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Primary Education and School Entry in the U.S.

Abstract

School entry is considered a significant moment in a child's educational biography. Due to the close organisational links between kindergarten and first grade, U.S. primary schools are a particularly interesting case in this regard. So, this paper describes U.S. primary education focusing on school entry: Fundamental characteristics and research findings on the U.S. elementary school are summarised, and school entry is examined in detail on the basis of an empirical project. In the first part of this article, we outline the main organisational and practical issues of primary education, including the broader context of the U.S. school system and its federal structure, funding, teacher education and curriculum. Moreover, we highlight two central research issues: inequalities and standardised testing. The second part of the paper focuses on school entry and the relationship between kindergarten and first grade. After reviewing extant research, we present findings from an ethnographic research project illustrating the daily practice of this relation in U.S. primary schools. This project involved three months of ethnographic fieldwork at five schools and addresses the question of how school is produced at school entry, that is, from the perspective of socialisation theory, of how students are taught what school makes a school. The qualitative analysis of the observational data shows how similar everyday life is in both classes and how, despite all the similarities, a distinction is made between the first-grade and kindergarten classes.

Keywords: Primary School, School Entry, Kindergarten, First Grade, United States of America

1 Introduction

School entry is considered a significant moment in a child's educational biography. Due to the close organisational links between kindergarten and first grade, U.S. primary schools are a particularly interesting case in this regard. At the same time, there are hardly any comprehensive overviews of primary education in the U.S. For these reasons, this article has two aims. On the one hand, we provide an overview of the central structures and important research findings of U.S. primary education. On the other hand, we address the question of school entry and the relationship between first grade and kindergarten class in detail by presenting findings from an empirical research project.

Focusing on the U.S. and the beginning of primary schooling in the U.S. in this manner is revealing for at least two reasons. First, it is striking that there are several ways to begin schooling in the U.S. because instruction takes place before first grade, i.e., in kindergarten and before. Normally, the kindergarten is located at a primary school. So, questions arise regarding when and how the 'practice' of primary schooling actually begins, how teachers and students experience first-grade-like instruction in kindergarten and how previous instruction in kindergarten resonates in first grade. Secondly, there have been various changes over the past few decades that suggest an examination of the beginning of primary school. Kindergarten has become increasingly academic and is often referred to as "new first grade" (Bassok et al., 2016, p. 1). School reforms have also led to increased standardised testing in primary schools. Both kindergarten and primary school are, therefore, subject to changes that will be examined in this text.

These characteristics of today's U.S. primary schools lead to this paper providing a comprehensive analysis of these characteristics and corresponding research findings, with a focus on school entry and the relationship between kindergarten and first grade. Such a paper, which presents analyses of essential features of U.S. primary education, is also needed because similar existing summary papers are either outdated (Aksoy, 1998) or very brief (Addo, 2019). Our paper fills this gap.

The paper has two parts that follow the two aims. The first is to provide a general overview of the U.S. primary school system, its structure and organisation, and central research on the mentioned characteristics. In this part, we first locate primary education within the school system of the U.S. (2.1) and outline the central subjects of the primary school curriculum (2.2). Subsequently, the organisational and administrative structures of (primary) education in the U.S. are described (2.3); we discuss the federal structure, funding and alternatives to public schools. Next, we address key issues that are extensively examined in research related to primary education practice, policy and organisation in the U.S. We summarise key research findings regarding inequalities (2.4)

and standardised testing (2.5). In the second part of the paper, we elaborate on school entry and the relationship between kindergarten and first grade. First, we summarise and discuss research findings related to the academic character of kindergarten, transitions and kindergarten and school readiness (3.1). Then, we examine the everyday practice of U.S. primary schools more closely by presenting findings from an ethnographic research project. After explaining the method of the study (3.2), we analyse observations that are insightful for understanding the relationship between kindergarten and first grade. First, we illustrate how first-grade teachers reference kindergarten in their instruction (3.3). Secondly, we elaborate on three phenomena that underline the close relationship between kindergarten and first grade (3.4). After summarising the study's most important findings and discussing its limitations (3.5), in the concluding section (4), we condense the central characteristics of U.S. primary education.

This text only provides initial insights into the practice, organisation and research of primary education in the U.S. We aim to offer a kaleidoscopic view of both the concrete organisation and practice of U.S. primary schools as well as essential research questions and findings. Thus, we consciously work selectively on key issues and cannot summarise the entire scope of research.

As is evident in many parts of the text, decentralisation is one of the central characteristics of the U.S. educational system (Aksoy, 1998; Fossum, 2020). The states are the decisive actors, not the federal government. In one sense, this means that the U.S. ultimately maintains 50 different educational systems. The states, in turn, maintain school districts, which also exhibit differences among themselves. For this reason, the following text will refer to one state in the Midwestern United States (i.e., Indiana) and specifically the school district of Bowsertown Community School Corporation (BCSC, pseudonym).

2 Overview of the Structure and Research of U.S. Primary Education

2.1 Primary Schools in the U.S. School System

The educational system of the U.S. begins with early childhood education (for an overview, see Fossum, 2020). The more children age, the more (public) early childhood education institutions are available, some of which are already located within primary schools (Fossum, 2020). Accordingly, the older children are, the more likely they are to be enrolled in educational institutions (Cascio, 2021). Five-year-olds attend kindergarten (K), which is typically part of the primary school. Depending on the state, attending a kindergarten class

is either mandatory or voluntary (see section 3.1). The age at which compulsory education begins varies between five and eight years (NCES, 2024b). For four-year-olds and sometimes three-year-olds, there are public and non-public pre-K programmes (prekindergarten), some of which are also offered in primary schools, some of which are offered elsewhere, e.g., in nursery schools. For children aged three and under, there are public and non-public learning centres, childcare centres or nursery schools. Nationwide, there are 1,570 pre-K schools in the United States, compared to 52,474 primary schools (NCES, 2024b).

