

Positive effects of the placement of students with intellectual developmental disabilities in typical class

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Abstract

This paper is aimed at summarizing the results of the comparison of five different papers published on this journal. Those papers analyzed how including scholars with intellectual and developmental disabilities in a typical (instead of special) class might have effects on psychological development, academic and adaptive performances. Results are the following: a typical class fosters a better psychological development (particularly from a social point of view since their inclusion promotes, for example, friendship and social acceptance), higher school performances, better adaptive abilities. The present contribution considers also what characteristic typical class should have to offer an excellent inclusion model.

Keywords: Intellectual disabilities, Inclusive education, Deficit, Surplus effect

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1. Introduction

In a previous work (Vianello & Lanfranchi, 2009) we described some results of research carried out in Italy on cognitive and adaptive profiles of participants (children and youth) with Intellectual developmental disabilities due to genetic syndromes (Down, Fragile X, Cornelia de Lange, Prader-Willi).

In the majority of the cases the participants have performed above what expected on the basis of their mental age in a variety of areas (reading, writing, math, social adaptability).

Since in the past Zigler (Zigler & Bennet-Gates, 1999) found the opposite situation, named “deficit” respect to mental age, we have defined “surplus” respect to mental age the opposite phenomenon.

If we consider individuals affected by the same syndrome, deficit and surplus can be due to the intrasyndromic variability and/or to the different educational, scholastic and abilitative situations.

It is widely assumed that the cognitive, adaptive and behavioural profile of every syndrome is characterized by strength and weaknesses. For example we know that in Down syndrome social development is a strength and verbal communication is a weakness (Dykens, Hodapp, & Finucane, 2000; Bargagna, Perrelli, Dressler, Pinsuti, Colleoni, Astrea *et al.*, 2004; Vianello, 2006, 2008).

The presence of surplus respect to mental age in participants in our research may be attributable to the fact that almost (more than 97% of the students with disabilities) all the students with intellectual disabilities in Italy are educated in typical classrooms alongside their peers without disabilities, rather than in special education classes, as is often the case in many other countries.

On the contrary, in the United States only 16% of students with intellectual disabilities receive their education in general education classrooms (U.S. Department of Education, 2007).

Also in Europe the placement in inclusive classes is not frequent. More than 2% of the students attend special schools or classes (more than 4% in Belgium, Estonia, Germany, Czech Republic and Switzerland and less than 1% in Cyprus, Greece, Ireland, Italy, Malta, Norway, Portugal, Slovenia e Spain, European Agency, 2008).

On this theme in previous issues of this Journal papers were published by Michael F. Giangreco (2009), Thomas E. Scruggs & Kim Michaud (2009), Nancy L. Waldron e James McLeskey (2010), Elena Tanti Burlo' (2010).

For a correct interpretation of the results of studies carried out in Italy it is important to highlight that participants did not participate in groups that received particular educational or habilitative training. For example a study

on Down syndrome analyzed adolescents attending the second and the third class of the high junior school and none of them attended special schools or other kinds of residential institutes. Moreover it is important to highlight that surplus effect is not due to particularly low performances in intelligence tests. An important information originating from several researches (see Vianello, 2006 for a review) is that mean mental age of Italian adolescents with Down syndrome range between 5 and 6 years. It is a result that is very different from results of research conducted several years ago. For example Baroff (1989) summarize studies that state that at every chronological age, mean mental age in individuals with Down syndrome does not go beyond 4 years.

According to these findings, the surplus effect emerges significantly because individuals with Down syndrome, in the presents years, have a mental age higher than in the past. Perhaps an international comparison of data would be necessary to better judge the effects of inclusion in normal classes.

2. The surplus effect is more present in inclusive classes

On the whole all the authors agree that surplus effect in academic and adaptive performances respect to performances in intelligence tests is more frequent in inclusive classes than in special ones.

However the debate brought also contributions regarding the comparison between special and normal schools in terms of results, of general and social development, on academic performances, on adaptive performances, on social acceptance, on school performances of peers. Those aspects will be described in the following paragraphs. Finally a specific paragraph will be devoted to conditions of inclusive schools that give the best results.

3. Academic outcomes are greater in inclusive class

Most of the research has revealed that:

- segregated placements can have negative effects on social development and academic achievement or produce a deficit (Carlberg & Kavale, 1980; Madden & Slavin, 1983; Epps & Tindal, 1988; Freeman & Alkin, 2000; Salend & Duhaney, 2007);
- inclusive placements tend to produce outcomes that are at least as positive, and sometimes significantly more positive than separate class placements, in particular while academic outcomes tend to be higher for students with mild intellectual disabilities, academic outcomes for students with severe intellectual disabilities were at least as high, and sometimes higher than outcomes for peers who were educated in separate settings (Carlberg & Kavale, 1980; Giangreco, Dennis, Cloninger, Edel-

man, & Schattman, 1993; Hunt & Goetz, 1997; McGregor & Volgelsberg, 1998; Freeman & Alkin, 2000; Kim, Larson, & Lakin, 2001; McDonnell, Thorson, Disher, Mathot-Buckner, Mendel, & Ray, 2003; Cole, Waldron, & Majd, 2004; Downing & Peckham-Hardin, 2007; Felce & Perry, 2009);

- this advantage can be due also to the fact that in a normal context students with intellectual developmental disabilities can better express the abilities that they already have (Kim *et al.*, 2001; Felce & Perry, 2009);
- have more access to academic instruction (Logan & Keefe, 1997; Helmstetter, Curry, Brennan, & Sampson-Saul, 1998).

