Educational Environments of Students with Disabilities: The Disproportional Impacts of National Policies on the School Placements of Students Diagnosed with an ASD in Australia and the United States

Abstract

The journey towards inclusion has wrought many changes in the educational placement options for students with disabilities. In this paper I explore the different policy contexts of Australia and the United States and consider the influence on, and the impact of, their respective disability policies on the classroom environments in which groups of students with disabilities are placed and educated. I compare these contexts to investigate the historical drivers of policy change in each country and how these influence the articulation and support for diverse students’ access to regular education. Student placement data in Australia and the United States are analysed to illustrate how the policy trajectories in each context have influenced the placement patterns of students in the education system over time. The results of the comparison show that the pace and intensity of reform efforts in each context have been associated with very different drivers of policy change. The results of the student placement analysis suggest that the impact of these policies have been disproportionate, indicating that students identified with an ASD are educated in more segregated environments than their peers in both countries, and students from Australia are increasingly more segregated and are dropping out of school at a greater rate than their U.S counterparts.
The effect of legislative and policy reforms on the school placements of students have been extensively discussed with regard to the inclusivity of educational systems. In this paper I explore the impact of such policy reforms on the accessibility of education systems in Australia and the United States for students with disabilities, and consider how different influences have shaped each country’s reform trajectories. These two countries are useful examples to compare as they both have policies that espouse the virtue of inclusive education. For example, both countries are signatories to international agreements advocating inclusive education (United Nations Educational Scientific and Cultural Organization, 1994, 2000; United Nations General Assembly, 2006) the rights of children people with disabilities (United Nations General Assembly, 2006). Furthermore, each country has passed legislation and implemented several policy reforms to improve diverse students’ access to and participation in inclusive education, reduce the barriers faced by diverse students in accessing their local school, and support them in learning alongside their peers and on the same basis (Caruso, 2010; Disability Standards for Education (Cth.) (Austl.), 2005; Education of All Handicapped Children Act, 1975; The Individuals with Disabilities Education Act, 1997; The Individuals with Disabilities Education Improvement Act, 2004). While both countries’ education systems and policies have become more inclusive over time, there is some evidence to suggest that the benefits of this have been inequitable across different groups of students (McLeskey, Landers, Williamson, & Hoppey, 2012; Sweller, Graham, & Van Bergen, 2012).

In both Australia and the United States, this journey towards inclusion began during an era emphasising integration and access to regular educational environments by students, and less on other aspects of inclusive education such as participation, appropriate support and achievement. Consequently, I focus on student placement in educational environments as it enables consideration of the early impact of these policies and laws and any changes over time since then, and permits a comparison of these trends in the two countries by looking at the different influences on policy and placement in each context. I also investigate disproportionality in student placement trends with regard to students diagnosed with an ASD in light of existing evidence about uneven patterns of inclusion and segregation for other student groups. There is considerable literature, for example, on the overrepresentation of students of colour in special education in both countries (Artiles, Kozleski,
Trent, Osher, & Ortiz, 2010; Graham, 2012; Sweller, et al., 2012). Additionally, there is growing evidence that categorisation plays a role in influencing the educational placement of these students. These analyses have shown that some groups of students, such as those with learning or intellectual disabilities, have benefited from increasing access to regular educational environments (McLeskey, et al., 2012; Ryndak et al., 2014). Conversely others, such as those with emotional or behavioural difficulties, have been increasingly segregated into alternative special educational settings (Graham & Sweller, 2011) or dropping out of school at disproportionate rates to other student groups (Artiles, et al., 2010).

This paper focuses specifically on the placement trends of those diagnosed with an ASD in light of the relative lack of attention to their inclusion/exclusion as a low-incidence disability (Kurth, Morningstar, & Kozleski, 2014). There has been relatively little discussion regarding the historical impact of these policies for students whose support needs are identified in relation to developmental disabilities such as ASD. It remains unclear whether this has fluctuated over time, or whether any shifts occurred after legislation and policy were introduced, although there is some evidence to suggest that they are currently amongst the students who are most commonly educated in the most restrictive settings in the United States (Kurth, et al., 2014). Certainly when Kanner first articulated the characteristics of autism, these students were also typically placed in very restrictive settings. One illustrative example is that of:

Virginia S., born September 13, 1931,[who] has resided at a state training school for the feebleminded since 1936, with the exception of one month in 1938, when she was paroled to a school for the deaf "for educational opportunity." Dr Esther L. Richards, who saw her several times, clearly recognized that she was neither deaf nor feebleminded (Kanner, 1943 p. 230).