Children attend primary school (other names are elementary school, grade school or grammar school), which starts in first grade and lasts between four and eight years, depending on the state and the school district (Addo, 2019; De Brey et al., 2021). This is followed by attendance at a middle or junior high school and later or directly at a (senior) high school. In some cases, there is also an intermediate school between primary school and middle school. In our example school district, the primary school covers the first six years, the middle school includes grades seven and eight and the high school encompasses the remaining four years (BCSC, n.d.b., n.d.c.). By contrast, and to give some more examples, the primary school in the school district serving Chicago, Illinois, includes grades K-8, followed by high school (9-12) (Chicago Public Schools, n.d.). In the Pearland Independent School District, Texas, the elementary school includes grades preK-4, followed by the middle school (5-6), the junior high school (7-8) and the high school (9-12) (Pearland Independent School District, n.d.). Since all children attend the same schools, this can be described as a comprehensive school system (Fossum, 2020). Still, students are differentiated within the school, meaning they attend courses of varying performance levels as they progress through their academic years (tracking). Figure 1 shows an overview of the U.S. education system. However, in addition to the displayed schools and the related grades, there are also other school-grade configurations. This means that, depending on the school district and, above all, its size, grades can be grouped differently to form different combined schools, or there may be other school types (e.g., intermediate schools). The different configuration of the school types is also obvious from a definition of the NCES (2016): "Primary schools are those with at least one grade lower than 5 and no grade higher than 8. Middle schools have no grade lower than 5 and no grade higher than 8. High schools have no grade lower than 7 and at least one grade higher than 8. Combined schools are those with at least one grade lower than 7 and at least one grade higher than 8, or with all students in ungraded classrooms."

Age	School		Grade	
17	Com- bined schools	(Senior) High School	12	
16			11	
15			10	
14		Middle School or Junior High School	9	
13			8	
12			7	
11			6	
10		Primary School or Elementary School	5	
9			4	
8			3	
7			2	
6			1	
5	incl. Kindergarten		Preschool	K
4	incl. Pre-kindergarten		or	pre-K
3	Nursery School			

Figure 1: The Educational System of the U.S.: Early Childhood, Primary and Secondary Education

Note. The U.S. school system is diverse. There are different but synonymous terms for the same type of school (e.g., the terms elementary and primary school are synonymous), and the length of time spent in the same type of school varies (e.g., in primary schools or middle schools; see above in the text). The figure only shows the most typical school configurations. Combined schools combine the grades of different types of schools (e.g., there are combined schools that cover all grades, known as K-12 schools). In early childhood education, the terms 'nursery school', 'pre-school' and 'prekindergarten' are often used interchangeably. However, these terms often represent a continuum. Nursery schools serve young children aged zero to five, and they tend to focus more on play and socialization than academics. Preschools and prekindergartens both serve children aged three to five. While preschools often maintain the qualities of traditional nursery schools, prekindergartens tend to focus more on the acquisition of early academic knowledge and skills. The figure is based on De Brey et al. (2021, p. 14).

Children can attend both public and non-public schools (Fossum, 2020; Spring, 2020). As far as public schools are concerned, families do not freely choose which public school their child will attend. Instead, a district principle applies to all schools, meaning students who reside in a specific area attend a designated school, which can thus be referred to as a neighbourhood school (Fossum, 2020). The situation differs for charter and non-public schools (see section 2.3). State voucher programmes support school choice (Spring, 2020). Depending on the state and programme, families receive vouchers for attending a non-public school, meaning they do not have to cover all the costs privately.

Teacher education (for an overview, see Addo, 2019; Fossum, 2020; Tatto, 2021) in the U.S. is as decentralised as the school system. This means that teacher education and the qualifications required to teach at a school differ from state to state. In general, however, prospective teachers complete a teacher training programme before they can obtain a licence from the state, possibly after a state assessment and defined internships at schools (Tattoo, 2021). The traditional route is to complete a teacher training course at a university (Tattoo, 2021). In a four-year undergraduate programme, students focus on early childhood, elementary, secondary or special education; for secondary education, a content area such as mathematics, English Language Arts, sciences or social studies is additionally studied (Tattoo, 2021). In addition to the coursework, the programmes typically also include a clinical component, i.e., a form of student teaching, and students are repeatedly sent to schools for shorter internships, partly accompanied by university teachers (Tattoo, 2021). In Indiana, the coursework, a semester of student teaching and licensing tests enable the attainment of a state teaching licence. In addition to this traditional teacher preparation, there are (accelerated) teacher training programmes at both universities and non-university institutions (Tattoo, 2021).

2.2 Content and Curriculum of Primary Education

In the U.S., curricular decisions are made by teachers in classrooms, by committees representing local schools or districts and within state and federal public policy arenas (Walker, 2003). State guidelines determine the content and curriculum for primary education (Addo, 2019). In the case of the state of Indiana, these are the Indiana Academic Standards (as an example for first grade, IN DOE, 2023b), along which school districts and schools make specifications (as an example for first grade, BCSC, n.d.a). At the state and district levels, the emphasis is on English Language Arts and Mathematics. Together with Social Studies and Social-Emotional Learning, these are taught by the classroom teacher, who typically changes annually. Specials taught by subject specialists include arts, music, physical education and science, with some also offering Spanish.

In Indiana, students in primary school receive report cards four times a year, indicating how well students have met the learning objectives for each subject and curricular area on a scale from 0 to 4 or in letter grades A, B, C, D or F (BCSC, n.d.b). Non-letter grades, also known as standards-based grading, are meant to represent more individual and developmental-oriented feedback for different detailed learning objectives of each subject (Link & Guskey, 2022). Report card grades are primarily derived from written assessments, tests or quizzes; however, the grades are typically not based solely on the average of

individual results from assessments, tests or quizzes, as in higher grades, but also on the general assessment by the teachers.

2.3 Organisation of Primary Education

The federal government's influence is fundamentally limited in the U.S. educational system (Fossum, 2020). Nonetheless, far-reaching attempts at federal control are made, through which states and other levels receive funding for fulfilling the requirements of federal programmes. Thus, the states can be understood as the decisive actors. They are responsible for determining curricular and educational standards as well as the licensing of teachers (Fossum, 2020). The daily operations of public schools, however, are organised within school districts, which hire teachers, maintain buildings, procure materials and organise student transportation (Fossum, 2020). School districts can be seen as an expression of the ideal that "local communities exercise control over public schools" (Spring, 2020, p. 205). Politically, elected school boards are responsible for the school district, while superintendents, who are selected by school boards, administratively manage the school districts. In the 2021/22 school year, there were 19,253 school districts in the U.S., with 291 in Indiana (NCES, 2024a).

The funding of public schools follows the three mentioned levels. Schools are financed through federal, state and local funds (Fossum, 2020). In the 2020/21 school year, the federal government contributed 11 %, the states 46 % and local levels 43 % to the funding of public primary and secondary education in the U.S. Local funding is primarily derived from property taxes (Addo, 2019; Fossum, 2020), which contribute 36 % to the total funding (NCES, 2024a). There is little data on disparities in funding between primary and secondary schools. However, according to Heuer and Stullich (2011), in 70 % of all school districts, per-pupil expenditures are higher in high schools than in primary schools.

