

*Center for European Studies
Program for the Study of Germany and Europe
Working Paper No. 05.1*

**Special Education and the Risk of Becoming
Less Educated in Germany and the United States***

by

Justin J. W. Powell

Postdoctoral Research Fellow

Max-Planck-Institut für Bildungsforschung
Lentzeallee 94 | D-14195 Berlin, Germany
powell@mpib-berlin.mpg.de

Abstract

Over the twentieth century, a growing group of students has been transferred into considerably expanded special education systems. These programs serve children with diagnosed impairments and disabilities and students with a variety of learning difficulties. Children and youth “with special educational needs” constitute a heterogeneous group with social, ethnic, linguistic, and physical disadvantages. An increasingly large percentage of those students at risk of leaving school without credentials participate in special education, a highly legitimated low status (and stigmatizing) school form. While most countries commit themselves to school integration or inclusive education to replace segregated schools and separate classes, cross-national and regional comparisons of special education’s diverse student bodies show considerable disparities in their (1) rates of classification, (2) provided learning opportunities, and (3) educational attainments. Analyzing special education demographics and organizational structures indicates which children and youth are most likely to grow up less educated and how educational systems distribute educational success and failure. Findings from a German-American comparison show that which students bear the greatest risk of becoming less educated depends largely on definitions of “special educational needs” and the institutionalization of special education systems.

Keywords: special education, institutionalization, learning opportunity, segregation, integration, inclusion, educational attainment, Germany, United States.

*This paper was presented at the CES Berlin Dialogue, “Social Determinism vs. Equal Opportunity: Access to Higher Education in Germany and the United States,” at the Social Science Research Center Berlin (wzb) on December 13, 2004. I thank Abby Collins, Max Hirsh and Susanne von Below for organizing the event and gratefully acknowledge the Max Planck Society for sponsoring my doctoral research. A book based on the dissertation, *Barriers to Inclusion: The Institutionalization of Special Education in Germany and the United States*, is forthcoming from Paradigm Publishers in 2005.

1. Introduction

Given the rising importance accorded educational participation and certification in education societies, why do some students leave school without certificates or with low-value credentials only? The question reflects that formal schooling shapes ever more of the life course not only for the highly-educated, as the norms of educational attainment and (re)training have risen considerably, but for all. One consequence of these increasing norms is a rapidly growing proportion of students who, not succeeding in school quickly or easily enough, participate in special education. As its diverse educational settings developed since 1900 and especially quickly over the postwar period, special education offered assistance not only to children with recognized impairments, but also to those with a variety of learning difficulties. Then as now, these programs serve a highly heterogeneous group of children with social, ethnic, linguistic and physical disadvantages.

We might expect that rates of disability or “special educational needs (SEN)” would be roughly similar in wealthy countries. Yet this is not the case. Despite the dominance of the clinical professions and medical models of disability that define “disability” and “SEN” in terms of individual deficits, cross-national comparisons show that, within Europe, the rates of all children classified and receiving services varies considerably, from less than a percent to nearly a fifth of all students. Indeed, the boundaries of ab/normality depend in large measure on cultural ideologies about equality: which disadvantages should be compensated, how much, and in which school settings remains a matter of continued debate.

Although the group participating in special education includes children with similar disadvantages and difficulties in all countries, we find these large differences not only in the size of the group and its demographic characteristics, but also in terms of learning opportunities provided. A wide range of special education organizations exists and every European country has or is implementing reforms toward more integration or inclusion (EADSNE 1998: 168). Within the OECD, the proportion of these students who are integrated in general school settings ranges from almost none to almost all (OECD 2004). Cross-national comparisons of diverse student bodies in special education also exhibit large disparities in rates of educational attainment. These patterns lead to the following questions: if all countries classify students as having “special educational needs” but at vastly different rates, who are these children who participate in special education and who suffer a higher risk of leaving school without credentials? And if such different forms of schooling have been institutionalized to serve these students, what are the consequences of these learning opportunity structures for their educational trajectories?

To address such questions requires analyses that investigate the social construction of “special educational needs” and special education systems’ varied organizational forms. In turn, knowing which groups of students are most likely to participate in expanding special education organizations mostly in the lower tiers of educational systems demonstrates: (1) which children and youth in these societies are most likely to grow up less educated, and (2) educational systems’ distribution of educational success and failure within each cohort according to their “institutional logics” (Friedland & Alford 1991).

Studies that connect educational attainment and social stratification and utilize a life course approach exemplify the strategy of connecting early inequities with differential life chances. Sociological research on education emphasizes modern nation-states’ increased *institutionalization* of individuals’ life courses as it exemplifies needs and risks addressed by authorized professionals in legitimate organizations (cf. Mayer & Müller 1986: 234). Here, I examine special education as a paradigmatic case of such institutionalization. Youth with “special educational needs” and those in special education have been considered “at risk” for well over a century (Richardson 1999; 2000). The institutionalization—regulative, but often residential as well—of these individuals’ life courses had been steady, until advocates of “normalization” and “de-institutionalization,” challenged this status quo in recent decades (cf. Braddock & Parish 2001; Johnson 2003). More than ever before in education societies, being “disabled” equates to being less educated than one’s peers; conversely, being less educated leads to an increased risk of becoming disabled, of experiencing poverty and of suffering social exclusion (OECD 2003).

Given the dearth of studies on the development of special education systems (especially longitudinal and comparative analyses), the binary German-American comparison I present here must remain exploratory. Nevertheless, it can offer insights, especially due to the long-term interwoven development of science, statistics and (special) education (e.g. Maennel 1907; Sarason & Doris 1979). These nations have continuously borrowed each other's educational ideas and concepts (Drewek 2002; Goldschmidt 1991: 139-187). Moreover, they unite the unusual mixture of federal democracies with decentralized control over education content and financing simultaneously with more centralized rules for special, often unequal, groups of students, such as disabled, disadvantaged and immigrant children (Meyer 1992: 236). Furthermore, while the German and American special education institutions were originally quite similarly exclusionary, they have diverged considerably over the postwar period, despite the increasing reform efforts striving to implement *inclusive education* in both countries. This paper explores the consequences of their contrasting institutional structures in (special) education systems: how this prevalent mechanism of school stratification increasingly shapes the risk of becoming less educated.

To investigate these issues, I analyze: (1) students' classification into special education, (2) their allocation to learning opportunity structures (along a continuum from segregation to inclusion) and (3) their resulting educational attainments for Germany and the United States. Embedded in a broader European comparison, these findings emphasize the need for sociological explanations over biomedical or psychological ones. My empirical results emphasize national patterns of association between classification rates that measure selection processes, schooling structures that provide or constrain opportunities (Sørensen 1996) and the resulting (low) educational attainments.

In the country case studies presented here, I aim to show how special education settings—authorized to offer *different* educational opportunities—legitimately *reduce* individual access to opportunities to learn. These reduced opportunities, in combination with regulatory limits on certification, are hypothesized to reduce educational attainment. Those individual risks accumulate in the significant overrepresentation of special education students in the group of less educated youth in both countries, leading to considerably reduced vocational training and employment opportunities. Paradoxically, educational expansion has *increased* stigmatization of less educated youth because they constitute the lowest educational category (that has become smaller and more socially selective over time) while ever more of their peers have earned certificates, and because employers, dealing with uncertainty about individuals' abilities or skills, make hiring decisions based on those certificates as highly legitimate selection criteria (cf. Solga 2002a: 164; 2002b: 501). Indeed, not only does education influence political and economic allocation, but having credentials has become the “primary mechanism by which individuals are defined as full and legitimate societal members” (Ramirez & Rubinson 1979: 80).

The institutions and organizations that grew to supply *special* education reflect the competing educational and social ideologies, scientific principles and diverse interest groups that had influenced the genesis of *general* educational systems. Major processes relating to “special educational needs” and their institutionalization analyzed here are:

- the social mechanism of *classification* (classifying students based on the concepts in/educability, ab/normality, and dis/ability), together with the resulting symbolic and social boundaries of special education categories—as well as continuity and change in classification systems that produce the demographics of special education;
- the highly variable organizational settings in which special education students go to school and the resulting differential *learning opportunities* and educational pathways offered; and
- probabilities of *educational attainment* (credentials that youth in special education may earn) that affect their later employment opportunities and life chances.

Defining “special educational needs” or “student disabilities”

What are “special educational needs (SEN)” or “student disabilities”? They refer to institutionalized cultural value judgments about intellectual functioning and health that result in particular human differences being recognized as deserving of professional services or support (Powell, forthcoming).¹ Ambivalent and often contentious, classification into special education requires extensive mediation between its many positive and negative consequences: provision of additional resources and rights, but also prevalent stigmatization; even institutionalized discrimination throughout the life course (Powell 2003a,b). Defining disability requires analytic attention to the relationships between individuals embedded in social situations, but also to disciplinary perspectives, cultural contexts and translations of concepts into empirical measures that guide classification. Bureaucratic knowledge systems distinguish student disabilities and regulate access to special educational services and settings according to culturally specific social norms and professional practices: “Far from being ‘scientific facts’ based on objective, universally understood definitions of difference, the categories and labels assigned in different societies are contingent, temporary, and subjective” (Barton & Armstrong 2001: 696).

Applied by school gatekeepers (teachers, administrators, school psychologists, physicians) at the individual level in response to particular behaviors that occur in interactions, SEN categories imply deviance from social norms.² Although analyses of gatekeeping processes and the micro-level weighing of benefits against negative consequences are crucial, these cannot be adequately discussed here. Detailed ethnographic studies explore decision making in students’ educational careers that creates stratification in schools (Cicourel & Kitsuse 1963; Tomlinson 1981; Mehan, Hertweck & Meihls 1986) and between school types (Hofsäss 1993; Gomolla & Radtke 2002). Because official classification furnishes students with specific rights and resources but simultaneously provides the bureaucratic legitimacy and accountability needed to justify compensatory provision of additional expenditures and specialized services, it is considered a “resource-labeling-dilemma” (Füssel & Kretschmann 1993). This process represents a “supply-demand-deal” (Wocken 1996) or the resolution of the distributive dilemma of disability (Stone 1984). Indeed, while dis/ability and SEN categories have been continuously revised, the processes of classification in schools, once implemented, resist change—as do the organizations established to serve classified students.

