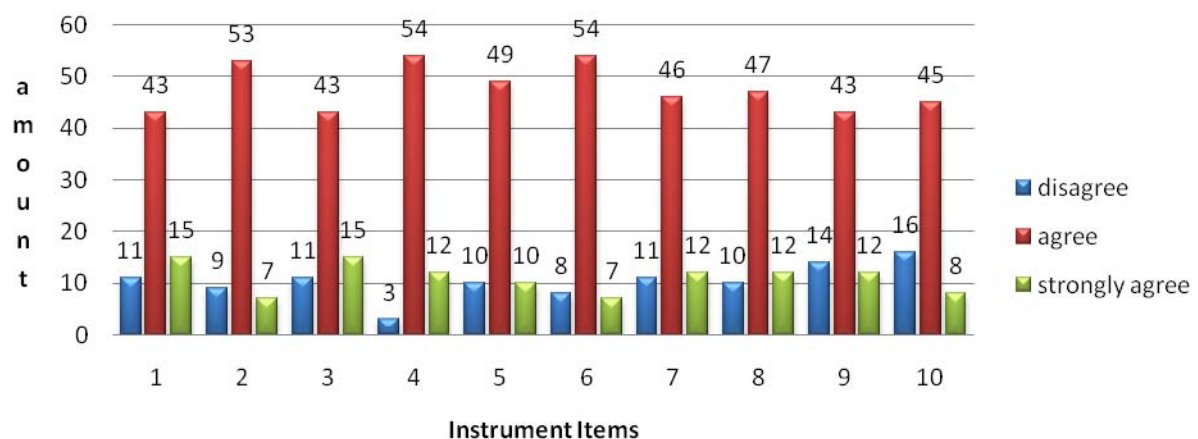


Figure 4 Instructional System and Teaching Approach

Based on the above diagram, it can be concluded that 64.14% respondent agree, 17.15% strongly agree, therefore, the instructional system and approach to teaching of special needs children at elementary school is effective, because only 14.71% of respondent disagree. Therefore, it can be concluded that in general instructional system and teaching approach can fulfill the needs of the special needs children at inclusive elementary school.

### 3.3 The Effectiveness of the Teachers' Teaching Behaviours

The teachers' behaviors which consist of: (1) the ability to do instructional planning complement to the needs of students with special needs, (2) the ability of the teachers in implementing individual instructional program, (3) the ability to develop instructional media matched up for the need of the students with special need, (4) the ability to work in team work, (5) the ability to increase learning motivation of the students with special need. All data research result on the indicators are displayed in the Figure 5.

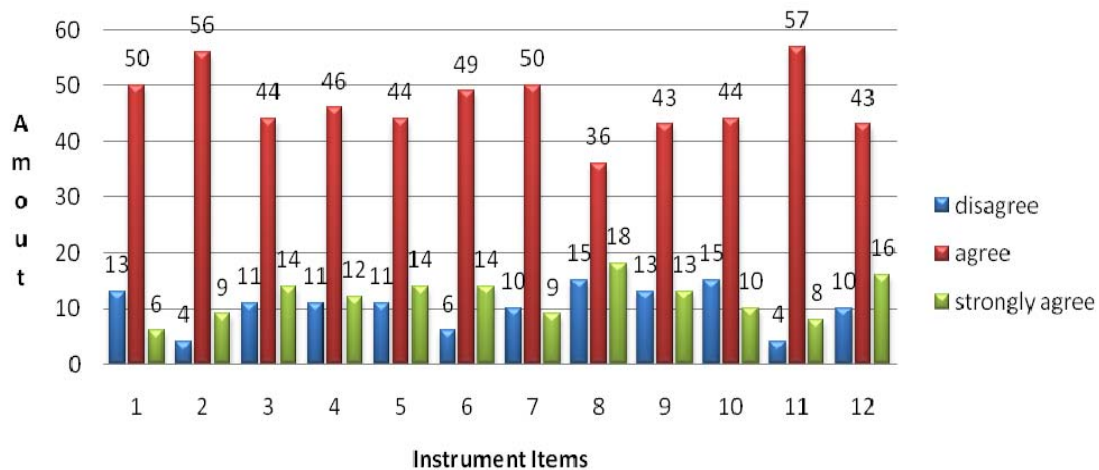


Figure 5 Teachers' Teaching Behaviors

Based on the above diagram, it can be concluded that 60.28% respondent agree, 21.42% strongly agree that the teachers' teaching behavior are effective, because only 17.57% of the respondent disagree. Therefore, it can be concluded that in general the teachers' teaching behaviors match to the needs of the special needs children at inclusive elementary school. However 17.57% of the respondent disagree

### 3.4 The Effectiveness of the Follow up of Instructional Feed Backs

The followed up of the monitoring and evaluation of instructional implementation which consist of: (a) to communicate the result of result of instructional system's implementation to the team which involved in inclusive education, (b) to use the results of instructional program's implementation in modifying the instructional system of inclusive education. All data research result on the indicators are displayed in the Figure 6.

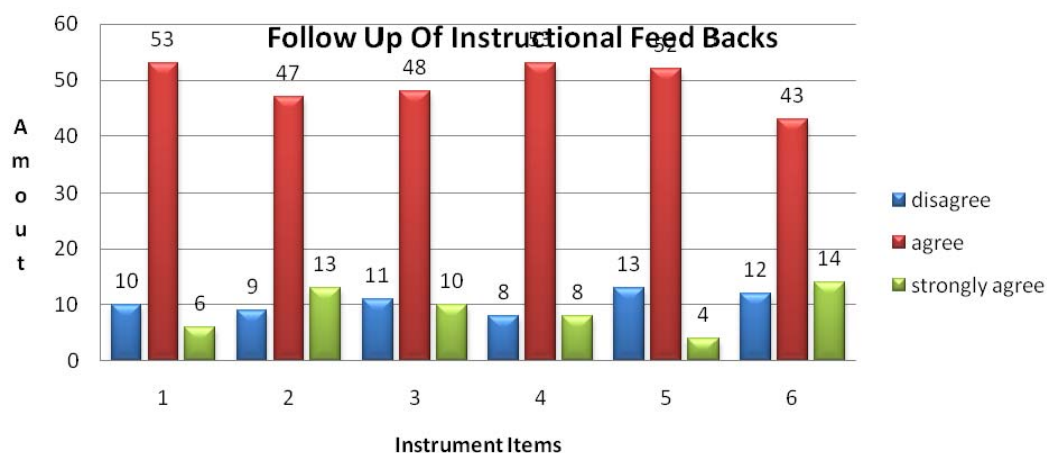


Figure 6 Follow up of Instrcutiional Feed Backs

Based on the above diagram, it can be concluded that 70.48% respondent agree, 13.33% .strongly agree that the follow up of the instructional feedback is effective, because only 16.19% of the respondent disagree. Therefore, in general, it can be concluded the follow up to instructional feedback is match to the needs of the special needs children at inclusive elementary school.

## 4. Conclusion

Judging from the research finding, which have been describe previously, it can be conluded that the inclusive educatoan implementation at elementary school for the special needs children have been done effectively.

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