Inclusive school placements and surplus/deficit in performance for students with intellectual disabilities: Is there a connection?

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Abstract

Vianello and Lanfranchi (2009) have presented a noteworthy hypothesis regarding students with intellectual disabilities, when they suggest that the location of a student’s education can produce a surplus (or deficit) relative to academic and social/behavior development. We provide a brief review of research on the effectiveness of placement settings for students with intellectual disabilities conducted in the U.S. that provides some support for the surplus/deficit hypothesis. This is followed by a review of the qualities of inclusive programs that may produce a surplus for these students, and how schools with these qualities are developed. Finally, we discuss the need to support schools as they transform practices to make differences ordinary for students with disabilities.

Keywords: Intellectual Disabilities; Inclusion; Program Effectiveness; School Change

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1. The surplus/deficit hypothesis and students with intellectual disabilities: Does setting add value?

Vianello and Lanfranchi (2009) present a very noteworthy hypothesis related to the education of students with intellectual disabilities, as they ask whether the location of a student’s education can produce a surplus (or deficit) in academic and social development. They begin to develop theoretical support for this hypothesis by reviewing research that demonstrates many students with intellectual disabilities seem to have a deficit in academic and social development relative to their presumed cognitive ability.

For example, research by Zigler and Bennet-Gates (1999) suggests that students with intellectual disabilities are often characterized by “more negative behavior in the presence of strangers, psychological dependence on adult figures personally-known to subjects, less expectation of success, more importance given to external motivation rather than internal” (Vianello & Lanfranchi, 2009, p. 43). These behaviors often result in less motivation to work, lower self-esteem, and less self-efficacy, which leads the individual to a deficit with respect to presumed intellectual ability.

Vianello and Lanfranchi then suggest that while many students with intellectual disabilities exhibit this deficit, some seem to exhibit a surplus, or academic achievement and social development that is greater than what would be expected based on their presumed cognitive ability. They then hypothesize that the student’s environment, whether poor, typical, or enriched, may influence the extent to which a student is either in deficit or surplus.

Research presented by Vianello and Lanfranchi, while very much preliminary, provides suggestive evidence that students with intellectual disabilities and one of four syndromes (Down syndrome, Fragile X syndrome, Cornelia de Lange syndrome, and Prader-Willi syndrome) may be more likely to exhibit a surplus when they are educated in an inclusive setting. The authors conclude that the surplus/deficit hypothesis remains to be confirmed, and that the research they have reviewed regarding this hypothesis has generated more questions than answers.

We concur with this perspective, and believe that the deficit/surplus hypothesis related to students with intellectual disabilities is very provocative and worthy of study. This concept seems to be similar to the ‘value added’ approach to assessment that is increasingly used in schools in the U.S. (Sanders & Horn, 1998; Sanders, 2006). This approach is built upon the idea that educators can predict the amount of academic progress a student will make in a given year by determining gains the student made in previous years. Thus, a student is expected to make an average gain each year, and interventions may be evaluated based on the extent to which they exceed these expected gains or add value to the student’s education. The question that Vianello and Lanfranchi asked, when placed within a value added context,
then becomes “Does an education in an inclusive setting add value to the education of students with intellectual disabilities?”

A major interest of ours related to this topic concerns the qualities of inclusive settings that may result in adding value to the education of students with disabilities. In a later section of this paper, we will address this issue, but first we review research from the U.S. that seems to support the surplus/deficit hypothesis, indicating that an education in an inclusive setting may add value to the education of many students with intellectual disabilities and produce a surplus for many students with intellectual disabilities.

2. What does evidence on the efficacy of placement settings from the U.S. say about the surplus/deficit hypothesis?

Most of the research that has been conducted regarding the effectiveness of placement settings for students with intellectual disabilities in the U.S. has revealed that these students do not benefit from full-time, separate class placements, and at times segregated placements can have negative effects on social development and academic achievement or produce a deficit (Dunn, 1968; Carlberg & Kavale, 1980; Madden & Slavin, 1983; Epps & Tindal, 1988; Freeman & Alkin 2000; Salend & Duhaney, 2007). In contrast, inclusive placements tend to produce outcomes that are at least as great, and sometimes significantly greater than separate class placements.

For example, in a review of the impact of placement setting on the academic and social attainment of students with intellectual disabilities, Freeman and Alkin (2000) found several benefits for inclusive placements. Regarding social outcomes, these authors found that students in inclusive placements tended to have better developed social skills and competence. In addition, while students with intellectual disabilities were not as well accepted as their general education peers, their level of acceptance tended to be positively correlated to the time they spent in the general education classroom. Freeman and Alkin found that low levels of social acceptance could be addressed, to some extent, through intensive training programs for teachers and peers.