2. Comparing Special Education in Europe

Situating Germany and the United States within the broader international variation provides a useful contextualization. While some European countries utilize only one or two SEN categories and others more than a dozen, most nations have implemented between six and ten such categories (Eurydice 2002: B-12), depending on extant official disability classifications, assessment procedures, finance regulations, resources allocated and educational system differentiation. Striking differences among the OECD countries exist between those that have non-categorical systems and those with highly differentiated classification systems (Powell 2004: Chs. 2, 4). The diversity of categories currently in use in Europe and the United States cannot be presented here.³ Of relevance for research on “low education,” recent cross-national studies of inclusive and special education and social exclusion utilize just three broad groups of students who receive “additional resources to access the curriculum” (OECD 2000b; Evans *et al.* 2002; OECD 2004): a.) children

¹In her path-breaking sociological analyses of special education, Tomlinson (1981, 1982) discussed these varied accounts of SEN as bodily, behavioral, social, psychological, functional, linguistic, intuitive, statistical, statutory, organizational, and even tautological—as in the phrase: “a child with special educational needs has special educational needs” (on analogous sources of deviance, see Howard Becker 1963: 4-9).

²Original Mertonian concepts such as self-fulfilling prophecy, self-sustaining prophecy, and the Matthew Effect (for the “gifted & talented”) help theorize about differentials in students’ learning within and between schools due to expectation levels (on U.S. tracking systems, see Eder 1981; Lucas 1999: 103ff.).

³In Europe, twenty-two categories are currently in use for students with disabilities, difficulties, and disadvantages (OECD 2004: Annex 2): Partially-sighted, blind, partially-hearing, deaf, emotional and behavioral difficulties, severe/moderate/light learning difficulties, physical disabilities, combinatorial/multiple disabilities, learning disabilities, speech & language disabilities, hospital, autism, gifted & talented, remedial, second language/mother-tongue-teaching, traveling children, disadvantaged, aboriginal, young offenders, other.

with impairments, b.) children with learning difficulties and c.) children with disadvantages. While this study's aggregation of specific SEN categories in use at local, regional and national levels is not an uncontested method, this typology does emphasize the main groups served by special education programs and addressed by educational policies. In fact, large differences among countries are found not only when including disadvantaged students or those with learning difficulties, but also in the most "objective" categories such as visual or hearing impairments.

The two indicators of development I examine here are: (1) the proportion of all students classified into special education, and (2) the segregation index (the proportion of all students classified into special education that are segregated: attending separate facilities or nearly fulltime separate classes). Comparable data on educational outcomes are almost completely lacking for students who receive additional resources, thus "future data gathering exercises will focus on collecting outcome data" (OECD 2004: 131). European research conducted by the EU-funded European Agency for Development in Special Needs Education shows a considerable range in proportion of students with SEN of all compulsory school age students (EADSNE 1998; 2003). For example, Greece and Italy have less than 1.5 percent; Germany's population size at around 5 percent is less than half that in the U.S. (12 percent), and Finland provides almost 18 percent of all schoolchildren with special education services (Table 1: Column 1). What these additional resources consist of and where they are provided require more detailed analyses than can be presented here, yet these rates indicate major cleavages between regions (e.g. Southern Europe vs. Scandinavia) that reflect differences in national policy and the variable institutionalization of special education, including such aspects as curricula, teacher training, financing, service provision and organizational differentiation.

Among the OECD countries, not only do the rates of all children classified as disabled vary considerably, but the proportion of those classified as having special educational needs who are integrated in general school settings ranges from almost none to almost all (cf. OECD 1999; Eurydice 2000). Across Europe, a wide range of special education arrangements exists and the proportion of students in separate schools or classes stretches from less than 1 percent to over 6 percent of all students (Table 1: Column 2). For the U.S., my calculations show that the proportion of students "segregated" full-time is very low (0.4 percent of all students), but that adding the relatively large group of "separated" students who spend more than 60 percent of their schooldays in separate classrooms places the U.S. in the mid-range, at 2.1 percent (cf. Powell 2004: Chs. 7, 8). These large cross-national differences—often matched by intra-national variance—demonstrate that how many children are classified and the learning opportunities that they have depend in large measure on the classification systems in use and on the institutional arrangements of (special) education systems.

Unitary educational systems, aiming for "full inclusion" of all children in general classrooms, educate nearly all students in general schools, such as in Norway. Some OECD countries maintain a continuum of settings from full inclusion to segregated special schools (e.g., UK, U.S.), while Germany together with Belgium and the Netherlands are gradually moving their highly differentiated, segmented educational systems (with mainly segregated special schools) toward the continuum model. Although special schools were closed in favor of students sharing in the mainstream of school life over the twentieth century, segregating or separating students with special educational needs (SEN) remains part of policies and praxis in most countries, even though all countries aim to increase school integration and/or inclusive education. Among the countries presented here, Germany (along with Switzerland, Czech Republic, and Belgium) has the highest percentage of all students of compulsory school age that are schooled in segregated settings (all above 4 percent), while Greece, Italy, Spain, Norway, Portugal and Iceland have the lowest rates of segregation (all below 1 percent). However, in some of these countries with low segregation rates, these coincide with little support provisions of any kind. Here, the goal of individualized support for accessing the curriculum is not met, even if most students do attend a general school.

Table 1 Students with SEN and Segregated (%), Select Countries, 1999-2001

	1	2	3
Classification Rank Order (SEN proportion of all students)	Total Classification Rate: "have SEN" in % all students*	Total Segregation Rate: segregated in special schools or most of the day in separate classes in % all students	SEN Group Segregation Rate: segregated in special schools or most of the day in separate classes in % SEN students
Finland	17.8	3.7	21
Iceland	15.0	0.9	6
USA	12.0	2.1	18
Denmark	11.9	1.5	13
Czech Republic	9.8	5.0	51
Switzerland	6.0	6.0	~100
Portugal	5.8	0.5	9
Norway	5.6	0.5	9
Germany	5.3	4.6	87
Belgium (Flemish)	5.0	4.9	98
Ireland	4.2	1.2	29
Hungary	4.1	3.7	90
Belgium (French)	4.0	4.0	~100
Slovakia	4.0	3.4	85
Spain	3.7	0.4	11
Poland	3.5	2.0	13
Austria	3.2	1.6	50
UK	3.2	1.1	34
France	3.1	2.6	84
The Netherlands	2.1	1.8	86
Sweden	2.0	1.3	65
Italy	1.5	<0.5	.
Greece	0.9	<0.5	.

Sources: European data from Eurydice and EADSNE (2003: 7); US DoED 2002, author's calculations.
 *Note: Because some countries do not classify students unless they attend special schools, the classification and segregation rates may be equal (e.g. Switzerland), however, some integrated students may receive some services or support but are not (yet) counted separately in official statistics. Figures for integrated students in Germany have been published since 2001; *Länder* reports have yet to be standardized.

Based on the structure of their special or inclusive educational structures, these countries can be grouped into three main types (see EADSNE 1998: 178ff.; 2003):

- **Two-track**—parallel development of general schools (with low rates of SEN classification) and legally and organizationally separate special schools (segregating more than 3 percent of all students): Belgium, the Netherlands, and Germany. Over the past decade, these countries have legislated reforms and established new organizations to move, more or less rapidly, toward a continuum model of service provision;
- **Continuum of services/multi-track**—broad spectrum of services in a diversity of settings from segregated special schools to “full inclusion” in general classrooms; classify relatively large proportions of students as having SEN; and educate between 1-3 percent of all students in special settings, such as Austria, Denmark, England and Wales, Finland, France and the U.S.;
- **One-track**—goal of “full inclusion” for all children, integration of almost all students in general schools, classifying relatively fewer children as disabled, and segregating less than 1 percent of all students in special schools or classes, e.g. Norway and Sweden as well as Greece, Italy, Portugal and Spain. Recently, these countries’ relatively few special schools are becoming resource/expertise centers that provide services to general school students. Debate centers on legislative advances prioritizing an increase in institutional flexibility (movement toward a continuum of settings and services), growing awareness of funding system consequences (e.g. incentives to segregate/separate), and the importance of parental choice.

Even such a cursory look emphasizes the importance of historical and comparative research on the *institutionalization* of these systems. Whereas in the U.S., 95 percent of students receiving special education support attend general schools, in Germany, only around 10 percent do. These national differences exemplify crucial path-dependent developments: Germany has hierarchically segregated secondary school systems and an apprenticeship system while the U.S. has universal secondary schools—“the most important institutional distinction” with respect to schooling (Mayer 2001: 98). Next, I analyze these cases that fall in the mid-range between the most inclusive and the most segregating educational systems.

3. The German-American Comparison

Having begun two hundred years ago with schools for blind and deaf children, the institutions established to provide special education became less similar over the twentieth century as they developed isomorphically to general education. Comparing Germany’s highly differentiated special school system and the U.S.’s burgeoning lowest comprehensive school track provides a test of educational expansion’s impact on the distribution of educational opportunities not as is usually done—from the top—but from the bottom.⁴ These countries’ postwar special education institutions increasingly diverged in population size, in segregation, integration and inclusion rates, and in educational attainment (Tables 2, 3).

Both societies claim to be democratic meritocracies, combining orientations to achievement and equality of educational opportunity, yet at particular levels of education: elementary and secondary in the U.S., postsecondary in Germany. Perhaps most fundamentally for the questions raised here, similar ideologies, interests and institutions relating to dis/ability and ab/normality resulted in the exclusion—in both countries—of a majority of children with impairments from schooling until after World War II, when their citizenship rights were affirmed (on the global spread of personhood following earlier eugenic tragedies, see Barrett & Kurzman 2004). The legacies of that legitimated exclusion, amounting to selection based on disability categories at the school gate, are evident in national and *Länder*/state educational policy and organizational responses to it. These continue to affect which children in Germany and the United States will become disabled and when, who will be integrated and where, and what learning opportunities they will benefit from while in school.

⁴In the U.S. and increasingly also in Germany, not only those on lower tail of the bell, normal, or Gauß curve distribution of intelligence, but also the “gifted and talented” (or “*Begabte*”) receive special education in the form of individualized attention and specialized curricula. In this paper, I address primarily the former group.