The exclusion and inappropriate placement of this group of students has been documented since that time, as illustrated by the frequency with parents have had to litigate on behalf of their children who have been denied access to their local school (Caruso, 2010; Dicker & Bennett, 2010) as well as the persistent debates regarding appropriate school placement in both academic literature and the public media (Boyce, Buckley, Young, & Pakula, 2011; Evans, 2014). These historical and contemporary indications of the barriers that are faced by students identified with an ASD in accessing regular education highlight a need to understand whether policies that aimed to improve their access to the
regular school system have indeed made any difference to this group. The purpose of this paper is thus to examine patterns in students’ school placement data as an indicator of the impact of policy and legislation in Australia since 1992 and in the United States since 1975, and to consider how these policy reforms have been articulated and influenced, and how they have changed the placement of students diagnosed with an ASD. The following sections of this paper discuss the development of educational policy for diverse students in each national context. The impact of these developments is considered regarding the trends in the educational placement of students with disabilities in general, as well as the educational placement of students diagnosed as being on the autism spectrum, to compare similarities or differences across student groups.

The analysis and discussion that follows in this paper refers to the trends in educating of students along the spectrum of placement options from the most segregated (prisons, residential settings), through the variety of segregated settings (special schools, special education classrooms, pull out settings) to the classrooms that are variously referred to in this academic sphere as “regular”, “inclusive” “mainstream” or “general education”. Each of these latter terms are loaded with their own political history and their use points towards a discourse of inclusion as eloquently elucidated elsewhere (Graham & Sweller, 2011; Slee, 2011). I use the term “inclusive” to describe educational policies that espouse the value of student access and participation in regular schools alongside their peers, yet I acknowledge that these policies have not, at their core, the radical reconceptualization of schooling that would reform the system and remove all barriers to student access, participation and achievement that are at the present time only partially mitigated for some. Similarly, I refer to the places in which students are included variously as “general education”, “mainstream” or “regular” or “inclusive” settings, with an acknowledgement that these terms are at once descriptions of places that are less physically segregated than others, yet simultaneously signify the historical division between educational environments provided for most by pointing elsewhere to alternative settings for the few.

Considering the placement data of individuals identified as being on the autism spectrum contains some challenges as this requires factoring in the prevalence data and this figure is subject to much debate. Autism is not a medical condition but rather a spectrum of neurodiverse characteristics; individuals described having an ASD are highly idiosyncratic and do not share immutable
characteristics (Caruso, 2010). There is widespread acknowledgement of a dramatic increase in the rate of diagnosis of ASD; however, prevalence data is problematic for several reasons. One issue is that a diagnosis of an ASD is a “soft” diagnosis achieved through clinical judgements by a multidisciplinary team in accordance with criteria specified in the Diagnostic and Statistical Manual (DSM; 2013) but subject to the perspective of the individuals involved (Caruso, 2010). Moreover, since the condition was first described by Kanner (1943) there have been changes to how it is described and understood (Volkmar & McPartland, 2014) and there have been several amendments recommended by the American Psychological Association as to how the diagnosis is achieved (American Psychiatric Association, 2013; Hazen, McDougle, & Volkmar, 2013). These amendments included a broadening of the spectrum of subgroups under the Pervasive Developmental Disorder group that is the general category beneath which ASD sits, as well as the expansion of diagnostic criteria (Wing & Potter, 2002). A diagnosis of an ASD can thus depend on variables including the context, clinicians, or the age of the child, (Crais et al., 2014) as well as which edition of the DSM was used. A further issue in the prevalence data is that there is some evidence to suggest that clinicians are engaging in diagnostic substitution (Leonard et al., 2010; Skellern, Schluter, & McDowell, 2005) as well as diagnostic re-categorisation (Polyak, Kubina, & Girirajan, 2015). Because of these limitations in prevalence data, the figures cannot be considered to be exact (Leonard, et al., 2010; Williams, MacDermott, Ridley, Glasson, & Wray, 2008) and figures such as student placement numbers that rely on diagnostic data should be treated as indicative rather than precise. The exercise remains important if the issue of disproportionality in each country is to be explored for this group of students. The issues that arise in understanding the figures that are specific to each context will be discussed in the relevant sections that follow.