Freeman and Alkin (2000) also examined research that addressed academic outcomes for students with intellectual disabilities in inclusive settings, and found that outcomes were also positively correlated with the time spent in an inclusive classroom. They note that while academic outcomes tended to be greater for students with mild intellectual disabilities, academic outcomes for students with severe intellectual disabilities were at least as great, and sometimes greater than outcomes for peers who were educated in separate settings.

A review by Salend and Duhaney (2007) reached similar conclusions. These authors found that students with severe disabilities who were educa-
Students who were included experienced greater increases in skills learned, engaged and instructional time, and exposure to academic content than peers who were educated in separate settings. With regard to social and behavioral development, students who were included often had more friendships, increased social interactions with classmates, greater social acceptance than students educated in separate settings, better self-concepts, and fewer disruptive behaviors.

Although most research is supportive of inclusive placements for students with intellectual disabilities, Epps and Tindal (1988) concluded that some research favors separate classes over inclusive placements for some students. Others have concurred with this conclusion, as they have noted some variability in outcomes regarding the effectiveness of placement settings for students with disabilities (Carlberg & Kavale, 1980; Freeman & Alkin 2000). These differences are likely related to the quality of the inclusive or separate class settings (Leinhardt & Pallay, 1982; Epps & Tindal, 1988; Fox & Ysseldyke, 1997; Salend & Waldron & McLeskey, 1998; Duhaney, 1999; McLeskey & Waldron, 2000, 2002, 2006). For example, Fox and Ysseldyke found that when an inclusive program was poorly designed and teachers were provided little support or professional development, few supports were provided in general education classrooms to meet the needs of students with disabilities and student outcomes were not enhanced.

In sum, these findings provide some support for the surplus/deficit hypothesis. Most of the research conducted to this point reveals that students with intellectual disabilities seem to make more academic and social progress when placed in well-designed, inclusive classrooms. However, if these programs are not well designed, negative outcomes may result (Madden & Slavin, 1983; Fox & Ysseldyke, 1997; McLeskey & Waldron 2006). These findings suggest that critical variables that influence student outcomes are the quality of the program that is delivered, and the extent to which the general education setting is changed to better accommodate the needs of students with disabilities (Salend & Duhaney, 1999; Waldron & McLeskey, 1998). In the next section, we provide a brief review of research related to the quality of effective, inclusive programs.

3. What are the qualities of well-designed inclusive programs that result in a “surplus” or value-added for students with disabilities?

Although many have speculated regarding the qualities of effective, inclusive schools based on their work in these settings (e.g., Burstein, Sears, Wilcoxon, Cabello, & Spagna, 2004; Salend & Duhaney, 2007; McLeskey, Rosenberg, & Westling, 2010), surprisingly little systematic research has been conducted that addresses this important issue. This area of research has begun to be addressed by Dyson, Farrell, Polat, Hutcheson, and Gallan-
naugh (2004) and Farrell, Dyson, Polat, Hutcheson, & Gallannaugh, (2007) by identifying schools in the U.K. that are both inclusive (i.e., a relatively large number of students with disabilities are educated in the school), and effective (i.e., the school produces greater than expected academic gains for students with disabilities). While the definition of effective schools based on academic achievement is narrow (i.e., academic measures used may not accurately reflect the progress of all students, especially those with more substantial disabilities, and social development is not considered), and the definition of inclusivity is relatively gross (i.e., number of students with disabilities educated in a given school), this research represents a good beginning in examining the qualities of effective, inclusive schools.

Dyson et al. (2004) and Farrell et al. (2007) addressed this topic by identifying twelve schools in the U.K. that had high levels of school inclusivity, as well as high levels of student achievement. Case studies were conducted in each of these schools, and produced five primary findings.

(1) There was not a single model for inclusion, as schools developed inclusive programs in many different ways. However, these effective, inclusive schools shared several principal elements, including:

- Services provided for students with disabilities were characterized by flexibility. This included flexible instruction in the general education classroom, as well as flexible support to meet changing student needs. Customizing support was dependent on careful assessment, planning, and monitoring of student progress.
- Teaching assistants were used to break down rigid grouping patterns, as they provided in-class support, and individual or small group instruction.
- Most schools had sophisticated systems for monitoring student progress, and used this data to carefully plan individual student support and interventions.
- High performing schools used strategies directed toward raising the achievement of all students in the school, as well as specific strategies to address the needs of students who struggled to learn.