Table 2 German & U.S. Special Education Classification and Integration Rates

<i>Comparative Indicator</i>	Germany	U.S.A.
<i>Population: Classified students</i> (2001-2002 School Year)	~ 5 % of all students of compulsory-school age in general schools have “special educational needs”	~ 12 % of all students ages 6-17 have an individualized education program (IEP)
<i>Learning Opportunity Structure: Integration in general schools</i> (2001-2002 School Year)	10-15 % of all students with SEN attend general schools	> 95 % of all students with an IEP attend general schools

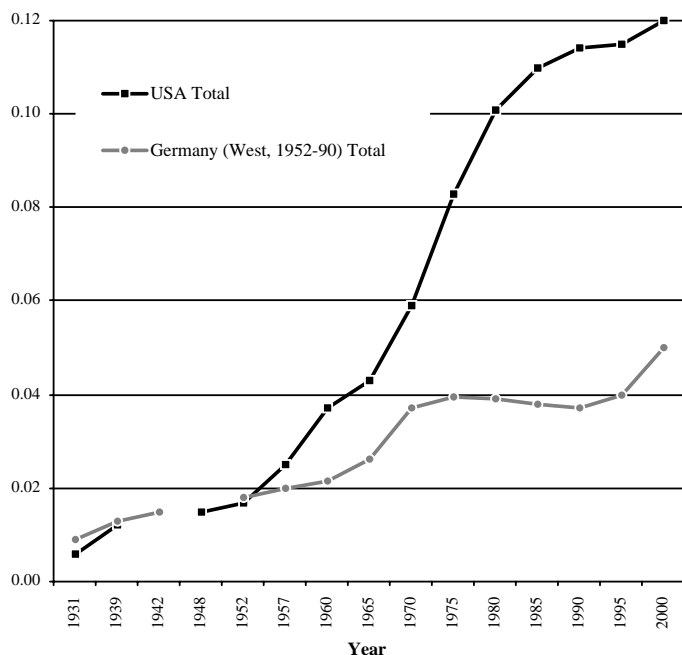
Sources: Author’s calculations based on KMK 2003 (unpublished tabulations), KMK (2002b); U.S. DoED (2001). Note: German official statistics only include classified “integrated” students as of the 1999-2000 school year.

3.1 Classification Rates

In absolute numbers and proportion, Germany and the U.S. witnessed dramatic growth in their special education populations over the twentieth century. Around 1900, both countries reported around 12,000 “abnormal” children being served with additional or specialized attention, either in special classes or schools. Especially in Germany, the slow rebuilding process postwar included substantial continuity in special education theory and leadership. Special education’s renewed growth began within years of the armistice, but especially rapidly as of the late 1950s and early 1960s (Figure 1).

The Western German special school population (in “learning” and total) in 1960 was 2.1 percent of all general school students in grades 1-10. The building of more than ten types of special schools, constituting one of the most differentiated (special) school systems in the world, brought further growth. (Along similar lines, the GDR established nine school types based also on categories of impairment.) By 1965, the proportion of special school students in West Germany had risen to 2.6 percent. Five years later, 3.7 percent of children and youth in West Germany attended one of the special schools, and between 1975 and 1990, the proportion stayed at around 3.8 percent, despite considerable demographic declines in the total school-age population. With the transformation processes following reunification, the population rose to 4 percent by 1994-95. Since the 1999-2000 school year, the national statistical series on special education collected and published by the Conference of *Länder* Education Ministers (KMK) includes data on “*Integrations-schüler*,” those students with SEN who attend general schools. Adding these students has again raised the official overall participation rate in special education to more than 5 percent of the student population in general schools, representing nearly half a million children and youth. Over four decades, the proportion of students attending special schools has more than doubled: one in twenty children of compulsory school age participated in special education (2001-02 school year).

Figure 1 Special Education Population in Germany & the U.S. (% All Students), 1931-2000



Sources: Germany: *Statistisches Bundesamt, Fachserie 11,1 "Die öffentlichen und privaten Sonderschulen in den Ländern des Bundesgebietes und in West-Berlin"* 1951: 13; 1957: 22-25; Myschker (1969: 161); Hofsäss (1993: 70); Krappmann et al. (2003: Fig. 17.1); U.S.: NCES 120 Years of Historical Statistics 1993: Table 11; U.S. DoED (2001 & prior years), author's calculations. Note: Germany 2000 includes "integrated" students.

In the U.S., growth has also been continuously upward. In school year 2000-01, about one of nine public school students ages 6-21 received special education services. That 12 percent represents more than five and half million students. By contrast, in 1931-32, only 0.6 percent of the public school enrollment was noted as needing special education. Yet, a few years after the Second World War, the rate had already nearly tripled to 1.5 percent (1950). And it did so again by 1965-66 (4.3 percent), having surpassed the German level. By the enactment year of the "mainstreaming" law, in 1976-77—which guaranteed all disabled children in the U.S. access to their local public schools as a civil right—the population had almost doubled again, to 8.3 percent. And for the past two decades, between ten to twelve percent of public schoolchildren in the U.S. have received special education services (half of them classified in the category "specific learning disabilities"). These numbers indicate that World War II was a critical juncture for (special) education in both victorious and defeated nations.⁵ In West Germany, growth in the number of participants peaked by 1975, but the U.S. population in special education was already more than double that in German special schools—and continues to rise.

Looking for explanations that could account for the divergence in the proportions of students in special education since the early 1950s, we find a multitude of mechanisms that define the limits to growth of special education: resources and the resulting incentive structures, legal mandates for provision, and availability of funds; school student population characteristics; professional knowledge and training; and a bundle

⁵For example, the UK witnessed similarly steep growth in special education enrollments since 1945 (Tomlinson 1985: 157-165), as it (more or less) transitioned from an inegalitarian to an egalitarian educational system (Carrier 1984: 35-64). By 2000, 20 percent of all students in some regions of the UK had "special educational needs."

of other local-level factors that reflect gatekeeping practices that I group under the term “classification threshold.” All these factors operate within and through the existing (and self-reinforcing, expanding) national and state/*Länder* educational systems and their structures. Growth in the supply of education as a reform and changes in demand for education affect the distribution of opportunities and credentials (Lundgreen 2003; Walters 2000). Resources, incentive structures and policy provisions with school and student characteristics in special and general education combine with gatekeepers making decisions about students’ educational careers to mediate supply and demand. These processes result in the often considerable variance in composition of the student bodies in special education institutions.

Among the most significant differences between the German and American classification systems is the logic underlying their categories, in turn embedded in the differing educational systems, which relate to nation-specific ideologies, interests and institutional developments. Persistently from the beginnings of special education, U.S. policymakers and gatekeepers have added new clinical—medical and psychological—impairment categories (e.g. autism, developmental delay, traumatic brain injury over the 1990s), resisting attempts to replace them with a general category of SEN. From the late 1940s to 1994, Germany emphasized organizational settings, not individuals, even in its definitions of SEN: special educators implemented institutional categories of “*Sonderschulbedürftigkeit*” that represent a child’s defined “need to attend a special school.” This classification system demonstrates the institutional logic and professional power behind the differentiation of ten school types, and it was altered only in 1994 as disability was finally added to the Basic Law’s anti-discrimination article (Art. 3, §3, Sent. 2).

Rapid developments in dis/ability concepts, definitions, and labels exhibit the shifting boundaries between special and general education students. Yet these changes in categorical labels—despite new procedures for identification, referral, assessment, diagnosis and classification, as well as evolving understandings of disability and the tools to measure its complex interrelation of personal, social and environmental factors—have not transformed the institutional settings in which students so classified spend their school-days. Thus, the organizational source of (special) education stigmatization has continued to this day. Children may be differentiated through application of categories and labels, but the result is allocation to learning opportunity structures. Before discussing those school structures, I present the demographics of SEN students to emphasize the heterogeneity of the group participating in national special education systems.

3.2 *Demographics of Students with SEN*

Who ends up in special education? The group dimensions age, gender, poverty and ethnicity vary according to disability category and to region, as individual and environmental characteristics interact. In terms of *age*, early intervention programs have become increasingly important as research shows how vital are early learning experiences and preventive measures for at-risk children. Transitions between school types (either horizontally or vertically in stratified school systems) are especially significant. In Germany, students’ risk of transfer to a special school rises continuously, with the rate peaking at age fourteen and falling off sharply (OECD 1999). By contrast, in the U.S., national enrollment data show that nine- and ten-year-old children are most likely to be classified as having student disabilities. The remaining non-classified students’ probability of receiving an IEP declines steadily thereafter, but services are guaranteed until age twenty-one in most states (encouraging many to remain in school as long as allowable). This difference emphasizes the mechanism of retention (Germany) and the availability of special education in nearly every American school.

Reflecting a pattern of *gender* distribution found in many OECD countries, nearly two-thirds of special school students are boys (OECD 1999). In Germany, by 2002 the proportion of girls attending special schools had declined to 36 percent (Statistisches Bundesamt 2002). In the U.S., boys are overrepresented in special education and are slightly underrepresented in gifted education. Boys in both the U.S. and Germany seem to be increasingly disadvantaged given their considerable overrepresentation in special education and slight underrepresentation in the top track (gifted education) or school type (*Gymnasium*).

Poverty not only adversely affects health; it “is the most consistently associated indicator of poor academic achievement and school failure” (Land & Legters 2002: 4ff.). Despite much higher poverty rates among children in the U.S. than in Germany (double, by most estimates), a large proportion of special education programs in both countries serve children from low-income families. In the U.S., compensatory education (e.g. Title 1, *Elementary & Secondary Education Act*, “Head Start”) was conceived to reduce the adverse effects of childhood poverty, minority status and other characteristics on learning. But special education provides far more resources targeted to individual students. While in the U.S. the official definition of “learning disability” expressly rejects classification of children who are having difficulty learning due to material disadvantage, in Germany this category mainly reflects the effects of low SES, including culturally specific interpretations of behavior and especially linguistic dis/advantages.

Studies confirm that today, as a century ago, nearly all students attending German special schools (category: learning) belonged to the lowest SES group (cf. e.g. Begemann 1970; Wocken 2000). This special school type competes with the *Hauptschule*, serving at-risk students whose disadvantages that burdened school type’s teachers cannot or will not sufficiently compensate. Yet the rationale of increased resources outweighing the stigmatization of attending a special school has not been borne out by research (Wocken 2000: 494), a major cleavage in any dialogue about special education (Krappmann, Leschinsky & Powell 2003: 757). In Germany and the U.S., there is also significant disproportionality by ethnic group in special education.