Influences of policy reform for students with disabilities in Australia

The initial driver for reforming educational policy about the placement of students with disabilities in Australia began in the 1970s, after the Karmel Report Schools in Australia (1973) recommended government support for integration. This recommendation was made in recognition of the inequities in educational opportunities for students where the public education system was
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reserved for “trainable” students, and special education provided for some, with those deemed “ineducable” excluded from compulsory education altogether (Loreman, Deppeler, & Harvey, 2011). Following the Karmel Report, integration was implemented across the different states and territories and the ensuing policy development was punctuated by more departmental reviews and reports (Collins, 1984; Doherty, 1982) that influenced how integration was enacted during the 1980s. There has been some consideration given to the impact of these departmental reports on student educational placement. On the one hand, they inscribed the right of children with disabilities to access the regular education system, leading to an increase in the integration of students within the confines of regular schools (Dempsey, Foreman, & Jenkinson, 2002). They also articulated a democratic rights-based approach to the access of all children to learn together in regular schools. Yet on the other this was subverted by the inscription of new deficit-oriented categories for describing students’ needs, and the concomitant burgeoning of new classes of segregated environments, such as off-site teaching units and other exclusionary “support” mechanisms, thereby doing as much to hinder the policy and system journey towards inclusion as they did to facilitate it (Slee, 1992; Slee, 1995, 2011). Many students hitherto educated in special schools either remained there or were placed in the newer segregated environments while many students were shifted into special education settings after being identified as needing assistance under the new categories such as behaviour disorders or emotional disturbance (Graham, Sweller, & Van Bergen, 2010).

It was another decade again before further policy reforms were implemented through by State-based equal-opportunity legislation in the early 1990s (Dempsey, et al., 2002) and the Commonwealth introduced the Disability Discrimination Act of 1992 (DDA). Yet another decade elapsed before the introduction of the Disability Standards for Education 2005 (henceforth known as the Standards), which clarified the rights and responsibilities of education providers under the DDA, and introduced the controversial “reasonable adjustments” and “unjustifiable hardship” clarifications. These policies have been critiqued on the ground they contain no firm mandates but consist of broadly inclusive statements that are not immediately clear in their translation to good management of inclusion in schools (Lindsay, 2004). It is the impact of these national policies and legislation on student inclusion that this paper seeks to understand.
Impact of Australian policy on students with disabilities

In addition to the challenges presented in obtaining reliable prevalence data outlined earlier, mapping the national impact of the policy reforms through the DDA and the Standards using the state-reported figures for student educational environments presents a new challenge. This is because the state-reported figures refer only to the numbers of funded students, rather than all those covered by the DDA, (which includes categories that attract no funding, such as mental health). These figures aren’t comparable between jurisdictions, as each Australian state and territory has their own funding criteria with differing categories and rules that determine disability funding thus there has historically been no consistent picture available for the country as a whole. For example in Victoria, the ASD funding criteria are grounded in students’ adaptive and language skill scores more than two standard deviations below the mean (Department of Education and Early Childhood Development, 2014) whereas other states criteria rely on challenges students experience, such as social interaction, (Department for Education and Child Development, 2014; Department for Education and Communities, 2003; Department for Education, 2014). Regardless of the funding criteria, in each state the numbers of funded students are only a fraction of the students who receive a diagnosis (Bartak & Fry, 2004) meaning many unfunded students are therefore excluded from the reported placement data. For all of these reasons, these state-reported numbers are limited in their contribution to tracking the impact of the DDA, and highlight a need for another data source to understand how student placements have changed in response to national disability policies. This is likely to change with the Nationally Consistent Collection of Data for Students with Disabilities which has become policy as of the start of 2015, (Department of Education and Training, 2014) but data on national placement trends won’t be available for some time and will not permit retrospective data comparison relating to the period during which the DDA and the Standards were introduced.

One source for considering the nationwide impact of the DDA and the Standards is the Survey of Disability and Carers (SDAC) (Australian Bureau of Statistics, 1988, 1998, 2003, 2009, 2012). This data included both funded and unfunded students and gathered information about student placement along the continuum of restricted environments. To understand the trends in student
placement in relation to the timing of national disability and educational policy reform in Australia, I analysed and graphed the data from the SDAC and represented the placement data in terms of proportions of students. For each year and each type of setting, I converted the number of students reported as being educated in each type of setting to a percentage of the total number of students identified with a disability reported in the SDAC. This process was selected to prevent fluctuations in raw student numbers and population trend from influencing the analysis and presenting a distorted visual representation. The SDAC does not report student numbers in settings such as hospitals, care facilities, residential homes for persons with disabilities or prisons, and thus it was not possible to report the number of young people in these most severe forms of segregation. The analysis of the SDAC data is illustrated in Figure 1.