If parents do not send their children to a public school, they must ensure that "the child is being provided with instruction equivalent to that given in public schools" (IN DOE, 2024b, p. 1). This instruction requirement applies in Indiana for those aged 7 to 18. In place of public schooling, parents can homeschool their children or have them taught at home by someone else (IN DOE, 2024b). Teaching in home school co-ops or virtual/digital/online/distance learning schools is also possible, the latter requiring the active participation of parents as learning coaches, especially for elementary children. Oversight of homeschooling in Indiana is minimal: There is no requirement for registration, nor do parents have to keep or submit educational records or have their children take statewide tests or graduation exams (IN DOE, 2024b). Furthermore, par-

ents do not have to teach specific content, i.e., it is not precisely defined what instruction in homeschooling consists of. Parents “are free to select any curriculum they choose to provide a programme of education to their student(s)” (IN DOE, 2024b, p. 4), and they do not have to follow the official curriculum of public schools. However, it is stipulated that children must be instructed for 180 days in an academic year, while the amount of instruction time per day is not regulated, and parents have to keep attendance records (IN DOE, 2024b). While homeschooled children do not receive a diploma, they can voluntarily take a high school exam (IN DOE, 2024b). In the U.S., in 2019, a total of 2.8 % of five- to seventeen-year-old students were homeschooled; the proportion is similar for children from kindergarten to fifth grade (NCES, 2024a). During the pandemic, the homeschooling rate rose to 11 % and has since fallen again, but without reaching pre-pandemic levels. In the 2022/23 school year, the homeschooling rate is 6 % (Watson, 2024).

In addition to homeschooling, another alternative to public schools is attendance at private or charter schools. Although charter schools are publicly funded, they are more independently managed schools meant to offer alternative, innovative and differentiated learning opportunities (Fossum, 2020; Ravitch, 2010; Spring, 2020). The field of charter schools is wide-ranging. In addition to private sponsors, school districts, other public bodies, churches and universities also organise charter schools (Rebarber & Zgainer, 2014). Compared to regular schools, charter schools promise a focus in terms of content, e.g., on STEM education, or in terms of teaching methods, e.g., based on progressive educational approaches (Rebarber & Zgainer, 2014). In Indiana, there were 119 charter schools in the 2021/22 school year among a total of 1,915 public schools, representing 6.2 % of public schools; nationwide, the figure was 7.9 % (NCES, 2024a). In order to achieve greater flexibility, charter schools are exempt from some legal regulations and can be regarded as a kind of autonomous school district. In return, they have to fulfil the objectives set out in the charter and are thus subject to greater performance and accountability requirements (Indiana Charter School Board, n.d.).

Private or religious schools, on the other hand, are non-public schools (Cortina & Frey, 2009). As with homeschooling, regulations for these schools in Indiana are minimal or voluntary. Non-public schools can seek state accreditation, but are not required to do so, and in such cases, they are not bound by any content requirements (IN DOE, n.d.b). At the very least, non-public schools are required to document student attendance. In 2019, 10.8 % of children from kindergarten to fifth grade attended a non-state school in the U.S.; among all students, the proportion was 9.3 % (NCES, 2024a). Overall, in Indiana for the 2022/23 school year, 87 % attended a public school, 5 % a charter school and 8 % a non-public school; in total, 5 % utilised school vouchers to attend

a non-public school (IN DOE, 2023a). Although school choice has been a central keyword and goal of school reforms in recent decades (Ravitch, 2010), the schools representing this principle are not determinative of the system.

2.4 Inequalities, Segregation and School Funding

The U.S. education system is characterised by various inequalities, particularly concerning socioeconomic status and race. From the very beginning, when students enter kindergarten, their performance on mandated assessments differs based on their socioeconomic background (García & Weiss, 2017). These inequalities continue throughout their education, and disparities are also apparent when comparing outcomes among racial and ethnic groups. Black, Hispanic and Native American students consistently achieve lower test scores in both mathematics and reading across all school types (Logan et al., 2012). Additionally, students are more likely to be held back in grades if their parents have lower educational attainment, and students from low-income, less-educated families perform worse on standardised tests than those whose parents have higher incomes and educational backgrounds (Goyette, 2017). Test scores also vary depending on the percentage of children from low-income families in a school (Logan et al., 2012).

One notable aspect related to the question of inequalities is the local segregation and the role of school funding. As previously mentioned, the education system is primarily funded through state and local sources, with the latter predominantly generated by property taxes (Addo, 2019). This raises the question of disparities in local funding among various communities and how these relate to different educational outcomes. Descriptively, it can be noted that spending per student varies both between states and school districts (Goyette, 2017). Total spending on schools per student in 2020/21 ranged from \$10,261 in Idaho to \$33,222 in the District of Columbia; the U.S. average was \$16,345, and in Indiana, it was \$12,811 (NCES, 2024a). Among the 100 largest school districts in the U.S., expenditures in 2021 ranged from \$8,060 in a district in Utah to \$31,397 in a district in Massachusetts (NCES, 2023).

Many studies focus on these differences, examining expenditures in relation to the population composition of the districts and their educational outcomes (Farrie & Sciarra, 2022; Hyman, 2017; Owens & Candipan, 2019). It is essential to note first that educational spending can influence student success. Hyman (2017) demonstrates with data from Michigan that increased school spending increases the likelihood of attending college and earning a college degree. Regarding educational inequalities, Owens and Candipan (2019) investigate how these are locally conditioned. The starting point is the finding that local segregation exists: neighbourhoods with predominantly high or low incomes, resulting in poor and wealthy students attending schools with correspond-

ingly poor or wealthy student compositions. This segregation has intensified (see also Goyette, 2017; Hill & Burke, 2020), and similar patterns are found regarding racial segregation (Goyette, 2017). Since property taxes partially fund schools, it can be assumed that affluent neighbourhoods have better-funded schools, pay teachers higher salaries and ultimately yield higher educational success rates (Fossum, 2020; Goyette, 2017). The study by Owens and Candipan (2019) highlights the disparities between schools in higher- and lower-income areas:

Across nearly all school indicators, a consistent story emerges: schools serving high-income neighborhoods have greater social, economic, and instructional resources than schools serving lower-income neighborhoods. Low-income neighborhoods' schools enroll more disadvantaged students, experience greater absences and disciplinary measures, have fewer experienced or certified teachers, pay teachers lower salaries, and have lower achievement and achievement growth. (pp. 3191–3192)

Interestingly, however, no differences in funding are found in this study between the two groups, meaning that expenditures for both groups are equal. This presents a problem: educating children from low-income families tends to be more costly, so schools with a higher proportion of such children usually require more funding. Thus, equal financial resources have a negative impact, and more compensatory funding is needed. Farrie and Sciarra (2022) reveal significant differences between states regarding how low- and high-poverty districts are funded, indicating whether schools are funded progressively or compensatorily. In Utah, for instance, nearly twice as much money is spent on high-poverty districts as on low-poverty districts.