Ethnic disproportionality has attracted considerable criticism to special education and segregated special schools in particular (Powell & Wagner 2001). For over thirty years in the U.S., blacks have had higher probabilities of classification in categories such as “mental retardation” and “emotional disturbance,” but not in “specific learning disabilities.” “Residential, social and school segregation is so profound, especially for blacks, that it often overrides middle-class advantages that some minority children may have” (Fischer *et al.* 1996: 196). Recent findings from the Harvard Civil Rights Project suggest that while “toxic social conditions” may indeed lead to higher impairment rates among children of some ethnic groups, a significant source of overrepresentation may instead result from inappropriate interpretation of cultural differences and biased classification processes and instruments (Oswald, Coutinho & Best 2002: 2). In any case, socio-demographic factors are clearly associated with classification rates and with disproportionality among ethnic groups, but not always in the same direction (e.g., Asian-Americans as a “model minority” or Scandinavians in Germany are clearly *under*represented in special education).

Children and grandchildren of large ethnic minority groups (“guestworkers”) who came to Germany mainly in the 1960s during the *Wirtschaftswunder*—Italians, Yugoslavians, Turks, Greeks, Portuguese and Spaniards—to work in Germany’s fast-growing industrial export economy face higher probabilities of transfer to special schools and *Hauptschulen* than native Germans. In 2001-02, while non-Germans in aggregate were proportionally represented in *Sonderschulen* in the support categories speech, illness, and social and emotional development, they were overrepresented in all others (Powell & Wagner 2002). Overall, non-Germans have 70 percent higher odds of attending a *Sonderschule*, and more than double the likelihood of attending a special school in the category “learning.” Among the factors suggested to be responsible for this troubling regularity are lacking language skills, early environmental risks, poverty rates, family structures, religious affiliation and discrimination—similar factors as are mentioned as explanatory variables in the U.S. case.⁶

⁶The concept of “educational risk” has undergone deep shifts since passage of the ESEA Act (1965) that addressed poverty, minority status and other individual/family characteristics toward concern about low expectations public school teachers held or hold. More recently, a whole plethora of factors has been defined, including: individual/family-level risk indicators such as poverty, Limited English Proficiency, race/ethnicity, parents’ educational attainment, single-parent families and school-level risk indicators, including school socio-demographic characteristics (poverty, class size, school size, urbanicity), school climate and culture, expectations, violence, school policies, tracking, special education, retention, discipline and suspensions/ expulsions (Land & Legters 2002: 1-28).

Summarizing these comparative findings, we more fully understand that special education represents children and youth at the nexus of multiple social differences, with many ascriptive attributes, including dis/ability, gender and ethnicity. But the effects of social, economic, and cultural disadvantages are evidently hardly separable from impairments and learning difficulties that are identified during children's school careers. Higher poverty rates and greater ethnic diversity, combined with the wide diffusion of special education programs in nearly every American school, lead to a higher proportion of students in U.S. special education than in Germany's segregated special schools. The organizational proximity, availability of special education and emphasis on early intervention also leads to American students being identified, referred and assessed as having a disability somewhat earlier than German students.

3.3 Learning Opportunity Structures

Despite a growing diversity of organizational forms in some German *Länder*, there is as yet no significant "continuum" as in the U.S., but rather the institutionally constituted either/or of special or general school. However, most students that are integrated then spend most if not all of their schooldays in the general classroom. Vertical differentiation has effectively blocked three decades of integration attempts through its rigid, segregative system of school types with continuous selection—all with the goal of building supposedly homogeneous student groups. The American model's comprehensive schools are outwardly democratic and egalitarian, but many schools continue to stratify within via tracking, also aiming to produce more homogeneous classes. Nevertheless, the comprehensive school allows flexibility in curricular planning and permeability in allocation to courses or tracks, the German structure does not (Figure 2),⁷ a key factor in their different thresholds.

Since the very beginning of German (special) education, the separation/integration debate forms a key discourse. The struggle between proponents and opponents of integration continues unabated. Over the 1980s and 1990s, growing criticism of Germany's highly differentiated special school system has led to calls for *Integrationspädagogik*, which accepts and values heterogeneity. Myriad forms of inclusive education are gradually developing: integrated classes (*Integrationsklassen*), individual integration (*Einzelintegration*), ambulant services, resource centers (*sonderpädagogische Förderzentren*) (Sander 1998: 54-65) and a host of other evolving concepts. These school reforms attempt to meet individual needs without segregation; however, they differ considerably in the amount of peer contact they provide and in the curricular goals they offer. The diverse forms of joint instruction (*gemeinsamer Unterricht*), most of which do enable classified children to take part in general classes all day, only reach an estimated one-tenth of all students in special education.⁸

American states' noncompliance with the laws mandating inclusion have led to repeated calls for internal school reform or even "restructuring," with a goal of reducing separation and maximizing the time students with SEN spend in the general classroom with their peers. Although conceived of in a variety of ways, "inclusive education" envisions teachers replacing the institutionalized separate schools and classrooms with diverse general classrooms in restructured schools. Where such programs have been effectively realized, students benefit from enhanced attention in well-supported classes with multiple educators collaborating and special education providing additional resources. The latter would provide flexible, part-time

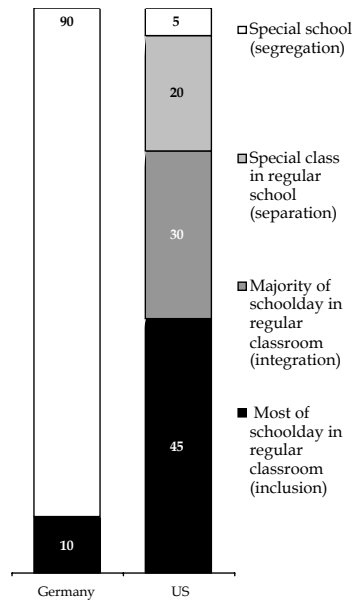
⁷The German comprehensive school (*Gesamtschule*) does not exist in all *Länder* and does not challenge the vertical differentiation (see Leschinsky & Mayer 1999). Japan provides an interesting contrast: there, innate abilities are believed to be significantly enhanced by intense effort, thus no tracking or separation of students occurs before age fifteen. Establishment of special schools (category: learning) were effectively opposed by the Burakumin Liberation League, an organization that promotes the interests of a group that for centuries was a pariah caste (Heidenheimer 1997: 96). Furthermore, Japan has no official category for "learning disability," and its educational system segregates about half as many students thus labeled in special schools as the U.S., one-quarter as many as Germany (cf. OECD 1995).

⁸Inclusion rates are exceedingly difficult to estimate, especially in these federalist countries. The American definition used here is the most basic, quantitative guideline: of time spent in the general classroom, without referring to the quality of teaching, curricula or peer interaction. In the even more tentative German aggregate statistics, it is very difficult to reconstruct which children and youth are schooled in which settings, given *Länder* bureaucrats and politicians' "self-promotion" interests and marketing strategies regarding official "integration" statistics (Cloerkes 2003: 11-23).

support services for students whose learning requires it, or offer segregated provision as necessary on an individual case-by-case basis.

To understand country-specific strategies and proposals for change, it is helpful to understand how these structures evolved. Since the mid-1980s, policy elites, nongovernmental organizations and interest groups at local, regional and national levels shifted the debate to a similar, ambitious goal, that of inclusive education. In both countries, attempts to realize this goal are significantly challenged, especially for secondary education. Beyond primary schooling, in which even children with low incidence or multiple disabilities can be and are included in general schools classrooms, academic achievement and behavioral performance grow in importance, schools identify more students as requiring special education.

Figure 2 Special Education Learning Opportunity Structures



Sources: Germany: Author’s estimate based on BMAS (1998—4 percent); KMK (2001c—11.6 percent), (2002b—14 percent), 2003—13 percent); U.S.: DoED (2001), author’s calculations. Notes: In some German *Länder*, there are “integration” developments as well, but these are marginal and similarly difficult to aggregate. In contrast to the KMK, the German Statistical Office has not yet included students with SEN in general schools (*Integrationschüler*) in its official statistical publications, e.g. *Bildung im Zahlenspiegel*. Since the validity and reliability of the German data have been questioned (e.g. Markowitz 2001: 200-205), these benchmarks must be interpreted with caution.

Germany’s Segregated Special Schools and Inclusion

Deleted: <sp>

By 1960, Germany had already established more than one thousand *Sonderschulen*; during the expansive 1960s the number of schools doubled. Responding to increased supply, the *Sonderschule* population doubled in the 1960s and again in the 1970s. Special schools were (re)constructed, extended, and differentiated, according to Conference of *Länder* Education Ministers (KMK) recommendations in 1960 and 1972, but reflecting suggestions by the Association of Special Schools (VDS) itself. The number of schools more than tripled by the late 1990s, peaking in 1999 at 3,422 schools. Since reunification, the new *Länder* have had the highest special school attendance rates. The prevailing structure of Germany’s provision of special education fails students in two ways: (1) many children in general schools do not receive the support they need, and (2) most children attending special schools are sent only after a “wait-to-fail” period of retention

of one to two years in which their learning difficulties often have not been fully addressed. A considerably at-risk group bears the brunt of stigmatization and school failure.

Teachers seem highly reluctant to send their students to special schools, preferring retention (historically, a legal prerequisite), at which point for many children it will already be too late to make up lost learning opportunities in the past. Because of lacking teacher training, and given the very few general schools that have special educators on staff, general educators may not receive sufficient theoretical or practical assistance to teach heterogeneous classes. Conversely, those that *are* sent become part of a negatively selected group in the special school system that suffers all the more stigma and low expectations as they attend schools that serve only students similarly classified and often with similar learning, language or behavioral problems. This not only magnifies the challenges faced by special schoolteachers (despite the much smaller classes), but also takes away positive peer role models and may segregate students from school and neighborhood friends. Special school attendance is generally seen as “without perspective” (*aussichtslos*) for good reason, especially given the current dearth of vocational training opportunities for even those youth who do attain the lowest general education certificate (*Hauptschulabschluss*).

Types of Tracking in US Comprehensive Schools

In the U.S., nearly all students in special education attend their local (not necessarily neighborhood) public school. Similar to the German development, in 1948 only 15 percent of disabled children in America were estimated to be attending public schools, while special classes existed for those students whom teachers could not effectively teach in the general classroom. By 1966, one-third of the estimated “exceptional” children were schooled, 3-4 percent of whom were segregated in publicly operated institutions (6 percent counting segregated private residential settings). “By 1977, over 90 percent of all special education students attended general schools, and two-thirds received most of their instruction in general classes” (Singer & Butler 1992: 169), representing a remarkable increase in public school systems that had special education programs. However, because of the multitude of course schedules and individualized education plans in special education, class sizes and time spent in each environment is difficult to calculate. As in German special schools, where the student-teacher-ratio (STR) has stayed between six and seven for the past four decades, American special schools have a much smaller student-teacher ratio overall: the 6.7 STR in 1987 had risen slightly to 7.2 by 1999 (Powell 2004: Ch. 8).