*Figure 1. SDAC data reporting the placement of students aged 5-20 with disability in Australia for the selected period 1981-2009*

An inspection of Figure 1 clearly indicates that the *DDA* was not associated with clear shifts towards more inclusive placements of students. While there was a downward trend in the placements in segregated settings such as special schools, this pre-dates the *DDA* and the *Standards*, a finding which has been shown in NSW data elsewhere (Dempsey & Foreman, 1995). What the SDAC data also indicates is that this trend has since reversed and risen again. The SDAC figures also suggest that with the introduction of the *DDA*, proportion of students placed in segregated settings located inside
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regular schools such as support units, resource rooms and special education classes rose and remained high, while there was a reduction in the numbers of students with disabilities placed in regular education rooms. Since the articulation of the Standards, there have been very slight improvements in the trends, with the number of students educated in regular classrooms increasing slightly, and special school enrolments and special class placements ceasing to rise. These changes are only small when compared to the larger shifts in the trend patterns between 1988 and 1993.

One important and positive shift in the trends following the introduction of the DDA that is suggested by the SDAC data is the reduction in the proportion of students with disabilities who do not attend school during the compulsory education years of 5-15. Prior to the DDA, approximately 25% of students who were aged under 15 and who were identified with a disability did not attend school (Australian Institute of Health and Welfare, 2008). Since then, the proportion of students with disabilities under 15 not attending has fallen to approximately 2% of all students with disabilities in 2009. This changes considerably when considering the post-compulsory years as well, with 17% of students with a disability aged 5-20 years not attending school, as 51% of those students aged 15-20 do not attend (Australian Bureau of Statistics, 2009).

Policy impact on students with an ASD diagnosis.

The findings from the SDAC relating specifically to ASD was reported in two ABS publications (Australian Bureau of Statistics, 2011, 2014) and show distinctly disproportionate variations from the aggregated data for Australian students with disabilities discussed above. The students with an ASD diagnosis were reported in these publication according to their schooling “restriction status”. The findings relating to student placement are presented in Figure 2. The comparison of 2009 and 2012 data in Figure 2 indicates relatively stable numbers of students with a diagnosis of an ASD in special classes in regular schools although this is inconsistent with other student groups and is approximately double that of the overall proportion of students with disabilities. Moreover, Figure 2 suggests that there are increasing enrolments of students described as having an ASD in special schools, and that the proportion of students described as having an ASD who attend
special schools is approximately three times higher than the for students with disabilities and is increasing more rapidly when compared to Figure 1.

The numbers of students described as having an ASD that were placed in the general education classroom halved in three years, in stark contrast to the wider population of students with disabilities. There is a steep rise in the proportion of students with an ASD diagnosis not participating in education at all between 2009 and 2012 with 6% of students aged 5 – 14 described as having an ASD not participating in education. This stands in contrast the average for students with a disability for whom the trend is decreasing.

*Figure 2.* Percentage of students aged 5 and over by schooling restriction (Australian Bureau of Statistics, 2011, 2014)

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**ABS Autism in Australia data by schooling restriction**

<table>
<thead>
<tr>
<th>% students identified as having an ASD in Australia</th>
<th>2009</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of students not at school</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>% of students in regular schools placed in special classes</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>% of students placed in special school</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>% of students without educational restriction</td>
<td>30%</td>
<td>25%</td>
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**Inclusive Educational Policy Development in the United States.**

In the United States, the first specific rights for people with disabilities were articulated in the landmark *Rehabilitation Act of 1973* following two landmark cases brought against education boards. In these cases families successfully argued for access to public education for their children with disabilities (Sawyer, McLaughlin, & Winglee, 1994) on the basis that the education provided in

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Changes in Education Placements for Students with a Diagnosis of an ASD

Prior to this time, many young people with disabilities were excluded from education altogether and those that were granted access were largely placed in segregated special education rooms which were criticised as offering an inferior education that was “obsolete and unjustifiable” (Dunn, 1968, p. 5). Two years after these landmark cases, the *Education for all Handicapped Children Act of 1975 (EAHCA)* was introduced. This statute contained two important mandates: that students have a right to a free and public education (FAPE) and that this education is accessed in the least restrictive environment (LRE; *Education of All Handicapped Children Act, 1975*). The LRE concept required placement options on a continuum from general education, resource rooms, separate classrooms, special schools, residential facilities and hospitals.