(2) Schools had an ethos that was positive and welcoming of all students, and a strong commitment to the principle of inclusion or equity for all students. This included a clear recognition of the practical challenges that were presented by inclusion, as well as the need to use limited resources very effectively and efficiently. Alongside this commitment to equity, the effective, inclusive schools also had a strong commitment to excellence, which included improving achievement and holding high expectations for all students.

(3) Instructional practices in general education classrooms were readily identifiable by observers as ‘good’ practice, and were seen as likely to be effective. Furthermore, these practices were flexible, and were changed as necessary by teachers to meet particular student needs.
(4) Multiple strategies were used to increase student achievement. This included raising the overall quality of teaching in the school; focusing directly on raising student achievement to predetermined targets; and focusing on any identified weaknesses in underlying skills and seeking to remedy these weaknesses.

(5) Educators typically viewed the education of students with disabilities as a normal part of their responsibilities, simply as a fact of life. However, teachers had significant challenges addressing the behavior of students who were disruptive, and viewed the behavior of these students as the most significant difficulty they faced in raising student achievement.

It is noteworthy that, as part of this research, Dyson et al. (2004) also used a national database to examine the relationship between level of school inclusivity and student achievement. This analysis resulted in a slightly negative, but significant correlation between inclusivity and achievement. Based on this finding, the authors concluded that it was not the inclusivity of a school that improves achievement, but specific practices (as previously described) that occurred within these settings that improved achievement. The relevance of this finding to the surplus/deficit hypothesis is unclear for two reasons. First, this data primarily relates to the achievement of students with milder disabilities, and may not relate to inclusion when examining outcomes for students with intellectual disabilities. Second, the outcomes measured do not include important outcome measures for students with intellectual disabilities that could be improved by placement in inclusive classrooms (e.g., social development, friendships, academic skills not included as part of national standards and achievement measures).

While the research of Dyson and colleagues (2004) suggests that the quality of inclusive programs is a critical consideration when examining the effectiveness of these settings, further research is needed to determine which qualities of these settings result in improved outcomes or a surplus for students with severe disabilities. It seems likely that many of the qualities of inclusive schools described by Dyson and colleagues (2004) could be relevant for programs that include students with severe disabilities, and these qualities should provide a good starting point for research that addresses this issue.

4. How are effective, inclusive schools developed?

Several of the reviews of research on inclusion that were cited previously noted that developing an inclusive school is not a simple task, and these programs are, at times, poorly developed (Madden & Slavin, 1983; Epps & Tindal, 1988; Salend & Duhaney, 1999). The qualities of effective, inclusive programs that were previously described are good qualities for
any school, and will surely be recognized as such by many teachers and other professionals. This information can be used to help those who seek to develop an inclusive program, as information is provided regarding critical areas to address in program planning and implementation. However, as Farrell et al. (2007) and others (McLeskey & Waldron, 2000, 2006) have noted, there is not a model for effective, inclusive practices. Thus, the qualities that characterize these programs are only useful for general guidance, and the particulars of any inclusive program must be tailored to the specific characteristics and needs of a local school (McLeskey & Waldron, 2006).

But of course, simply recognizing the qualities of effective, inclusive programs is not sufficient, as much research on school change has demonstrated that good ideas such as these do not travel of their own volition and become implemented in schools (Fullan, 2007). Systematic school change activities are required to achieve the changes that are needed to develop effective, inclusive programs (McLeskey & Waldron, 2000, 2002). Research suggests that to develop an effective, inclusive school, the following are critical considerations in ensuring the success of the school change.

A. A team of teachers and other stakeholders should spend several months planning the changes that will occur as the inclusive program is developed (McLeskey & Waldron, 2000, 2006). This allows teachers and other stakeholders the opportunity to engage in discussions and understand the rationale for inclusion, and build a commitment for inclusion. In addition, this group should work collaboratively to determine school needs, develop goals, generate a plan for change, and work to implement this plan. One frequent outcome of this group is the development of a learning community within the school, as teachers and other stakeholders work together to solve problems as they arise and support one another through the difficult change process (Waldron & McLeskey, 2010).

B. Adequate resources must be provided to support teachers in meeting student needs, and these resources must be used efficiently and effectively. These resources include adequate numbers of teachers and other professionals, as well as support for adequate planning time, curricular resources, technology needs, student grouping arrangements that ensure high quality instruction, and other critical needs.