Structurally, the four to six years of primary school for all children, and the integrated comprehensive schools with integration classes or some forms of individual integration offering inclusive education in Germany, are analogous to the organizational patterns of inclusion within general schools in the U.S. The attempts of several *Länder* to establish cooperation (*Kooperation*) and external classes (*Aussenklassen*) instead reflect the American setting of “resource rooms” in which special education students spend most of their day separated from their peers, but do attend a general school. The plethora of settings in Germany reflect *Länder*-specific attempts to provide integrative and inclusive education to parents and students who demand it, as in the U.S. with its continuum of settings. The major difference remains the default or automatic setting offered due to historical developments of Germany’s inter-school segregation and the U.S.’s intra-school separation.

In Germany, retention (and delayed school entry) is a more significant mechanism than special education, unlike in the U.S., where the two are often utilized in conjunction (see Entwisle, Alexander & Olson 1997; Alexander, Entwisle & Dauber 2003). Teacher beliefs and training and organizational solutions to heterogeneous student bodies interact. Teachers’ political and ethical values affect their teaching, but these are infrequently critically reflected or theoretically justified (see e.g. Gehrman 2000: 85-96). To discover why inclusive education differs from classroom to classroom, school to school and locality to locality, requires not only research into demographic and structural constraints, but also the ideological commitments and perspectives of teachers, gatekeepers and parents.

National differences have increasingly been examined in the context of internationally comparative studies of student achievement. The growing importance of educational attainment has made schools and

teachers more accountable for that difficult-to-measure output of their work. Special education's growth—and its students' disparate participation rates, domestically and internationally, in large-scale assessments—demonstrate its function as a “safety valve” for educators and schools (Sapon-Shevin 1989: 92f.). In both the U.S.'s National Assessment of Educational Progress (NAEP) and the OECD's Program of International Student Assessment (PISA), nations, states and localities have highly variable rates of including students classified as disabled in such assessments.⁹ Such “exclusions” problematize comparisons of student performance at highly aggregated levels, but they also indicate that nations' and regions' educational systems differ greatly not only in their integration and inclusive ideologies, but in organizational structures and also in curricula, teaching methods and everyday gatekeeping practices (see Below 2002 for a comprehensive treatment of such regional differences in Germany). Findings on special education students' educational attainment indicate the effects of such institutional conditions on output.

3.4 Educational Attainment

Although the group of less educated individuals in both countries has contracted considerably—by 1998, the proportion of the population aged 25-64 who had completed upper secondary education in both Germany and the U.S. exceeded 80 percent (OECD 2000a: 26)—these educational systems produce graduates with an “absolute wealth of competencies” and school-leavers without any certificates—the educationally impoverished (Allmendinger & Leibfried 2002: 304). Germany's stratified and selective educational system differentiates children after a short primary schooling into separate schools. As the *Hauptschulabschluss* has become ubiquitous, the group of youth without certification faces increasing difficulties. The inadequacy of the lowest-level school types to provide their students with certificates (and competencies) has left both the *Sonderschule* and the *Hauptschule* in a serious “crisis of legitimacy” (Preuss-Lausitz 1981: 11; Solga & Wagner 2001). School-leavers without a *Hauptschulabschluss* represent a residual category of shrinking proportions, but of increasing societal concern due to their lack of vocational training and employment prospects (Alfeld & Schnabel 2002; Solga 2003).

Especially the German *Hauptschulabschluss* and the American high school certificate (where offered) have declined in value with educational expansion. Indeed, even higher general education certificates are increasingly being taken for granted, and they have become a necessary, but not sufficient, condition for gaining access to further education or even most low-paying jobs. Solga (2002, 2003b) has demonstrated how educational expansion paradoxically led to the increasing exclusion of less-educated youth, whose group size has declined, from vocational training and from many occupations. Increasingly, the *mittlere Reife* (intermediate-level certificate) replaces the lower *Hauptschulabschluss* as the minimum accepted formal certificate of general education to access many occupations. German special school leavers make up two-fifths of youth who do not attain even the lowest qualified certificate, without which their vocational training opportunities and hence labor-market chances are extremely limited. Similarly, American special education students were more likely to drop out, less likely to complete a general equivalency diploma (GED) later on, and less likely to participate in postsecondary education or have paid employment—and, if so, these jobs were more likely to be low-status and/or part-time (Marder & D'Amico 1992: 47f.; NLTS 2003). In both Germany and the United States, students who have participated in special education, given their low educational attainment rates, continue to face bleak labor market conditions. Even today, despite the access they have won to educational systems, school-leavers from special education represent a growing proportion of America's “working poor” and Germany's long-term unemployed and social assistance receivers (cf. Daly 1997: 115), as the advantage of reduced exclusion and increased attainment is annulled by credential inflation (Collins 1979).

On the one hand, special education students in both countries receive specialized, professional services and are educated in smaller classes. On the other hand, these students have lower educational attainment,

⁹Yet special education students are often excluded from research on ability grouping and from international school performance comparisons, such as the PISA study of fifteen-year-olds' reading and mathematics competencies. Indeed, “the important question of how the educational system deals with equality and difference among disabled persons can only be answered by specific studies, even if PISA can function as a reference point” (Baumert & Schümer 2001: 325, translation JP).

which has been associated with lessened opportunities to learn, lowered expectations and reduced motivation and self-efficacy or esteem due to stigmatization. Four-fifths of those youth leaving Germany’s segregated special schools do not even attain a *Hauptschulabschluss* (Table 3). By contrast, nearly half of American special education exiters graduate from high school with a regular diploma, the credential necessary (but not sufficient) for entry to postsecondary education and most entry-level jobs. Furthermore, the American rate of students exiting without any certificate is one-third the German rate. Next, we turn to the educational trajectories of special education students.

Table 3 Attainment of Students in German & U.S. Special Education

<i>Comparative Indicator</i>	Germany	U.S.A.
<i>Attainment: Certificates</i> (1999-2000 School Year)	School-leavers from special schools attain: 0.1 % <i>Abitur</i> 1.9 % <i>Realschulabschluss</i> 20 % <i>Hauptschulabschluss</i> 78 % no certificate (dropout & age out)	Exiters from special education programs attain: 45 % high school diploma 9 % high school certificate 20 % mobility (return to general education) 26 % no diploma or certificate (dropouts + age outs)

Sources: Author’s calculations based on KMK (2002b); US DoED (2001).

Note: U.S. % all exiters ages 14+ without moved, died, known to continue elsewhere, unknown. These attainment figures are conservative given that a fifth of students return to general education.

Return to General Education

The “return to general education” indicator measures the permeability in the special educational system and the opportunities to access general curricula, but also the (re)evaluation of special educational needs or student disability status. Once transferred to a special school, German students’ educational pathways are likely to remain in such “special” institutions. With the exception of those in the support category “speech,” less than 5 percent of special school students return to general schools in Germany, mainly due to the curricular differences and rigid plans for each school type (Preuss-Lausitz 2001: 211). Given the continuum of educational settings that most American schools provide in their systems of curricular differentiation, the structural conditions for return to general education (track mobility) would seem to be very good for the 95 percent of students in special education who remain within the general school building. Indeed, compared with Germany’s differentiation by school type, the U.S. has a highly permeable system that responds to individual differences (Roeder 2001: 211).

However, analyses indicate that, despite the greater possibilities of returning to full-time general education, fewer than one-tenth of American students no longer required or received an individualized education plan (IEP) in any given year (Powell 2004: Ch. 8). Thus, while remaining in the general school building is positively associated with certification, it does not often lead to “declassification” or to the termination of special education services. Arguably, the necessity of return to general education in the U.S. is less pressing, because attainment is much more likely and students’ social relations can be maintained within the same school building. For some, a return to general education full-time may not be preferable if it would mean receiving fewer resources and leaving friends in their smaller special education classes behind. The stigma of having been in special education may well remain, on certificates and in motivation to learn. By contrast, inclusive education proponents suggest that special education services be universalized within general classrooms, offered on an immediate, ad hoc basis without the formal procedures and labeling that are sources of stigmatization. In such programs, individuals are not socially penalized for receiving additional assistance; indeed, these resources are often distributed on a classroom basis, thus benefiting all

students. For educational attainment, this has important benefits beyond curricular and peer access, but also in terms of certificates and their signals.

Especially in Germany, inclusive education aims to remove the reliance on segregated special schools. But a further step is necessary: to allow students to access a range of curricular options, and to no longer be subject to special school curricular plans, which in many *Länder* constrain eligibility for mid- to high-level certification. In contrast, the American high school diploma is the uniform standard for access to post-secondary schooling, allowing and encouraging special education students to strive to attain it. Since half of all American high school graduates go on to some form of college, the final selection for adult status positions is, at least officially, deferred to postsecondary institutions. A student's school record, directly affected by tracking within schools, is the most important consideration alongside the psychometric tests, such as the SAT or ACT, required for college applications. Since graduates are much more likely to attend a two-year or less prestigious four-year institution, their lower status within the educational system is maintained.

In both countries, as meritocratic selection processes are the only legitimate ones to promote students, they are also the only legitimate ones to retain students, or to place them in special education. Once in special education, students' curricular options are reduced and expectations may also decline. The group of students in Germany's special schools is much more selective, with even fewer chances of a return to general schools within the stratified system that sorts students very earlier in their careers, at grade six or earlier.

Dropout & Age out

High school dropouts (U.S.) or school-leavers without a *Hauptschulabschluss* in Germany represent an ever smaller residual category that faces serious risks of not completing vocational training or post-secondary education and the resulting poor employment prospects. In part, these limitations on educational attainment are legal and policy-driven constraints. Many German *Länder* and U.S. states simply do not offer special education students the curricular conditions necessary to complete any type of qualified certification, even if their special education services would not limit their taking part in academic or vocational courses.