There is some similarity between the United States and Australian in terms of the immediate impact of legislation for the rights of young people with disabilities to access regular public schools and classrooms. On the one hand, the period following the *EAHCA* brought about a move away from the previous reliance on special education rooms as the default model for accommodating students with disabilities (Zigmond et al., 1995). Under this new policy there was a presumption in favour of regular schools and classrooms as the LRE with the education of students with disabilities to occur alongside their non-disabled peers “to the maximum extent possible” (Keeffe-Martin, 2001, p. 3). It was intended that students would only be removed to segregated settings if they were unable to make satisfactory progress with the use of appropriate support in regular settings (McLeskey & Pacchiano, 1994; Sawyer, et al., 1994). The FAPE concept involved the public purse being used to for the provision of these appropriate support services in the LRE appropriate setting. On the other hand, the new model of service delivery was not inclusion, but rather the birth of the pull-out or resource room which became increasingly the norm, and these later became the focus of similar criticisms to the old model – that students needs were not being met, they were being separated from their peers to the detriment of their learning, and that the model of instruction was inferior (Madden & Slavin, 1983). As in Australia, the legislative attempts to introduce a newer and more inclusive model defeated itself by creating new types of segregation.
Litigation continued to shape policy and legislation in the *EAHCA* Act through its series of changes (1978, 1986) as well as the subsequently renamed *Individuals with Disabilities Education Act (IDEA) of 1990*. IDEA was strengthened and expanded through review, recodification and reauthorisation (1997, 2004), and these revisions were prompted by court interpretations of the legislative intentions of the statute that largely revolved around the two central mandates of the statute: the LRE and FAPE (Keeffe-Martin, 2001).

**Policy impact on students with disabilities.**

To understand the degree to which the *EAHCA* and *IDEA* changed the settings in which students with disabilities were placed, the proportions of students placed along the LRE continuum are compared over the different time periods. This comparison relies on national placement data collected and recorded by the Office of Special Education Programs (OSEP) from the inception of the *EAHCA* Act, and presented yearly to Congress as a progress report under a federally-funded and mandated program. Reviews of the placement trends indicate that between 1977 and 1990, following the introduction of the *EAHCA*, the legislation had little overall impact on moving students with disabilities from special schools into regular schools (Singer & Butler, 1987), or from special education classrooms into general education classrooms (McLeskey & Pacchiano, 1994). The greater impact occurred following the introduction of *IDEA* with analysis of the data since 1990 showing an overall steady increase in the overall placement of students with disabilities in regular classrooms for the majority of the school day, with a steady decrease in the overall number of students placed in separate classrooms for much or most of the school day (National Center for Education Statistics, 2014). These shifts in student placements can be seen in Figure 3.
While the combined data presented by Kena, et al. (2014; see Figure 3) suggests that placement trends for students with disabilities disability shifted towards less restrictive environments, a more complex and varied picture is revealed when the data is disaggregated by student characteristics. Analysis and comparisons of placement trends within and between different groups suggest that EAHCA had a differential impact on the placement of students with disabilities depending on variables such as diagnostic label (Sawyer, et al., 1994), or the extent of the challenges that they faced in their learning (Ryndak, et al., 2014). For example students diagnosed with emotional disturbance or intellectual disabilities were found to be more likely to be placed in segregated school settings (Sawyer, et al., 1994) while other students, such as those diagnosed with specific learning disabilities or language disorders, spent more of their school day placed in general education classrooms. The later impact of IDEA’s increase in student placements in regular schools was similarly dependent on student disability categories. McLeskey, et al. (2012) found that for the higher-incidence disability categories of learning disability, emotional and behaviour disorders and mild intellectual disabilities, general education placements substantially increased while placements in special education settings (including separate classrooms in schools, or separate schools) decreased between 1990 and 2007.
Policy impact on students with an ASD diagnosis.

The impact of EAHCA and IDEA legislation over time on students with an ASD diagnosis is less clear. When the initial EAHCA was introduced, the incidence of ASD was low (approximately 1 in 2,500) and the condition was poorly understood; as a consequence, students were frequently labelled as “suffering” from emotional disturbance or psychosis (Dicker & Bennett, 2010, p. 421). When the EAHCA amendments were introduced 1986, the condition remained rarely diagnosed and poorly understood (Wing & Potter, 2002). The frequency and types of litigation remained unchanged, however, and the large numbers of cases of parents seeking for their children to be included in public schools suggests that these amendments did not serve to improve the clarity of professional understanding or the implementation of the amendments for individuals diagnosed with an ASD (Dicker & Bennett, 2010).