C. Teachers and other professionals should be provided with high quality professional development to learn the knowledge and skills needed to meet student needs. This high quality professional development should focus on teacher identified skills, and should be long-term, job-embedded, and supported by in-class coaching (Pugach, Blanton, Correa, McLeskey, & Langley, 2009).

D. The principal, teachers, and other stakeholders should work to distribute leadership to support school improvement activities (Waldron & McLeskey, 2010). Research evidence indicates that successful school
change is supported as leaders are developed beyond the school principal, and responsibilities for providing leadership for different aspects of school improvement are distributed among the school staff (Waldron & McLeskey, 2010). The act of distributing leadership is an important step toward changing the culture of the school, and moving in a direction where stakeholders work collaboratively to engage in joint problem solving, data sharing and analysis, and shared decision-making.

5. Supporting inclusion, transforming schools, and making differences ordinary

Vianello and Lanfranchi note in their review of studies related to the surplus/deficit hypothesis in Italian schools, that they did not have a population of students to study who were educated in separate schools, as almost all students with intellectual disabilities in Italy are educated in inclusive schools. Unfortunately, inclusion of students with intellectual disabilities is not a matter of social policy in most other countries. For example, in the U.S. research has revealed that in 2007-08, only about 17% of students with intellectual disabilities spent most of the school day in general education classrooms, while about 78% of these students were educated on a regular school campus but were segregated for much or all of the school day from their general education peers, and 6% were educated in separate schools (McLeskey, Landers, Williamson, & Hoppey, 2010).

Interestingly, in some states in the U.S., inclusion of students with intellectual disabilities is much more prevalent (Smith, 2007). For example, one state includes over 60% of students with intellectual disabilities in general education classrooms for most of the school day, while five additional states similarly include at least 25% of these students (Smith, 2007). Thus, inclusion of large numbers of students with intellectual disabilities can be accomplished in the U.S., given current policies and funding for education, but most states have chosen not to engage in major policy initiatives to ensure that this occurs.

It is noteworthy that this large scale segregation of students with intellectual disabilities continues in the U.S., in spite of the fact that researchers have long questioned the value of separate class placements for these students (e.g., Dunn, 1968), and federal legislation provides a clear preference for inclusive placements for these and other students with disabilities (Williamson, McLeskey, Hoppey, & Rentz, 2006). For example, in 1968 Dunn reviewed research related to the effectiveness of separate class placements, and concluded that these settings resulted in poor educational outcomes for students with intellectual disabilities (or produced a deficit). He went on to characterize the widespread practice of segregating students with intellectual disabilities from their general education peers for much or all of
the school day as “morally and educationally wrong” (p. 5), and “obsolete and unjustifiable from the point of view of the pupils so placed” (p. 6). In response to these shortcomings, Dunn recommended that students with intellectual disabilities be educated in general education classrooms for much of the school day.

Our experience suggests that the development of inclusive programs for large numbers of students with disabilities is highly dependent upon the development of an ethos of support for inclusion by school and community leaders. Unless this support is developed and carefully cultivated, inclusive programs are difficult to support or sustain. In essence, this ethos results in the acceptance of persons with disabilities as a natural part of the school community. This acceptance then leads to the assumption that they will be active participants in the school community in much the same way as other community members are participants, and provides the moral purpose for transforming schools in ways that make many student differences ordinary (Artiles, Harris-Murri, & Rostenberg, 2006; McLeskey & Waldron, 2007).

To illustrate, we have found that well designed inclusive schools seek to make differences ordinary in general education classrooms (McLeskey & Waldron, 2000, 2007). Of course, in any classroom, there is a range of academic and social behavior that is considered typical, ordinary, and acceptable to the teacher (McLeskey & Waldron, 2007). In effective, inclusive classrooms that share an ethos in support of inclusion, teachers arrange curriculum and instruction so that they can accommodate a broad range of differences among their students. This allows a broader range of students to naturally fit into the classroom.

Teachers create more accommodating classrooms by planning curriculum and instruction to ‘fit’ a broad range of students, and also by providing supports to students in the classroom. Well-designed inclusive programs ensure that these supports are natural and unobtrusive whenever possible. This is important not only to ensure that students are a natural part of the classroom, but also because research evidence indicates that supports that fit the ebb and flow of the classroom are preferred by teachers and are more likely to continue to be used over time (Gersten, Chard, & Baker, 2000; Klingner, Arguelles, Hughes, & Vaughn, 2001). More specifically, this research suggests that supports that are accepted and used by teachers should:

- Fit into the ongoing details of daily classrooms instruction;
- Be perceived by teachers as effective for students with disabilities as well as other students in the classroom; and
- Enhance and build on the teacher’s current repertoire of instructional practices.