Emphasizing the structural differences between the two educational systems in terms of stratification, dropout rates of special education students in the U.S. are less than one-third as high as in Germany (see Table 3). Not only the greater (negative) selectivity of the German special school population, but also the belief among American students within their comprehensive school that the high school diploma or certificate is within reach plausibly results in higher expectations for themselves (and among their teachers, parents and classmates). In contrast to Germany's rigidly structured school systems, the American comprehensive school makes far greater curricular flexibility and mobility possible, effectively postponing the judgment of a student's future opportunities to the transition to further education or employment.

An important rationale for American youth with IEPs to remain in school longer—to “age out” at around age twenty-one—is clearly related to the provision of services in school. For individuals and families, this extended institutionalization offers at least a short-term solution to the difficulties of a transition from school to work. Although IEPs should now include a “transition plan,” this aspect of already overburdened teachers' work remains mostly rhetorical. (It is unlikely that intensive transition planning will be possible for 12 percent of all students.) For those students who do not drop out, special education participation delays entry into a low-wage, low-skill labor market. By contrast, being enrolled in a German school is no prerequisite for receiving social services. If students are officially classified disabled and thus eligible independent of student status, they may have little incentive to remain in school. In other words, the U.S. invests in services for students to enable their attainment but makes their participation in certain tracks difficult by offering those services during class times. Germany does not often provide services in general schools and these are the domain of social policy, and thus are not incentives for gatekeepers to retain students in general schools or for them to stay in school longer than required. Conversely, integrated students

in Germany who have access to social services on the basis of official classification but need no assistance during school hours may well not identify themselves as or be considered “disabled.”

Vocational Training and Post-secondary Education

Since four-fifths of German special school leavers do not receive a *Hauptschulabschluss*, they are likely to remain in a holding pattern (“cooling-out”) in state-sponsored, school-based vocational training measures. Given the traditional importance of Germany’s dual system of general and vocational training (which other nations often attempt to emulate), we might expect this combination of school and practical training also to be offered to graduates of special schools. However, with the exception of *Berufsbildungswerke* (special vocational training sites) and “sheltered workshops,” most students remain in or return to a school setting. Since few school-leavers without certificates (*Hauptschule* level) are able to secure a dual system training opportunity, school-leavers from special schools face even greater difficulties at this transition to vocational training. After a special school career, it is exceedingly difficult to compensate the student’s lack of self-esteem and/or unrealistic expectations (cf. Pfahl 2003). Although vocational training plays a lesser role in the U.S. than it does in Germany, longitudinal data from the United States indicate that the more vocational training disabled youth had received in high school, the more likely they were to succeed in finding paid work (Wagner *et al.* 1993). The specificity of training as well as the lack of alternatives affects the importance of vocational training for students with SEN. If vocational training can simultaneously “provide a safety net and be a mechanism of social exclusion” (Shavit & Müller 2000: 449), it remains to be investigated how much of a net vocational training can truly provide. Currently, in both countries such programs reach only a small minority of students with SEN.

In the U.S., more than half of all special education exiters each year graduate with a high school diploma or certificate. And while disabled students there are increasingly likely to go on to higher education, more often than their nondisabled peers they attend a two-year junior or community college (on that important, understudied sector of American post-secondary education, see Brint & Karabel 1989). There, students may attain an Associate’s degree before going on to a four-year college or university. Although only suggestive, studies do indicate that the barrier of not having the necessary certificate for post-secondary education does impact German special school leavers more than American special education graduates. Whereas more than 9 percent of first-year students in American postsecondary education institutions self-reported being disabled in 2000 (NSF 2003), in Germany the *Studentenwerk*’s Fourteenth Social Survey registered only 2.3 percent of students as disabled (BMAS 1998: 47), reflecting the 0-100 percent grading of being disabled as well as the priority given to those “50 percent disabled or more” (*Schwerbehinderte*). Aside from individual-level differences in dis/abilities, efforts and aspirations, comparing Germany and the U.S. manifests the importance of opportunity structures, not only for learning, but also for attaining credentials necessary for employment, further study or even to access basic vocational training needed to secure work in low-status occupations. Because low education is also strongly associated with less occupational success and thus with lower income, and conversely less wealth with more impairment, the failure to effectively compensate for these material, cognitive and physical disadvantages early in life results in a “confluence of health and social trajectories” (cf. Vågerö & Illsley 1995).

4. Discussion

Special education organizations in both societies have dealt with a population of students continuously changing in size and composition, but representing especially poor boys, children belonging to ethnic, migrant or linguistic minority groups, and increasingly integrated children with perceived impairments. It is these diverse student bodies—among the last to be fully recognized as citizens—that most challenge rationalized, standardized organizational structures of German and American (special) educational systems. Differentiated school structures, bureaucratic divisions and the interests of professional gatekeepers resist the reform and restructuring of the existing segregating (Germany) or separating (U.S.) special education systems necessary to successfully realize inclusive education. They do this by relying on the legitimated institutional logics of each national education system, which reflect fundamental societal values and educational

ideologies as they frame the interests that have successfully fought for special education's diffusion and differentiation.

Over the twentieth century, special education expanded, especially as educational exclusion was eliminated. But ever more complex organizations, developed by the nascent discipline of special education, were embedded into existing educational institutions, in a subsidiary relationship—whether in the same school system or building. No matter what their structure, special education programs provide functional “relief” from school failure for general teachers. Yet the variance shown here demonstrates that political conflicts (not general consensus) and professional choices (not widespread certainty) are responsible for the distribution of opportunities to the diverse group of special education students. Especially the nationally and regionally variant “classification thresholds” (Powell 2003b) emphasize the need for continuous dialogue about the understandings of complex individual and institutional interactions leading to official disability status. Yet ambivalence about special education will be sustained due to its substantial costs and questioned benefits, especially as qualification levels continue to rise.

In Germany, the short duration of inclusive primary school and highly stratified secondary school types provided the model for special educators to successfully lobby for, establish and legitimate a *special* school system. Fully developed, this system of over ten segregated school types simultaneously served a highly selective, relatively small group of students and hindered general schools from providing special education services more flexibly, in a preventive manner. Guarding the logic of early selection and “appropriate support” of the German educational system, many *Länder* education ministries have successfully resisted parental demands for widespread adoption of inclusive education. Yet these have been continuously scientifically monitored and evaluated (the majority positively) since the early 1980s. School laws as well as fiscal and administrative considerations are persistent barriers to parents' and advocates' struggles for inclusion. The dominant individual-deficit paradigm of disability has been countered with pedagogical categories of support as well as constitutional anti-discrimination protections over the past decade, but most students classified disabled still are segregated. Thus, each cohort of students learns that homogeneous groupings are preferable and that status accrues to those who have the resources and innate abilities to perform well early in their school careers. The stigma of segregated special schooling is reproduced.

Disabled Americans, acting as a minority group based on the successful model of the women's and civil rights movements, had already won extensive rights and anti-discrimination protection by the mid-1970s. Growing to include all disabled children, compulsory primary and secondary schooling was truly universalized by the 1980s. From the beginning, American advocates for school integration benefited from the comprehensive school system's integrative organization and function, but also from the focus on individual participatory rights. The primacy of parental choice, substantial independence from cost considerations (if mainly from the threat of due process litigation), and lessened stigma contributed to the largely unanticipated continuous expansion of special education. Thoroughly embedded in the bureaucratic administration and day-to-day operations of nearly every American school, special education programs grew unfettered over the twentieth century. Yet ambivalence about special education is exemplified in continuing disciplinary conflicts, in federal and state legislation and litigation and in local struggles. What constitutes a “free appropriate public education” remains highly contested. Inclusive education advocates seek to go a significant step further: to teach all children together, no matter what their dis/advantages and currently defined dis/abilities.

Special education's variable institutionalization more accurately reflects patterns of authority and regulation, of decision-making structures, and of vested interests of (special) educators, psychologists and physicians who certify student disabilities than it reveals pedagogically relevant characteristics of individual students classified and allocated to disparate special education settings. Holding special education accountable would require recognition of persistent separation, segregation, and stigmatization of children and youth who more often than not are already among the disadvantaged. However, the resulting additional disadvantages in learning opportunities, educational attainments and life chances are something neither society, despite egalitarian rhetoric, has been eager to confront. Multiple efforts over the past three decades to

address and reduce the overrepresentation of male students, ethnic minorities, and poor children and youth in special educational programs have largely failed, as these three groups remain the core clients of special educational services and support. Whereas American special education is a tool to realize equality of educational opportunity, Germany's educational policies are overshadowed by social policies in state attempts to compensate for disadvantages. Yet German debates about quality of (special) education and about the organizational settings in which children and youth with special educational needs should be educated mirror American discourses (Benkmann 1994). Building on the successes of other civil rights movements of the 1960s and 1970s, the American disability rights movement and parents of children with disabilities achieved passage of anti-discrimination and school integration legislation, which shifted from intents to mandates. In Germany, disability activists and parental groups have also fought for such policies since the 1980s, successfully mainly over the past decade. However, given the regionally variable institutionalization of special education and considerable inertia in educational systems as a whole, change has been much more gradual in Germany than in the United States.

Despite significant changes and differences between and within these societies in the ways in which groups of disabled students are socially defined, sorted into educational programs, and to which degree they are segregated or integrated into general school systems, inequalities in learning opportunities persist. In the U.S.—with mainly comprehensive public schools in which most students attend neighborhood schools—increasing proportions of students are spending time in special but also in inclusive education. In Germany—with its hierarchically differentiated and highly specialized educational system—more children are being segregated in special schools, despite increases in inclusive education offered mainly in general primary schools. Officially classified student “abnormality” is becoming increasingly “normal.” A major challenge to special and inclusive education alike is that people are *not* unified about which is more desirable. There is no consensus in public discourse, among academic disciplines or in educational and social policies, and ideologies of ab/normality, integration, meritocracy and equality require interpretation in local contexts to draw the categorical boundaries that guide individual actors to make these often difficult choices.

In this paper, I could only sketch the impact of particular institutional arrangements in schooling longitudinally and show the consequences of often contradictory national (special) education policies as they affect the educational experiences and attainments of students classified disabled. Like the federal, decentralized political structures that enact policies requiring lower-level implementation, the strength of these societal values also varies considerably by region and social group. Institutional inertia and organizational loose coupling constrain the opportunities for reform. Not only in Germany does the persistence of special education interests and the legitimated special school system pose a considerable challenge to the restructuring of schools to be inclusive.