This changed with the shift from EAHCA to IDEA (1990) which contained a number of important amendments. One of these amendments was that specific provisions were articulated for students with an ASD diagnosis. Even though these students had always been covered by the EAHCA laws, greater clarity existed regarding educational programme development specifically for these students. Interestingly, a review of U.S. federal court cases shows that there was then (and remains) a high frequency of litigation regarding ASD and IDEA (Dicker & Bennett, 2010); however, there was a shift in the type of the litigation from parents advocating for their child’s inclusion in the LRE regular schools, to alleging school failure to provide FAPE designed to meet their child’s individual needs (Mandlawitz, 2002). Under EAHCA parents tended to litigate to have their children appropriately included in regular schools, whereas after IDEA several parents began to fight to have publicly-funded educational programmes run in more specialised or segregated settings or even their homes (Mandlawitz, 2002). These cases led to a clarification in the definition of FAPE to also include intensive one-on-one therapy, and the definition of LRE to include home-based education where that was most appropriate.

At the present time, the impact of IDEA on the patterns of education placement of individuals with an ASD along the LRE continuum remain unclear. Some research has suggested that student
placement is determined by their cognitive and communication skills (White, Scahill, Klin, Koenig, & Volkmar, 2007), yet others find that placement is more dependent on the family’s place of residence and the relevant State laws (Kurth, 2014). While it is known that students with low-incidence disabilities and high support needs tend to be placed in the most restrictive settings (Kurth, et al., 2014) there has been little attention to national placement trends since the introduction of IDEA. To identify this trend, I undertook an analysis of LRE placements from the annual reports to Congress. Prior to 1996 the data was reported on different categories of settings along the LRE continuum to those used after 1996, thus I excluded these years in the analysis. For each year and each type of setting, I calculated and graphed the percentage of students categorised as having an ASD a percentage of all students with an autism diagnosis served under IDEA. This was done for two reasons. Firstly, it is in keeping with the visual representations created by NCES, such as their Condition of Education indicators (see Figure 3), and thus permits direct comparison. Additionally it controls for yearly growth in student numbers from population trend and an increase in prevalence.

I obtained the percentage of students categorised as having an ASD using the yearly number of students in this category reported by the National Center for Education Statistics (National Center for Education Statistics, 2013). Then the yearly numbers of these students educated in each of the settings on the LRE continuum of services were obtained from the OSEP’s Annual Reports to Congress on the Implementation of the Individuals with Disabilities Education Act from 1996 – 2011(U.S. Department of Education, 1995-2013). I calculated the percentage of students described as autistic who were placed in each setting was calculated by dividing the OSEP number by the NCES total and converting to a percentage of that total. OSEP report student numbers for a very large number of types of settings. There were then plotted and are represented in Figure 4.

For the purposes of this analysis, these settings were reorganised by combining some types of environment as follows:

- Students placed in the general education classroom for 80% of the school day or more
- Students educated in regular general education classroom for 40-79% of the school day (such as those attending pull-out settings)
• Students educated in regular general education classrooms for less than 40% of the school day (such as students educated in separate classes, for example special education classrooms)
• Students placed in special schools (including both private and public)
• Students who were homebound, detained, hospitalised, or placed in residential facilities (the most restrictive settings on the continuum)

Figure 4. Percentages of total students diagnosed with an ASD aged 6–21 served under IDEA by educational environment: selected school years: 1996-2011

Figure 4 shows a clear pattern of change since the 1996 IDEA amendments with a steady decline in the number of students diagnosed with an ASD diagnosis placed in the more restrictive of the LRE continuum of settings such as special schools, special education rooms or residential facilities. There was a concomitant rise in the numbers of students placed in neighbourhood schools who spent more time in regular classrooms alongside their non-disabled peers, with a growth in the percentage of students spending 40 - 79% of the school day with their non-disabled peers. The proportion of students diagnosed with an ASD educated in this setting is now closer to the overall number of students with disabilities in such settings. There has been a marked decrease over time in the number of students spending 40% or less of the school day in regular classrooms and it is now no longer the most common placement for students diagnosed with an ASD although it remains far more common for this group of students than it is for students with disabilities overall. More than half of
students diagnosed with an ASD are now placed in the two least restrictive settings, with the majority placed for most or all of the school day in general education classrooms although this is far less than the overall percentage of students with disability placed in this setting. Influences on policy development in the United States

**Discussion**

This paper set out to understand how national education policies in Australia and the United States evolved with regard to increasing the equity in access by students with disabilities to the regular education system, and whether these policies have had an impact in terms of the environments in which students with disabilities are educated. The analysis has specifically considered the impact of policy reforms for students identified with an ASD in light of historical exclusion and an awareness of the current tendency toward more restrictive settings.