Inequalities also manifest in everyday (primary) school life. Jacobsen et al. (2019) investigate the relationship between race and disciplinary measures in primary schools. Even after controlling for student and school characteristics, Black students are three times more likely to receive school disciplinary actions (Jacobsen et al., 2019). Bassok et al. (2016) report differences in teacher beliefs and instructional activities based on student composition, family income and race. The ethnographic study by Kozlowski (2022) further illustrates how students interpret instructions differently based on their prior preschool socialisation and, consequently, their socioeconomic background, which affects their ability to decipher and understand the hidden academic curriculum. These recent findings emphasise the problem of inequalities and the roles of schools and teachers in perpetuating them, as highlighted by Becker (1952) and Hollingshead (1949) over 70 years ago (for an overview of the development of inequality in the U.S., see Hill & Burke, 2020).

2.5 Standardised Testing

Standardised testing plays a significant role in the U.S. school system, especially since the *No Child Left Behind Act* of 2002 (Goyette, 2017; Repko-Erwin, 2017). This federal legislation is one example of how the federal government tries to expand its influence over the states through funding, as mentioned in section 2.3. The *No Child Left Behind Act* stipulated that schools would only receive federal funding if they met certain conditions, including defining performance goals and measuring achievement at the state level through standardised tests to increase accountability for student success. The *Every Student Succeeds Act* of 2015 continued these fundamental ideas and measures (Spring, 2020). States are still required to set standards and measure their achievement. Schools or districts that receive poor evaluations or test results must take action, sometimes targeting only specific affected student groups. For instance, in Indiana, which outlines all mandated measures in Indiana's Consolidated State Plan Under the Every Student Succeeds Act (IN DOE, 2023e), mathematics and English are tested annually for students in grades three to eight. The results (as well as other key data) are published for the entire state, individual school districts and individual schools, categorised by "Below Proficiency", "Approaching Proficiency", "At Proficiency" and "Above Proficiency" (IN DOE, 2018) for each subject and school year. It is worth mentioning that the set of measures to increase accountability also includes the idea of partially compensating teachers based on their students' test results (e.g., Fryer, 2013). The underlying idea is that outcomes on standardised tests are measures of teacher quality.

The two mentioned laws and their underlying concepts of standardisation, testing and accountability have been extensively criticised (e.g., Ravitch, 2010) and researched regarding their impacts. Im et al. (2020) focus specifically on primary education. They investigate the relationship between the frequency of standardised tests in first grade, the type of instruction in first grade and mathematics performance in first and third grades. Their findings indicate that a higher number of standardised tests correlates with increased learning time and improved mathematics performance in first grade but not in third grade. The study attributes this to the nature of instruction, indicating that a greater number of standardised tests is associated with procedural instruction (formal procedures, narrow mathematical skills) as opposed to conceptual instruction focused on problem-solving and application, which is linked to lower mathematics performance in the long term. The study illustrates various criticisms of standardised testing, particularly the teaching to the test and the narrowing of subject-specific skills. Similar findings emerge from the ethnographic study by Yoon (2015), which highlights the "narrow definitions of literacy in culturally

confining ways" (p. 389) as a consequence of standardised tests in early literacy.

A related critique concerns the validity of standardised tests. In this context, the qualitative study by Dutro et al. (2013) is enlightening, as it examines the writing processes and products of four racially and ethnically diverse fourth- and fifth-grade students. They demonstrate how poorly standardised tests capture students' multifaceted writing abilities, their positive emotional connections to writing, their individual histories as writers or their unique conditions for good writing (see also Repko-Erwin, 2017).

3 School Entry: The Transition from Kindergarten to First Grade

3.1 Overview of the Structure and Research of Kindergarten, First Grade and School Entry

Though kindergarten in the U.S. was originally inspired by the Froebelian kindergartens in Germany with the idea of a mixture of academic and non-academic activities, time and context considerably altered both the theory and practices of early education (Castner & Maron-Puntarelli, 2022). Today, there is a strong connection between academic-oriented kindergarten and primary school in the U.S. Kindergarten is typically housed within a primary school, and it, rather than first grade, is regarded as the beginning of formal schooling; hence, in the U.S., it is common to refer to K-12 schooling. Educational standards in Indiana are accordingly formulated for kindergarten as well as for first and subsequent grades. This connection is also evident in teacher education, as primary school teachers in Indiana receive their licences for either grades K-3 or K-6. Although kindergarten is structurally considered an integral part of the school system and academic learning occurs within it, attendance is not mandatory in all states. In 20 states, kindergarten attendance is required, while 25 states obligate school districts to offer half-day kindergarten. In Indiana, as well as in 20 other states, districts are required to offer a full-day kindergarten (NCES, 2024b; see also Fossum, 2020). The number of children attending public kindergarten has increased: in 2020, 36 % more children were enrolled in kindergarten than in 2000, 3.5 million compared to 2.5 million children, while in the same period, 21 % more children were enrolled across all grades, from preschool to high school (NCES, 2024a; see also Cascio, 2021).

The aforementioned educational standards illustrate the academic character of kindergarten. Kindergarten children are expected to count in ones and tens up to 100 and to write numbers from 0 to 20 (IN DOE, 2023d). In English,

they should be able to write most uppercase and lowercase letters and spell simple words (IN DOE, 2023c). Furthermore, the length of the school day, as determined by the states, underscores this academic character: While some states set different amounts of instructional time for kindergarten and first grade, others do not. In West Virginia, for example, the duration is 5.3 hours daily for both kindergarten and grades 1 through 5, and in New York and New Mexico, it is 5.5 hours daily for both kindergarten and grades 1 through 6 (NCES, 2024b). Another indication of the school character of kindergarten is that kindergarten students, at least in Indiana and the local school district, receive report cards similar to those in first grade. Nonetheless, the everyday practice in both year groups still differs regarding the time allocated for play, breaks and free play-learning activities.