International and national conventions and organizations including the UN, the EU, and the OECD support inclusive education programs as the next step in the project of schooling for all, of access to learning opportunities and educational outputs. Thus far, neither in Germany nor the United States have national, regional or local calls for inclusive education been realized to the degree hoped for by advocacy groups, made up mostly of parents of disabled children and the disability movement—despite educational integration and anti-discrimination recommendations and legislation in both countries. Even as national path-dependent developments and inertia in educational systems have hindered efforts to implement reforms of special education institutions, inclusive education remains a goal close to the ideal of egalitarian meritocracies, as it promises to more fully utilize the diversity of interests and abilities found among all groups of children to develop each individual's intellectual and social competencies. In education societies, the value of schooling has continuously increased. Even youth “with special educational needs,” whose training and employment opportunities are seriously limited in both countries, partake in ever longer school careers on the path to certified adult citizenship, if not salable competencies. Individual investment in one's own abilities and certificates is becoming ever more crucial. Thus, if we wish to understand what it means to be “less educated” in contemporary education societies, increasingly we will have to ask who has “special educa-

tional needs” as well as why and how special and inclusive educational systems provide them such differential opportunities for learning.

References

- Albrecht, Gary L., Katharine D. Seelman, and Michael Bury, eds. (2001). *Handbook of Disability Studies*. Thousand Oaks CA: Sage.
- Alexander, Karl L., Doris R. Entwisle, and Susan L. Dauber (2003). *On the Success of Failure. A Reassessment of the Effects of Retention in the Primary Grades*. Cambridge: Cambridge University Press.
- Alfeld, Corinne and Kai U. Schnabel (2002). “Parental Influence on Students’ Educational Choices in the United States and Germany: Different Ramifications—Same Effect?” *Journal of Vocational Behavior* 60: 178-198.
- Allmendinger, Jutta and Stephan Leibfried (2002). “Bildungsarmut im Sozialstaat.” G. Burkart & J. Wolf, eds. *Lebenszeiten: Erkundungen zur Soziologie der Generationen*. Opladen: Leske & Budrich, pp. 287-315.
- Altman, Barbara M (2001). “Disability Definitions, Models, Classification Schemes, and Applications.” G.L. Albrecht, K.D. Seelman, and M. Bury, pp. 97-122.
- Barrett, Deborah and Charles Kurzman (2004). “Globalizing Social Movement Theory: The Case of Eugenics,” *Theory and Society* 33,5: 487-527.
- Barton, Len and Felicity Armstrong (2001). “Disability, Education, and Inclusion: Cross-Cultural Issues and Dilemmas.” G.L. Albrecht, K.D. Seelman, and M. Bury, eds. *Handbook of Disability Studies*. Thousand Oaks CA: Sage, pp. 693-710.
- Baumert, Jürgen and Gundel Schümer (2001). “Familiäre Lebensverhältnisse, Bildungsbeteiligung und Kompetenzerwerb.” Deutsches PISA-Konsortium, ed. *PISA 2000: Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich*. Opladen: Leske & Budrich, pp. 323-407.
- Becker, Howard S. (1963). *Outsiders. Studies in the Sociology of Deviance*. New York: Free Press.
- Begemann, Ernst (1970). *Die Erziehung der sozio-kulturell benachteiligten Schüler*. Hannover: Schroedel.
- Below, Susanne von (2002). *Bildungssysteme und soziale Ungleichheit: Das Beispiel der neuen Bundesländer*. Opladen: Leske & Budrich.
- Benkman, Rainer (1994). “Dekategorisierung und Heterogenität—Aktuelle Probleme schulischer Integration von Kindern mit Lernschwierigkeiten in den Vereinigten Staaten und der Bundesrepublik Deutschland,” *Sonderpädagogik* 24,1: 4-13.
- BMAS (1998). “Die Lage der Behinderten und die Entwicklung der Rehabilitation. Vierter Bericht der Bundesregierung.” Berlin: Bundesministerium für Arbeit und Sozialordnung.
- BMBF (2001). *Grund- und Strukturdaten 1999/2000*. Bonn: Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie.
- Braddock, David L. and Susan L. Parish (2001). “An Institutional History of Disability.” G.L. Albrecht, K.D. Seelman, and M. Bury, eds. *Handbook of Disability Studies*. Thousand Oaks CA: Sage, pp. 11-68.
- Brint, Steven and Jerome Karabel (1989). *The Diverted Dream. Community Colleges and the Promise of Educational Opportunity in America, 1900-1985*. New York: Oxford University Press.
- Carrier, James G. (1984). “Comparative Special Education: Ideology, Differentiation and Allocation in England and the United States.” L. Barton and S. Tomlinson, eds. *Special Education and Social Interests*. London: Croom Helm, pp. 35-64.
- Cicourel, Aaron V. and John I. Kitsuse (1963). *The Educational Decision-Makers*. Indianapolis: Bobbs-Merrill.
- Cloerkes, Günther ({1997} 2001). *Soziologie der Behinderten: eine Einführung (unter Mitwirkung von Reinhard Markowetz)*. 2. erweiterte Auflage. Heidelberg: Universitätsverlag Winter.
- Cloerkes, Günther, ed. (2003). *Wie man behindert wird. Texte zur Konstruktion einer sozialen Rolle und zur Lebenssituation betroffener Menschen*. Heidelberg: Universitätsverlag Winter.
- Collins, Randall (1979). *The Credential Society: An Historical Sociology of Education and Stratification*. New York: Academic Press.
- Cortina, Kai S. et al., eds. (2003). *Das Bildungswesen in der Bundesrepublik Deutschland: Strukturen und Entwicklungen im Überblick*. Reinbek: Rowohlt.

- Daly, Mary C. (1997). "Who is Protected by the ADA? Evidence from the German Experience," *Annals of the American Academy of Political and Social Science* 549 (January): 101-116.
- DoED (1997). "Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act." Washington DC: U.S. Department of Education.
- DoED (2000). "Twenty-Second Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act." Washington DC: U.S. Department of Education.
- DoED (2001). "Twenty-Third Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act." Washington DC: U.S. Department of Education.
- Drewek, Peter (2002). "Bildung und Erziehung im deutsch-amerikanischen Vergleich." M. Caruso and H.-E. Tenorth, eds. *Internationalisierung: Semantik und Bildungssystem in vergleichender Perspektive*. Frankfurt a.M.: Peter Lang, 185-209.
- EADSNE (1998). "Integration in Europe: Provision for Pupils with Special Educational Needs. Trends in 14 European Countries." Middelfart: European Agency for Development in Special Needs Education.
- EADSNE (2003). "Special Needs Education in Europe." Middelfart, DK: European Agency for Development in Special Needs Education.
- Eder, Donna (1981). "Ability Grouping as a Self-Fulfilling Prophecy: A Micro-Analysis of Teacher-Student Interaction," *Sociology of Education* 54,3: 151-162.
- Entwisle, Doris R., Karl L. Alexander, and Linda Steffel Olson (1997). *Children, Schools, and Inequality*. Boulder CO: Westview Press.
- Eurydice (2000). *Schlüsseldaten zum Bildungswesen in Europa 1999/2000*. Brussels: European Commission.
- Eurydice (2002). *Key Data on Education in Europe 2002*. Brussels: European Commission.
- Evans, Peter *et al.* (2002). "Social Exclusion and Students with Special Educational Needs," *OECD/CERI Papers*. Paris: OECD.
- Fischer, Claude S. *et al.* (1996). *Inequality by Design. Cracking the Bell Curve Myth*. Princeton: Princeton University Press.
- Friedland, Roger and Robert R. Alford (1991). "Bringing Society Back In: Symbols, Practices, and Institutional Contradictions." W.W. Powell and P.J. DiMaggio, eds. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago, pp. 232-263.
- Goldschmidt, Dietrich (1991). *Die gesellschaftliche Herausforderung der Universität. Historische Analysen, internationale Vergleiche, globale Perspektiven*. Weinheim: Deutscher Studien Verlag.
- Gomolla, Mechthild and Frank-Olaf Radtke (2002). *Institutionelle Diskriminierung: Die Herstellung ethnischer Differenz in der Schule*. Opladen: Leske & Budrich.
- Hallinan, Maureen T. ed. *The Handbook of the Sociology of Education*. New York: Kluwer Academic/Plenum.
- Heidenheimer, Arnold J. (1997). *Disparate Ladders. Why School Policies Differ in Germany, Japan, and Switzerland*. New Brunswick NJ: Transaction Publishers.
- Heimlich, Ulrich (1999). "Subsidiarität sonderpädagogischer Förderung — Organisatorische Innovationsprobleme auf dem Weg zur Integration." U. Heimlich, ed. *Sonderpädagogische Fördersysteme: Auf dem Weg zur Integration*. Stuttgart: Kohlhammer, pp. 13-32.
- Hofsäss, Thomas Reinhold (1993). *Die Überweisung von Schülern auf die Hilfsschule und die Schule für Lernbehinderte: Eine historisch-vergleichende Untersuchung*. Berlin: Edition Marhold.
- Johnson, Harriet McBryde (2003). "The Disability Gulag." *The New York Times Magazine*, 23 Nov. 2003.
- KMK (1960). "Gutachten zur Ordnung des Sonderschulwesens." Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland.
- KMK (1972). "Empfehlung zur Ordnung des Sonderschulwesens." Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland.
- KMK (1994). "Empfehlungen zur sonderpädagogischen Förderung in den Schulen der Bundesrepublik Deutschland." Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland.
- KMK (2001c). "Sonderpädagogische Förderung in Schulen 1990 bis 1999 (Dokumentation Nr. 153)." Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland.