**Policy Influences and Reform**

Australian educational reforms in relation to disability and inclusive education have been triggered and influenced by departmental reports and reviews. The implementation of these has not always remained faithful to their intent to ensure greater access to regular education classrooms, such as the proliferation of special education classroom settings that followed the Collins Report undermining its recommendation for less segregated placements for disabilities, and the creation of new categories of student support when it recommended that categorisation play a lesser role in supporting students’ needs. The paradox in the implementation of this report’s recommendations undermining its own aims serves as a clear example of how reports and reviews as a driver of policy reform might fail to achieve the full implementation of their recommendations.

Furthermore, the absence of clear mandates in Australia’s policies may explain in part why the inclusive intent of the DDA and the Standards has not been fully realised for all students with diverse needs, and create the conditions for disproportional effects on student placement trends in Australia, as recourse is difficult for families unhappy with the equity and access of their child to regular education. These policies are designed to be proactive, rather than reactive, such that
compliance with the Standards ensures compliance with the DDA and thus should avert the need for litigation (Cumming & Dickson, 2012). In practice, the management of student inclusion therefore relies on principals’ knowledge and expertise in managing the decision-making however there is no clear framework to do so, and tensions arise through factors such as principals’ inexperience, limited knowledge of the law, and discriminatory attitudes. The lack of a mandate with clear courses for action if breached places a heavy burden of proof on parents who assert that their child has experienced discrimination (Keeffe-Martin, 2001; Lindsay, 2004) and may explain the relatively low levels of litigation in Australia under the DDA and the Standards.

In the United States, there were early similarities to the Australian context, with the implementation of EAHCA in the United States creating a new class of segregated settings (in the form of pull-out or resource rooms) that undermined the intent of the legislation to place students where appropriate alongside their peers. A clear contrast exists in the United States, though, as seen subsequent refinement, development and evolution of the EAHCA, which has been considerable. U.S. legislation mandates make very clear the expectations for how student inclusion is to be managed by education providers and clarify the avenues for due process and mediation (Keeffe-Martin, 2001); in the case of a failure to provide students with their entitlements regarding LRE and FAPE. Over time litigation has been instrumental in clarifying these terms, or even changing state and federal legislation regarding the educational of students diagnosed with an ASD and other disabilities, resulting in clear mandates and frameworks for action. Not only was the founding of the EAHCA prompted in part by class actions, but the evolution of the statute over subsequent decades was driven by a significant volume of court decisions that clarified definitions in the mandates of LRE and FAPE (Dicker & Bennett, 2010; Keeffe-Martin, 2001).

Placement trends

For both countries there is clear disproportionality in the impact of policy and legislation for specific groups of students. The analysis of Australian student placement trends illustrates that the strongest changes in for students with disability in general appear to have occurred prior to the introduction of the DDA legislation, suggesting that the changes in placement occurred in response to
social rather than legislative change. There appears to be some impact of the DDA on special school enrolments which reduced following its introduction. This was, however, short-lived although there was a sustained beneficial impact through a steady improvement in the percentage of students with a disability who participated in compulsory education. The DDA is also associated with changes that run counter to its broadly inclusive objectives, with some groups of students being placed in special classrooms and a comparative drop in their placement in regular classrooms. The placement trends apparent for of students identified with an ASD runs counter to the inclusive aims of the DDA and the Standards with these students placed increasingly in special education settings. Additionally, the proportion of students diagnosed with an ASD in the more restrictive settings is much higher than the general population of students with disability, showing that these students are more likely to be excluded from general education settings than other groups of students with a disability. Moreover, there is a concerning increase in the proportion of these students not participating in education at all, a trend that stands in stark contrast to the rest of the population of students with disabilities. These trends clearly emphasise a disjunction between the aggregated placement data of students with disability and the patterns of placement for the group of students identified with an ASD. They highlight a need for school-based research to extend our understanding of effective strategies that can provide “reasonable adjustments” that support the education of students with an ASD diagnosis and keep them learning and engaged at school and preparing for life beyond.