4. The social development is greater in inclusive classrooms

Most of the research has revealed for students with intellectual disabilities that there is a greater social development in inclusive classrooms (Freeman & Alkin, 2000; Buckley, Bird, Sacks, & Archer, 2002; Fisher & Meyer, 2002; McDonnell *et al.*, 2003; Buckley, Bird, & Sacks, 2006).

Studies comparing special education versus general education classes have found that students with intellectual disabilities placed in general education classes:

- had increased social interactions with classmates (Salend & Duhaney, 2007);
- had more friendships (Salend & Duhaney, 2007);
- had better self-concepts (Salend & Duhaney, 2007);
- exhibit higher levels of “happiness behaviour” when interacting with typical peers (Logan, Jacobs, Gast, Murray, Daino, & Skala, 1998);
- had less disruptive behaviour (Salend & Duhaney, 2007).

5. Social acceptance is greater in the inclusive class

Previous research showed that students with intellectual disabilities are less accepted than their typically developing peers; however their level of acceptance seems to be positively correlated to the time they spend in the general education classroom (Freeman & Alkin, 2000). Similar results were found in research carried out in Italy that found that a crucial variable in determining the level of social acceptance is the amount of time spent together.

It is interesting to highlight that in this research results show that social acceptance is differentiated according to the situations taken into consideration; in particular acceptance is lower for what concerns academic achievement and higher in helping situations. Specific training for teacher and scholar can enhance social acceptance (Freeman & Alkin, 2000).

6. Schoolmates of students with developmental intellectual disabilities do not learn less

Only few studies assessed performances of typically developing children attending class where there is a child with intellectual developmental disability.

McDonnell *et al.* (2003) showed that learning levels are the same in students attending inclusive classes versus traditional ones. Accordingly, we can hypothesize that the presence of students with developmental disabilities do not have a negative influence on the learning processes of students without disabilities.

Moreover Cole, Waldron and Majd (2004) showed that typically developing students attending inclusive class had higher academic performances than scholars attending normal class.

7. What inclusive class?

Although several studies showed the advantages of inclusion in normal classes compared to special schools, several studies showed that this was not always the case (Carlberg & Kavale, 1980; Epps & Tindal, 1988; Freeman & Alkin, 2000). Considering that one could ask what are the characteristics that bring the best results.

Several studies highlight the importance of adequate programming and the adaptation of general instruction to the needs of the students with disability.

As highlighted by Waldron e McLeskey (2010) the following variables seems to be critical:

(Dyson, Farrell, Polat, Hutcheson, & Gallannaugh, 2004; Farrell, Dyson, Polat, Hutcheson, & Gallannaugh, 2007; Giangreco, 2009).

- Welcoming attitude towards all the students
- Teaching assistants (e.g. support teachers)
- A flexible instruction
- Systems for monitoring student progress, and use of the data to plan individual student support and interventions
- Inclusive programs, which are good for any school
- Teaching students with disability should be considered a “normal” responsibility of the teacher.

Moreover according to Giangreco (2009) it is important not to treat those students as eternal children, not able to learn or share profound cultural experiences.

Moreover he highlights that simple and repetitive activities (such as threading pearls) are negative for these students and how important is al-

lowing them to participate in complex learning experiences, as those present in Shakespeare drama.

8. Discussion and open questions

Certainly suggestive are the two hypothesis (one implicit and the other explicit) that have been proposed in the paper that initiated this debate:

- attending normal classes, instead of special ones, can enhance cognitive and social development, school and adaptive performances;
- attending normal classes can allow students with disability to reach higher results in school and adaptive performances than we would expect on the basis of performances on intelligence tests.

Those two hypothesis have been at least partially confirmed by research carried out in Anglo-Saxon countries and in Italy. The study by Vianello and Lanfranchi (2009), in fact, highlighted the presence of surplus effect. However this study did not compare scholars in normal classes and in special schools.

Several problems remain open.

The surplus effect is not present only in students attending inclusive schools (see for example Hatton, Wheeler, Skinner, Bailey, Sullivan, Roberts *et al.*, 2003; Hardiman, Guerin, & Fitzsimons, 2009), because for some syndrome it is part of the profile typical for this syndrome. For example in Down syndrome adaptive performances are higher than cognitive and linguistic ones. This aspect is very important and should be kept in mind when we compare scholars in special and in normal classes. In order to confirm the higher value of attending inclusive classes we should find not only surplus in social adaptability, but this surplus should result greater than in special classes.

It follows that similar reasoning should be done for what concerns academic performances.

Assuming that inclusion in normal schools has enhanced cognitive and social development and brought school and adaptive performances to a higher level than those of scholars attending special schools outside Italy (at the moment it is not possible to make a direct comparison in Italy since we do not have special schools), we should explore what variables determine this surplus.

According to Scruggs and Michaud (2009), that refer to a study by Palladino, Cornoldi, Vianello, Scruggs and Mastropieri (1999), one aspect that could be important is the attitude of the Italian teacher who delegates less responsibilities to the paramedical staff.

According to Waldron and McLeskey (2010) the following aspects are also important:

- an attitude that is more or less welcoming towards all the scholars
- teaching flexibility

- good teaching methods for everyone.
- good abilities in detailed and personalized planning
- support to the teachers

We wish that the Italian researchers, at the moment quite absent on those research themes, might actively collaborate with foreigner researchers on those topics. Our hypothesis is that, if on one hand in Italy teachers have a positive attitude toward inclusion (in comparison to foreign colleagues), there could exist some “gaps “ (apart from some exceptions) in planning teaching methods and in teacher support. This means that our students with intellectual disabilities have still a wide range of potential improvement.

Moreover it means that if we are able to find how to better improve their development and performances, we will also find out how to propose a more effective school for all students apart from their differences.

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