The American kindergarten has not always been an academic institution of schooling; rather, a development over recent decades has led to kindergarten being regarded as the “new first grade” (Bassok et al., 2016, p. 1). Students in kindergarten now spend more time on learning and less on play, with higher learning objectives and a greater emphasis on assessments, as, for example, the survey study conducted by Bassok et al. (2016) shows by comparing data from 1998 and 2010 (see also Repko-Erwin, 2017). This academic shift in kindergarten, also influenced by accountability-based school reforms like *No Child Left Behind*, has faced criticism, with some calling for a return to a more child- and play-oriented kindergarten (Miller & Almon, 2009).

Regarding research on school entry and school transition, it is important to note that the transition to school is conceptualised and examined from various theoretical perspectives. Boyle et al. (2018) identify developmental, ecological, socio-cultural and critical theoretical perspectives in a systematic review of the research literature. In general, there is a shift from viewing transitions as an individual problem for children to considering it a multidimensional process in which child, family, school and educational policy interact with programmes and curricula (Pianta & Rimm-Kaufman, 2006).

The main body of research literature, then, focuses on the conditions for and challenges of successfully managing transitions with respect to various actors or institutions, programmes and practices (Boyle et al., 2018). Thereby, scholars primarily examine questions about competence development and school performance, inquiring about relationships between successful transition and later school success or the role of inequalities in successful transition (Cook & Coley, 2017; Goble et al., 2017; Purtell et al., 2020). Although employing a different theoretical approach, Gallagher’s study (2016) also addresses these questions by examining the role of academic language socialisation in a kindergarten class. Based on a seven-month observational study, Gallagher demonstrates that the so-called “sharing time” (p. 387), during which students

can freely share their experiences, provides opportunities for academic language socialisation, especially when teachers support this process. Given that acquiring the dominant academic language in school is crucial for academic success, the study microscopically illustrates how this socialisation can be initiated in kindergarten, thereby supporting the internalisation of the necessary and desired norms of formal schooling.

Connected to transition questions are issues related to school and kindergarten readiness (Boyle et al., 2018). The specific nature of the U.S. kindergarten necessitates the examination of both school readiness and kindergarten readiness, as well as of two transitions and two school beginnings. At its core, however, both terms refer to “children’s preparedness for participation in formal schooling” (Hustedt et al., 2018, p. 52), so both kindergarten and school readiness will be addressed in the following discussion.

Readiness can initially be understood as a legal construct, as states set varying requirements regarding the skills children must possess or acquire to attend kindergarten or first grade. These requirements overlap with early childhood education curricula, particularly for preschool. Only a few states conduct formal school readiness assessments (Daily et al., 2012). In Indiana, for example, there is a Kindergarten Readiness Assessment that occurs at the beginning of kindergarten and addresses the requirements of the Early Learning Standards: “Kindergarten readiness is achieved when children are prepared in all domains of early learning” (IN DOE, n.d.a). The assessment covers eight dimensions: English Language Arts, Mathematics, Science, Social Studies, Student Wellbeing, Approaches to Play and Learning, Creative Arts and Physical Education. Students are evaluated with the categories “ready for kindergarten” or “ready with support”, and “[a] school may not disenroll a student or refer him to a year of preschool or special education services” (IN DOE, 2024a, p. 6). The scientific understanding of readiness, however, remains open to debate (Graue, 2006). It is not conclusively established which specific skills children must have to be considered ready, nor is there agreement on whether the focus should be on ready children or ready schools. Therefore, it is important to note that readiness is a multifaceted, relational construct that is increasingly viewed not merely as an individual capability of students but also as something influenced by schools, curricula, early childhood education and families, similar to the previously explained scientific view on school transitions (see also Boyle et al., 2018).

Research focuses, among other things, on examining how educators construct school readiness and what expectations they hold for students. An interesting study in this regard is that of Hustedt et al. (2018), who investigate teacher beliefs in the context of the changing landscape of kindergarten (academisation, accountability, testing; see above). The authors find that kindergarten teach-

ers increasingly value assessment information, both for academic and non-academic domains (see also Repko-Erwin, 2017). However, they still consider non-academic skills (e.g., social skills or self-control) to be more important for kindergarten readiness. In light of kindergarten being regarded as the “new first grade” (Bassok et al., 2016, p. 1) and as a consequence of the educational reforms of recent decades, it can be generally concluded that the requirements for both kindergarten and school readiness have increased because, for example, “prior to NCLB, children were expected to leave kindergarten *ready* to read, whereas since NCLB, children have been pushed to leave kindergarten *already reading*” (Repko-Erwin, 2017, p. 67).

In addition to the construction of readiness, research – parallel to studies on school transition – primarily investigates the conditions under which kindergarten or school readiness can be improved, the effectiveness of various programmes and measures, the roles of different actors and the influence of readiness on later academic success (as an overview see Winter & Kelley, 2008). Questions of inequalities are also being examined. The study of Magnuson et al. (2004) indicates that preschool education improves the school readiness of disadvantaged children (e.g., of parents with low income and low education level). They benefit more from preschool education, i.e., they achieve better maths and reading scores in kindergarten than non-disadvantaged children who have attended a preschool.

3.2 An Ethnographic Study on Socialisation at School Entry

In the following sections, we will analyse some observational data from kindergarten and first grade to provide insight into the daily practice of academic instruction in kindergarten and first grade and their relationship. The data come from an ethnographic research project conducted by the first author from August to October 2024 in Indiana. The project aimed to investigate socialisation at school entry, that is, in first grade at the beginning of their first school year. The research question was how first-grade students are socialised at the beginning of their first school year, i.e., how students are taught what (primary) school is. Following the ideas of ethnography, the question is answered by comprehensively describing the culture of students and teachers at the beginning of the student’s school experience and understanding the central patterns of this culture of schooling (Fetterman, 2020).

Based on the general research question of the project, two more specific research questions were developed on the occasion of this paper and the debate in the literature about the relationship between kindergarten and first grade and the academic character of the kindergarten (see section 3.1): First, how does the former kindergarten instruction resonate in first grade? This question is addressed in section 3.3. In section 3.4, we address the second question:

What are the similarities in the daily interaction and instruction between kindergarten and first grade? First, however, we provide details about the sample and how the data were collected and analysed.