In the United States there was a strongly positive initial impact on the EAHCA on the placement of students with higher incidence disabilities into less restrictive settings, which may explain why the aggregated placement data for all students with disabilities suggested that this was the case in general. These trends toward more inclusive placements, however, were shown to conceal a different set of trends in the disaggregated data, with increasingly restrictive placements for students with lower-incidence disabilities (Kurth, et al., 2014). This disjunction highlights the importance of considering the impact of policies on disaggregated student groups. Analysis of the case law history, as well as placement trends for students diagnosed with an ASD (a lower incidence disability) suggested that legislation in the United States did not have any positive impact on their placement in less restrictive settings, until the addition of the specific category of autism in the IDEA
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Reauthorisation of 1990. This appears to have provided a catalyst for increasingly inclusive school placements for students diagnosed with an ASD with several changes in student placement arrangements that are in keeping with inclusive principles of the reauthorized IDEA statute favouring general education classroom placements over those with more restrictions. The fact that this group of students, however, remain in educational placements typically more restrictive than those of the larger population of students with disabilities, or those with more common types of disability, suggests that current educational practices do not adequately support their inclusion and highlight the need for further research to understand effective and inclusive pedagogy in this setting. The patterns of change in placement associated with the addition of the category of autism in the 1990 reauthorisation of IDEA reveal the powerful impact of specific legislative provisions for particular groups of students to generate change.

In both countries there appears to be room for progress in terms of shifting students diagnosed with an ASD out of restrictive settings and supporting them in classrooms alongside their peers, particularly for those students placed in the most restrictive settings. The clear mandates in U.S. legislation have made only a very minor impact for these students when compared to the benefits felt by other students groups. The use of more segregated settings in Australia is rising for these students, both those within regular schools and those in separate special schools. Moreover the increase in school dropout rates in Australia is particularly concerning. In both contexts there is a clear need for meaningful and systemic change, and that change hasn’t been adequately achieved through disability legislation alone. Better supports and service provision are clearly needed to improve the inclusion and learning of students diagnosed with an ASD in regular schools and classrooms. One way forward is for research to identify and promote effective and inclusive pedagogical strategies that all teachers may use for supporting the learning needs of all students including, but not limited to, those with an ASD diagnosis. There is also a clear role for pre-service teacher education and professional learning to support this change, and equip teachers with the skills and attitude to welcome teach all students in their classrooms.
Limitations

It is important to note limitations in this analysis. During the time period in which the placement data graphed in Figure 4 were collected, a number of changes were made in the revised editions of the DSM (American Psychiatric Association, 2000, 2002) that modified the guidelines involved in making an ASD diagnosis (King & Bearman, 2009). Moreover, there appears to have been a shift in clinical decision-making with clinicians more likely to use an ASD diagnosis where one they may have selected a different label such as intellectual disability (Polyak, et al., 2015). What is clear is that there has been documented rapid rise in the number of U.S. students described diagnosed with an ASD (Centers for Disease Control and Prevention, 2014; Wing & Potter, 2002) and hence a similar number served under IDEA during 1996-2011. The factors underlying this rise, though, are less clear although it is likely that a number of students were diagnosed with an ASD after these changes in 2000 that would formerly have been identified under broader diagnostic categories such as Pervasive Developmental Disorder or intellectual disability (Wing & Potter, 2002). Regardless, this would not account for the reduction in more restrictive settings apparent in the analysis of student placement trends. An additional limitation is related to the time periods that were able to be analysed and compared over time and between contexts. U.S. student data prior to 1996 was not reported and thus it was not possible to consider the trend in figures from the introduction of IDEA nor compared to the figures under the EAHCA. Similarly, the ABS have not yet released the 2012 data for educational environments of students with disabilities, and hence it was not possible to compare this with the SDAC data on 2012 placements for students identified with an ASD.

Conclusion

This paper has focused on student placement which is pivotal in considering the subsequent issues of the quality of students’ educational experiences in these contexts. Placement is, though, only a small aspect of inclusion, which extends conceptually beyond children’s access to their local school. Conceptually inclusion encompasses school enrolment policies, children’s age-appropriate placement in classrooms with their peers, children’s participation in school and classroom activities alongside their peers, students’ inclusion in the social life of the school alongside their peers, the accessibility of
the curriculum, as well as resourcing and teacher training to support student learning (Deppeler, Forlin, Chambers, Sharma, & Loreman, 2014; Florian, 2004). With such conceptual breadth, it is no simple task to consider the impact of policy on student inclusion. The review of student placement data above can indicate the degree to which legislation and policy did or did not change students’ access to their local school and the general education classroom, and the policy drivers that have been associated with positive policy impacts.

It is clear from the analysis presented here that education for all students will require future structural changes in educational policy, school culture, and classroom practice. These are needed in order to support the learning needs of diverse students, such as those with an ASD diagnosis, if they are to participate and to achieve in high quality and inclusive learning experiences that all students have a right to expect. This will require critical evaluation of the effectiveness of strategies for supporting students academically and socially in order to keep them learning and participating at school. Equally there is a role for ever-greater clarity in policy and legislation to support fundamental systemic change and to support an inclusive education for this group of students.
References


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