- KMK (2002a). "Schule in Deutschland. Zahlen, Fakten, Analysen (Dokumentation Nr. 161)." Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland.
- KMK (2002b). "Sonderpädagogische Förderung in Schulen 1991 bis 2000 (Dokumentation Nr. 159)." Bonn: Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland.
- Krappmann, Lothar, Achim Leschinsky, and Justin Powell (2003). "Kinder, die besonderer pädagogischer Förderung bedürfen." K.S. Cortina *et al.*, eds., pp. 755-786.
- Land, Deborah and Nettie Legters (2002). "The Extent and Consequences of Risk in U.S. Education." S. Stringfield and D. Land, eds. *Educating At-Risk Students*. Vol. 101. Chicago: National Society for the Study of Education, pp. 1-28.
- Losen, Daniel J. and Gary Orfield, eds. (2002). *Racial Inequality in Special Education*. Cambridge MA: Harvard Education Press.
- Lucas, Samuel Roundfield (1999). *Tracking Inequality: Stratification and Mobility in American High Schools*. New York: Teacher's College Press.
- Lundgreen, Peter (2003). "'Bildungspolitik' und 'Eigendynamik' in den Wachstumsschüben des deutschen Bildungssystems seit dem 19. Jahrhundert," *Zeitschrift für Pädagogik* 49,1: 34-46.
- Mackie, Romaine (1969). *Special Education in the United States: Statistics 1948-1966*. New York: Teacher's College Press.
- Maennel, Bruno (1907). *The Auxiliary Schools of Germany*. Washington DC: Department of the Interior, Bureau of Education/Government Printing Office.
- Marder, Camille and Ronald D'Amico (1992). "How Well Are Youth with Disabilities Really Doing? A Comparison of Youth with Disabilities and Youth in General. A Report from the National Longitudinal Transition Study of Special Education Students." Menlo Park CA: SRI.
- Mayer, Karl Ulrich (2001). "The Paradox of Global Social Change and National Path Dependencies." A. Woodward & M. Kohli, eds. *Inclusions and Exclusions in European Societies*. New York: Routledge, pp. 89-110.
- Mayer, Karl Ulrich and Walter Müller (1986). "The State and the Structure of the Life Course." A. B. Sørensen, F.E. Weinert, and L.R. Sherrod, eds. *Human Development and the Life Course: Multidisciplinary Perspectives*. Hillsdale NJ: Lawrence Erlbaum Associates, pp. 217-246.
- Mehan, Hugh, Alma Hertweck, and J. Lee Meihls (1986). *Handicapping the Handicapped: Decision Making in Students' Educational Careers*. Stanford CA: Stanford University Press.
- Meyer, John W. (1992). "Innovation and Knowledge Use in American Education." J.W. Meyer and W.R. Scott, eds. *Organizational Environments. Ritual and Rationality*. Newbury Park CA: Sage, pp. 233-260.
- Myschker, Norbert (1969). *Der Verband der Hilfsschulen Deutschlands und seine Bedeutung für das deutsche Sonderschulwesen*. 8. Beiheft der Zeitschrift für Heilpädagogik, Nienburg: Reißmeyer.
- NCES (1996). 120 Years of Historical Statistics. Washington DC: U.S. Department of Education, National Center for Education Statistics.
- NCES (1996). "Education Indicators: An International Perspective." Washington DC: U.S. Department of Education, National Center for Education Statistics.
- NCES (2001). "Common Core of Data." Washington DC: U.S. Department of Education, National Center for Education Statistics.
- NLTS (2003). *National Longitudinal Transition Study II*. SRI International (www.sri.com/nlts).
- OECD (1995). *Integrating Students with Special Needs into Mainstream Schools*. Paris.
- OECD (1999). *Inclusive Education at Work. Students with Disabilities in Mainstream Schools*. Paris.
- OECD (2000a). *Special Needs Education. Statistics and Indicators*. Paris.
- OECD (2000b). *Education at a Glance: OECD Indicators*. Paris.
- OECD (2002). *Education at a Glance: OECD Indicators*. Paris.
- OECD (2003). *Transforming Disability into Ability. Policies to Promote Work and Income Security for Disabled People*. Paris.
- OECD (2004). *Equity in Education. Students with Disabilities, Learning Difficulties and Disadvantages*. Paris.
- Oswald, Donald P., Martha Coutinho, and Al M. Best (2002). "Community and School Predictors of Overrepresentation of Minority Children in Special Education." D. Losen & G. Orfield, eds., pp. 1-37.

- Pfahl, Lisa (2003). "Stigma-Management im Job-coaching." Dipl.-Soz. Thesis, Institut für Soziologie, Freie Universität Berlin.
- Powell, Justin J.W. (2003a). "Constructing Disability and Social Inequality Early in the Life Course: The Case of Special Education in Germany and the United States," *Disability Studies Quarterly* 23,2: 57-75.
- Powell, Justin J.W. (2003b). "Hochbegabt, behindert oder normal? Klassifikationssysteme des sonderpädagogischen Förderbedarfs in Deutschland und den Vereinigten Staaten." In: Cloerkes, pp. 103-140.
- Powell, Justin J.W. (2004). *Barriers to Inclusion: The Institutionalization of Special Education in Germany and the United States*. Dissertation, Institut für Soziologie, Freie Universität Berlin.
- Powell, Justin J.W. (in press). Entry: "Special Needs," *International Encyclopedia of Social Policy*. London: Routledge.
- Powell, Justin J.W. and Sandra Wagner (2001). "Daten und Fakten zu Migrantenjugendlichen an Sonderschulen in der Bundesrepublik Deutschland," *Independent Research Group Working Paper, Max-Planck-Institut für Bildungsforschung, Berlin* 2001, 1.
- Powell, Justin J.W. and Sandra J. Wagner (2002). "Zur Entwicklung der Überrepräsentanz von Migrantenjugendlichen an Sonderschulen in der Bundesrepublik Deutschland seit 1991," *Gemeinsam Leben, Zeitschrift für Integrative Erziehung* 10,2: 66-71.
- Preuss-Lausitz, Ulf (1981). *Fördern ohne Sonderschule: Konzepte und Erfahrungen zur integrativen Förderung in der Regelschule*. Weinheim: Beltz.
- Preuss-Lausitz, Ulf (2001). "Gemeinsamer Unterricht Behinderter und Nichtbehinderter, Ein Weg für Sonderpädagogik und allgemeine Schulpädagogik zu einer gemeinsamen integrativen Pädagogik," *Zeitschrift für Erziehungswissenschaft* 4,2: 209-224.
- Ramirez, Francisco O. and Richard Rubinson (1979). "Creating Members: The Political Incorporation and Expansion of Public Education." J.W. Meyer and M.T. Hannan, eds. *National Development and the World System: Educational, Economic, and Political Change, 1950-70*. Chicago: U. of Chicago Press, pp. 72-84.
- Richardson, John G. (1999). *Common, Delinquent, and Special: The Institutional Shape of Special Education*. Studies in the History of Education, vol. 9. New York: Falmer.
- Richardson, John G. (2000). "The Variable Construction of Educational Risk." M.T. Hallinan, ed. *The Handbook of the Sociology of Education*. New York: Kluwer Academic/Plenum, pp. 307-323.
- Roeder, Peter Martin (2001). "Vergleichende ethnographische Studien zu Bildungssystemen," *Zeitschrift für Erziehungswissenschaft* 47,2: 201-215.
- Sander, Alfred (1998). "Schulorganisatorische Formen und Aspekte." M. Rosenberger, ed. *Schule ohne Aussonderung—Idee, Konzepte, Zukunftschancen*. Neuwied: Luchterhand, pp. 54-65.
- Sapon-Shevin, Mara (1989). "Mild Disabilities." D. Biklen, D. Ferguson, and A. Ford, eds. *Schooling and Disability. NSSE Yearbook*, Vol. 88. Chicago: National Society for the Study of Education, pp. 77-107.
- Sarason, Seymour B. and John Doris (1979). *Educational Handicap, Public Policy, and Social History: A Broadened Perspective on Mental Retardation*. New York: Free Press.
- Shavit, Yossi and Walter Müller (2000). "Vocational Secondary Education, Tracking, and Social Stratification." M.T. Hallinan, ed., pp. 437-452.
- Singer, Judith D. and John A. Butler (1992). "The Education for All Handicapped Children Act: Schools as Agents of Social Reform." T. Hehir and T. Latus, eds. *Special Education at the Century's End*. Cambridge MA: Harvard Educational Review, pp. 159-190.
- Solga, Heike (2002a). "Stigmatization by Negative Selection: Explaining Less-educated People's Decreasing Employment Opportunities," *European Sociological Review* 18,2: 159-178.
- Solga, Heike (2002b). "'Ausbildungslosigkeit' als soziales Stigma in Bildungsgesellschaften. Ein soziologischer Erklärungsbeitrag für die wachsenden Arbeitsmarktprobleme von gering qualifizierten Personen," *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 54,3: 476-505.
- Solga, Heike (2003a). "Jugendliche ohne Schulabschluss und ihre Wege in den Arbeitsmarkt." K.S. Cortina et al., eds. *Das Bildungswesen in der Bundesrepublik Deutschland: Strukturen und Entwicklungen im Überblick*. Reinbek: Rowohlt Taschenbuch Verlag, pp. 710-754.
- Solga, Heike (2003b). "Ohne Abschluss in die Bildungsgesellschaft." Habilitation Thesis, Fachbereich Politik- und Sozialwissenschaften, Freie Universität Berlin.

- Solga, Heike and Sandra Wagner (2001). "Paradoxie der Bildungsexpansion: Die doppelte Benachteiligung von Hauptschülern," *Zeitschrift für Erziehungswissenschaft* 4,1: 107-127.
- Sørensen, Aage B. (1996). "Educational Opportunities and School Effects." J. Clark, ed. *James S. Coleman*. London: Falmer Press, pp. 207-225.
- Statistisches Bundesamt (2002). "Bildung im Zahlenspiegel." Wiesbaden: Statistisches Bundesamt.
- Stone, Deborah A. (1984). *The Disabled State*. Philadelphia: Temple University Press.
- Tomlinson, Sally (1981). *Educational Subnormality*. London: Routledge & Kegan Paul.
- Tomlinson, Sally (1982). *A Sociology of Special Education*. London: Routledge & Kegan Paul.
- Tomlinson, Sally (1985). "The Expansion of Special Education," *Oxford Review of Education* 11,2: 157-166.
- Vågerö, Denny and Robert Illsley (1995). "Explaining the Difference. Beyond Black and Barker." *European Sociological Review* 11,6: 1-23.
- Wagner, Mary M. and Jose Blackorby (2002). "Disability Profiles of Elementary and Middle School Students with Disabilities." Menlo Park CA: SRI International (www.seels.net).
- Wagner, Mary M. et al. (1993). "The Transition Experiences of Young People with Disabilities." Menlo Park CA: SRI International.
- Walters, Pamela Barnhouse (2000). "The Limits of Growth. School Expansion and School Reform in Historical Perspective." M.T. Hallinan, ed., pp. 241-261.
- Wocken, Hans (1996). "Sonderpädagogischer Förderbedarf als systematischer Begriff," *Sonderpädagogik* 1: 34-38.
- Wocken, Hans (2000). "Leistung, Intelligenz und Soziallage von Schülern mit Lernbehinderungen," *Zeitschrift für Heilpädagogik* 12: 492-503.