The sample consisted of two primary schools, contrasting with a middle school, a high school and a private, reform-oriented comprehensive school. This way, six first-grade classes taught by seven teachers (in one case, with co-teaching) were part of the sample. Additionally, two kindergarten classes and a second-grade class were observed, along with various classes and teachers in a middle school and a high school. The first, kindergarten and second-grade classrooms were each observed for at least half a school day over a total of 15 days. The three first-grade classes from one primary school were also observed at two different times: once at the very beginning of the school year and again six weeks later (that is, in the eighth week of the school year), allowing for up to four half-day observations per class. Only the lessons of the homeroom teachers were observed, which included English, mathematics, science, social studies and social-emotional learning. In all cases, the first author of this paper observed classroom interactions, took notes and developed expanded field notes about the observations (Fetterman, 2020).

The data for this paper were analysed in three steps using methods of analysis of ethnography (Fetterman, 2020) and grounded theory (Corbin & Strauss, 2015). First, all data were reviewed and coded to identify central and recurring topics based on the research question (Fetterman, 2020; Corbin & Strauss, 2015). During the field phase, teachers of the first classes were observed making frequent references back to kindergarten in several places and various ways, so 'kindergarten' was a code in the first step of the analysis. In the second step, the passages labelled with this code were analysed using a line-by-line analysis and compared to identify common patterns for what ethnographers look for in their analyses (Fetterman, 2020). Here, the method of constant comparison used in grounded theory came into play (Corbin & Strauss, 2015). This led to the findings presented in section 3.3. Upon further consideration of the relationship between kindergarten and first grade, the idea arose to examine the similarities between the two interaction settings more closely. Drawing on the general coding of the data, which was independent of this paper and included, e.g., the code 'restroom', three similarities stood out, which are presented in section 3.4. Here, too, the passages were analysed line-by-line after being found via the coding.

3.3 Working on the Edge between Kindergarten and Primary School

As explained in the previous section, there were several situations in which teachers explicitly addressed the difference between kindergarten and first

grade in their lessons. The comparative analysis of these situations leads to three different types of kindergarten references (see Table 1). In the *first type*, reference is made to kindergarten to justify new, increased academic demands in first grade ('hard' academic discontinuity). In the *second type*, reference is made to kindergarten in a similar way, but in a disciplining sense and with regard to certain behavioural requirements ('hard' behavioural discontinuity). In the *third type*, reference is made in a rather relaxed and positive way to what may have already been learned in kindergarten ('soft' academic continuity).

Table 1: Three Types of References to Kindergarten in First Grade

	'Hard' Discontinuity	'Soft' Continuity
Academic (Dis)Continuity	(1) 'Hard' Academic Discontinuity	(3) 'Soft' Academic Continuity
Behavioural (Dis)Continuity	(2) 'Hard' Behavioural Discontinuity	Not Found

In the following, we will illustrate these three types using excerpts from the ethnographic field notes. The excerpts are taken from longer field notes. They are like snapshots into which we jump, without the situational context of what has happened before. Nevertheless, the excerpts should be comprehensible for the findings in question. The excerpts contain both descriptions of the situation from the ethnographer's point of view, i.e., they are written in the first person singular, and direct speech from teachers and students.

3.3.1 'Hard' Academic Discontinuity

Let us consider the first type using two examples, with the second coming from the eighth week of school:

Next, we are dealing with writing, the teacher announces. "In kindergarten, you guys learned to write", she continues, but not "exactly". Now, the goal is to write "quickly and neatly", the teacher says. The upcoming worksheet is projected for everyone to see. The teacher first demonstrates the correct way to write the numbers. (BP 02 @ E1-B-1)

The teacher comments once more on the morning work that the students just completed [each morning, there is a worksheet at the students' desks that they first work on individually]. It was "new morning work", the teacher says, because "we have done kindergarten work till now". She asks the class if it will now be a bit "harder". A few students murmur "yes", which the teacher confirms. The teacher then goes through the individual tasks and names typical mistakes: "Some first graders put the answer here...you just need to pay attention...", she advises. Sometimes it will "not be easy", the teacher concludes, "because it's not kindergarten anymore". (BP 23 @ E1-A-4)

In both cases, the reference to kindergarten marks new requirements. In kindergarten, students engaged in a particular type of morning work or a specific way of writing; now, the expectations are increasing. Students must now be able to write “quickly and neatly” and complete “harder” tasks in the morning work. Interestingly, the teachers reference kindergarten at all, as these explanations could also occur without this reference: You (now) have to write quickly and neatly; you must now complete more challenging tasks. The reference to kindergarten makes sense insofar as it serves a justification function. Kindergarten and its complementary grade, first grade, involve certain requirements that students must meet. The increasing demands are not arbitrary choices of the teachers, nor random occurrences of this school, but a logical consequence of the fact that one is now attending first grade. The phrase “it’s not kindergarten anymore” conveys the ‘hardness’ of the institution. Kindergarten is almost depicted as a kind of comfort zone where simple morning work exists, while first grade is associated with effort and hard work. The first example presents a potentially more positive view than the second regarding what the students have already learned: normal writing and a certain type of morning work. In both cases, however, this is not further emphasised or positively acknowledged as praise for what has been achieved, unlike in the third type discussed below. Although these situations and this first type point to a hard academic discontinuity between kindergarten and first grade, continuity is established between kindergarten and first grade in terms of tasks and requirements. In both cases, it concerns writing or morning work, so these are similar types of requirements, which have changed in difficulty.

3.3.2 ‘Hard’ Behavioural Discontinuity

The *second type*, too, indicates a hard discontinuity but refers to behavioural expectations. The following situation representing this type occurs during the line-up of the class before going to the library:

The teacher calls out the middle row: “... line-up... in line order”, then the other rows. After all the students are lined up at the front of the classroom, the teacher asks: “... will we talk?” “No”, she answers, we are not “kindergarteners”, she says. “Are we ready to be stars?... Will we follow first-grade procedures?”, she asks rhetorically. Then the line starts moving. (BP 06 @ E1-A-3)

The teacher here has higher expectations, compared to kindergarten, that a certain behaviour will be exhibited, i.e., not talking. While kindergarteners talk, first graders could already be quiet. The fact that not talking is a stricter rule than in kindergarten is also shown in the expression “first-grade procedures”. The teacher’s comments here must be understood as a preventive discipline because incorrect and undesired behaviour is made clear before

students exhibit this behaviour. At the same time, the reference to kindergarten has a motivating undertone. Now, being a first grader and no longer a kindergartener is conveyed as something positive. The underlying message is that anyone who talks is apparently not yet worthy of the first class. It is a peculiar, pressure-exerting or appellative motivation that relies on children or first graders seeing it as desirable to be (or seem to be) no longer kindergarteners.