Thus, supports that are used in an inclusive classroom should be the least intrusive and most natural supports that are effective (McLeskey & Waldron, 2007). This type of support helps to ensure that students with disabili-
ties are perceived as fully accepted, active participants in the classroom (McLeskey, Rosenberg, & Westling, 2010), and that supports are sustained over time by teachers (McLeskey & Waldron, 2007). This is not to suggest that students with disabilities do not need ‘special’ support in an inclusive classroom, but it does suggest that what counts as special needs not always stand out in inclusive settings (Pugach, 1995).

Another critical consideration in keeping differences ordinary in inclusive schools is ensuring that the ‘rhythm of the day’ for students with disabilities is as much like the school day of other students as possible (McLeskey & Waldron, 2007). For example, students should only be removed from the general education classroom when another placement produces improved academic or behavioral outcomes that cannot be achieved in the general education classroom. This is not to say that separate classes should never be used; to the contrary, these classes can be used to improve the development of important skills for students with disabilities. However, keeping the use of such programs to a minimum is important because these classes can result in (McLeskey & Waldron, 2007):

- Disruption of the student’s routine and the routine of the general education classroom;
- Reduction of instructional time because of transitions from one setting to another;
- Fragmentation of the student’s schedule, which makes it difficult for the teacher to provide effective, coherent instruction that meets the student’s needs;
- Difficulty for the student who must learn the rules of several different classroom settings;
- Stigma for the student, who may be viewed as different by others, which may result in difficulty making friends in the general education classroom.

A final critical consideration related to making differences ordinary in inclusive classrooms is ensuring that students with disabilities are part of the academic and social community of the classroom and school. Ferguson (1995) observed in inclusive classrooms and noted that this participation in the community of the classrooms did not always occur, as some students with disabilities seemed to be ‘in’ the classroom, but not ‘of’ the classroom. She noted that this seemed to occur because many teacher assumptions regarding students with disabilities remained unchallenged and unchanged. These assumptions included:

- Students with disabilities continued to be viewed as ‘irregular’, even though they were included;
- Students with disabilities needed specialized support that could not be provided by the classroom teachers;
- Specialized support was provided only by the special education teacher.
Closely examining these assumptions is a critical part of developing effective, inclusive programs where students with disabilities are active participants in the academic and social communities of classrooms and schools. More specifically, inclusion is not about moving special education into the general education classroom. It is about making differences ordinary in these settings, and ensuring that students with disabilities are fully accepted members of the classroom and school community. “An underlying assumption of successful inclusive programs is that all children will be included in the learning and social communities of the school and that classrooms in these schools will be so accepting of diversity that no one will be left out from the very beginning” (McLeskey & Waldron, 2007, p. 166).

6. Conclusion-Developing inclusive programs that produce a surplus, and that further a social justice agenda

Dyson (1999) suggests that the justification for inclusion has been built upon two distinct discourses. One of these discourses addresses the effectiveness of inclusive programs, while the other addresses the rights of students and social justice. The research agenda that is suggested by Vianello and Lanfranchi is obviously important to the effectiveness discourse, and has the potential to add significantly to the extant research that provides support for high quality inclusive programs that improve academic and social outcomes and produce a surplus for students with disabilities (Madden & Slavin, 1983; Freeman & Alkin, 2000; Salend & Duhaney, 2007). Indeed, this work could provide further support regarding the efficacy of inclusive programs for improving outcomes (and ultimately improving the lives) of students with intellectual disabilities.

Inextricably coupled with the effectiveness discourse is the social justice and rights discourse regarding the inclusion of students with intellectual disabilities (Dyson, 1999; Artiles et al., 2006). This discourse has obviously occurred in Italy, as most persons with intellectual disabilities are included in the schools and community as a natural part of everyday activities. Unfortunately, this discourse has not occurred in many other countries, and is necessary to provide the support and moral purpose that results in the motivation for transforming schools and making students with intellectual disabilities a natural part of these settings (Artiles et al., 2006; McLeskey & Waldron, 2006, 2007). We are optimistic that the current emphasis in many countries on accountability for outcomes for all students has the potential to move this discourse along, and could provide many settings in which to further explore how and why inclusive programs seem to add surplus to the lives of students with intellectual disabilities.
References