3.3.3 'Soft' Academic Continuity

Whereas the first two types indicate a discontinuity between first grade and kindergarten, the *third type* indicates a continuity in terms of academic expectations. In the example illustrating this type, the teacher is explaining the next writing task:

There is still "one more thing to do today that is pretty tough", the teacher explains. "You probably did this in kindergarten", she says, before moving on to the explanation of the task. It involves writing a "personal narrative". The teacher explains what this means: the students should write something about themselves, about something they have experienced. The teacher says that they will learn how to do this in first grade and that she just wants to see if they can already do it. (BP 04 @ E1-A-2)

Unlike in the first type, the learning from kindergarten is positively taken up here. There is no expectation that everyone knows what they could have learned in kindergarten – the word "probably" indicates this – but here in first grade, it is a starting point for repetition and review. This becomes particularly clear because the teacher explicitly states that what was actually learned in kindergarten is now being learned in first grade. Unlike in the first type, what was learned in kindergarten is not devalued or discredited as insufficient.

3.4 Similarities between Kindergarten and First Grade in the Daily School Routine

In the previous section, 3.3, we demonstrated how first-grade teachers refer back to kindergarten, thereby establishing both continuities and changes. Now, we will examine three phenomena in which the similarities between kindergarten and first grade, as discussed in section 3.1, manifest in the school routine. To do this, we will consider situations from kindergarten (K) and first grade (1) from the same primary school.

3.4.1 The Classroom

First, we want to explore the arrangement of a kindergarten classroom:

(K) Today, I am in a kindergarten class, which consists of five-year-olds. The classroom looks a bit different, but there are also many similarities. There are five group tables arranged in a large semicircle so that everyone can look towards the front, where the board and the screen are located. Instead of shelves under the tables, there is a shelf on one side of each table where the students keep their supplies, like pencil boxes or folders. In front of the board is a carpet with a colourful grid and name tags. There are also name tags on the tables, along with the alphabet and a kind of number line. The walls and board, like in the other classrooms, are filled with various posters, both informational (letters and their pronunciation, calendar area) and with rules, daily schedule and flag. There are also hooks for hanging backpacks and dots on the floor for lining up. From the beginning, a slide with the first items of the daily agenda is visible on the screen: Breakfast, Restroom, Morning Work, Morning Bin. Cheerful, calm background music is playing. The students come in gradually. (BP 11 @ E2-F-1)

The ethnographic observer already notes similarities between kindergarten and first-grade classrooms during the observation. In general, the room's design suggests the academic character of the kindergarten. It is not a space with a large play or free area at its centre but with group tables for work while seated. These tables have a shared visual focus directed towards the board and screen, which sets the stage for a teaching-learning situation where instruction comes from the front (by the teacher). The tables themselves are also organised academically, as they include storage for materials, and each spot is equipped with a number line and alphabet, that is, with a subject-specific basic knowledge that is (as a reminder or support) always present during the work at the tables. Thus, the tables and seating arrangements encourage academic work rather than free play.

The structured organisation of the kindergarten day is evident in the agenda displayed on the screen. There are predetermined agenda items that suggest limited spontaneity, flexibility and responsiveness to the children's needs. As noted in section 3.3 regarding first grade, there is also a morning work routine in place. The start of the day is, therefore, directly linked to academic content, albeit integrated with breakfast and going to the restroom.

3.4.2 Name Writing

Now, let us consider a more concrete practice that can be found both in kindergarten and first grade: that of writing one's own name on worksheets.

(K) The teacher then sits down at a table. This way, she is positioned across from the students, facing me. She lays out a worksheet that is now the focus, which is then made visible to everyone on the screen. "What is the first thing to do?", she asks the students. The answer is a little song that L begins, and the class joins in: "The first thing I do is always the same; I pick up my pencil and write down my name." The teacher writes her name on the sheet. (BP 11 @ E2-F-1)

(1) Then the teacher continues to move around and to comment: "... write your name on the top... good job... I need your name... SX, would you write your name on the paper, please?". (BP 09 @ E2-D-1)

In both cases and grade levels, teachers remind students to write their names on their worksheets. However, the expectations differ: while the teacher in kindergarten prompts students to write their names before starting the worksheet, in first grade, the teacher reminds individual students of this as she circulates around the room while students are working on the worksheets. In first grade, there is already an expectation that everyone knows how to write their names. In kindergarten, the reminder to write names before beginning work is presented in the form of a song. In fact, students are expected to know the song already because they join in; here, too, the expectation is that students are familiar with the rule of writing their names.

Writing their names serves at least two functions in both contexts. First, it has a pragmatic function, as it is simply good to know whose paper belongs to whom in order to place it in the correct box or folder; many school days resemble true material battles with numerous worksheets. The act of recording names implies an expectation of the future of these worksheets. If the worksheets were discarded after completion, there would be no need for names. However, it is assumed that the worksheets will have a somewhat longer lifespan. The second function is evident in individual accountability for work and performance. Writing names enables teachers to associate the worksheets with individual students and their abilities. If teachers were only interested in the overall performance of the class, names would not be necessary. The fact that the practice of writing names is already established in kindergarten indicates that this individual accountability for performance is relevant even at that level. This aligns with the report cards and the formal assessments in kindergarten.

3.4.3 Restroom Requests

We want to discuss a third phenomenon that illustrates the similarities between kindergarten and first grade: the students' requests to visit the restroom.

(K) Before moving on to the second task, the teacher [i.e., Ms. F] reminds a student: "Ms. F is in the middle of teaching", and she asks him how she could see that he is listening. Several students also make the restroom sign. The teacher asks one student if it is an emergency, but she then has to explain the word 'emergency' because the students do not understand the term. "Can you wait a minute?", she finally asks. (BP 11 @ E2-F-1)

(1) Together, the class then counts orally up to 70 when some students raise their hands. "Is it about counting?", the teacher asks. Water and the restroom are not an option right now, the teacher says. Meanwhile, one student has shouted something

and the teacher says to him, "I didn't see your hand". "We are not going anywhere right now", she emphasises. (BP 10 @ E2-D-2)

In all observed schools, students were allowed to go to the restroom during class with the teacher's permission. In both cases, whether in kindergarten or first grade, the rule allowing students to go to the restroom during class with permission indicates that the teacher has ultimate authority over this decision. The two situations illustrate how teachers refuse restroom requests. In both instances, this occurs during instructional phases with the class. Denying restroom visits signifies that the teachers consider the current content to be very important. In the first example, a delay is requested, suggesting that students could go to the restroom immediately after the task discussion. In the second example, the issue of "counting" is emphasised, with a temporal perspective provided: "Right now", restroom visits are not allowed, which also implies that they may be permitted later.

Thus, even in kindergarten, instruction and content are deemed so significant that no one should miss out on them. The mere existence of the restroom rule and the denial of restroom access underscores the academic nature of kindergarten, as was previously highlighted through the classroom arrangement and the practice of writing names.

3.5 Discussion

Regarding the first question, i.e., how the former kindergarten instruction resonates in first grade, our analysis revealed three types of reference to kindergarten in first grade. These references highlight a discontinuity in terms of academic and behavioural expectations as well as a continuity in terms of academic expectations. In the case of discontinuity, kindergarten serves as a negative contrast for first grade, as a remembrance of lower academic and behavioural expectations that need to be overcome. In the same instance, it seems to be impossible for the teachers to totally dismiss kindergarten experiences. They connect the academic activities of the kindergarten with those in first grade. The continuity parallels the discussion in section 3.1, hinting at a close relationship between the grades (Hustedt et al., 2018; Repko-Erwin, 2017). Against this background, continuity can be seen as expectable, whereas the extent to which teachers establish a discontinuity requires further explanation. One thesis following on from the disciplining-motivating reference to kindergarten in the second type would be that discontinuity is rather artificially created and instrumentalised, while continuity, although natural, can be used in a different and perhaps – seen from the teacher's perspective – less efficient way for motivation and discipline.

Another overarching insight is that teachers reference kindergarten at all. Thus, attendance at kindergarten is made the norm, even though it is not compulsory in Indiana. Teachers assume that first graders have attended kindergarten and learned something there. In a school system where there is no such close link between kindergarten and first grade, this would be unreasonable. Thus, the organisation of primary education in the U.S., with its close connection between kindergarten and first grade, resonates in daily practice. Moreover, the manner in which they establish this kind of connection is only possible because of the close relationship: Just because they know what happens in kindergarten – because it is typically located in the same building – teachers can refer to kindergarten, be it in terms of continuity or discontinuity. In more general terms, the empirical findings can thus be interpreted in line with the transition model from an ecological and socio-cultural perspective (Pianta & Rimm-Kaufman, 2006): the organisation, structure and political conditions and changes influence the transition, its daily practice and the experience of the transition by students and teachers.

Our second question concerned similarities of the daily interaction and instruction in kindergarten and first grade. The organisation of the classroom, the practice of name writing and similar reactions to restroom requests are examples of such similarities. They support the finding of the kindergarten as the “new first grade” (Bassok et al., 2016, p. 1). Kindergarten is a setting of working, learning, individual performance, accountability, structure and teacher-driven authority.

The data discussed here are from a small sample in one school district and brief ethnographic fieldwork. So, the findings require further research and elaboration. For example, more types of references are possible. At the same time, it is striking that a study that originally did not explicitly deal with the question of the relationship between kindergarten and first grade leads to the described findings. When a phenomenon comes into focus during analysis, even though it was not in focus before the fieldwork, this indicates that it is a phenomenon significant for the field and its culture.

4 Primary Education in the U.S.: A Short Conclusion

Both our overview of the structure, organisation and research on U.S. primary schools and school entry as well as our ethnographic findings about the relationship between kindergarten and first grade have revealed various characteristics that are central to the understanding, the daily practice and research on U.S. elementary schools: First, U.S. primary schools appear as institutions that cannot be considered independently from other parts of the educational system. First grade always refers back to kindergarten – politically and with

respect to curriculum and testing. Teachers themselves practically do these references. In organisational terms, pre-kindergarten and kindergarten are often part of the same primary schools. This structure suggests that there are several school entries in the U.S. and that school entry is a long and sometimes complicated process. In the case of K–8 schooling, primary school merges smoothly into a secondary school. Second, primary school cannot be considered independent of educational policy influences. The frequently mentioned educational reforms of recent decades have transformed primary schools and also kindergartens following the ideas of accountability, testing and standardisation, which in some way serves as a counterexample to the often-emphasised inertia of school systems in reform efforts. Third, U.S. kindergarten is a peculiarity as it is heavily influenced by primary school. Thus, primary school, including kindergarten, is a place of academic education. Fourth, U.S. primary schools, like the U.S. educational system, continue to face issues of generating and reproducing educational inequality. Inequalities are exacerbated in the U.S. by different funding based on local taxes.

All these characteristics summarised here could be studied in comparison with primary education in other countries in terms of teaching practice, policymaking and research. It is possible to ask why and how primary education systems have established different structures and, sometimes, what can be learned from them.

References

- Addo, A. O. (2019). Overview of primary education (USA). In C. D. Clark, I. Menter, & T. M. Teresa (Eds.), *Bloomsbury education and childhood studies*. Bloomsbury. <https://doi.org/10.5040/9781350996274.0026>
- Aksoy, N. (1998). An overview of elementary education in the United States: Past, present, and future with its organization, nature of program and teaching strategies. University of Cincinnati, College of Education. <https://files.eric.ed.gov/fulltext/ED424956.pdf>
- Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade? *AERA Open*, 2(1), n.p. <https://doi.org/10.1177/2332858415616358>
- BCSC (n.d.a). *Guide to learning in first grade*. Bowserstown Community School Corporation [pseudonymised].
- BCSC (n.d.b). *Guide to learning in primary school*. Bowserstown Community School Corporation [pseudonymised].
- BCSC (n.d.c). *Guide to learning in middle and high school*. Bowserstown Community School Corporation [pseudonymised].
- Becker, H. S. (1952). Social-class variations in the teacher-pupil relationship. *The Journal of Educational Sociology*, 25(8), 451–465. <https://doi.org/10.2307/2263957>
- Boyle, T., Grieshaber, S., & Petriwskyj, A. (2018). An integrative review of transitions to school literature. *Educational Research Review*, 24, 170–180. <https://doi.org/10.1016/j.edurev.2018.05.001>
- Cascio, E. U. (2021). *Early childhood education in the United States: What, when, where, who, how, and why: Working paper 28722*. National Bureau of Economic Research. <https://doi.org/10.3386/w28722>

- Castner, D., & Maron-Puntarelli, C. (2022). Revitalizing a humanizing vision: Contesting GERM policies with Froebel. *Global Education Review*, 9(1), 38–53.
- Chicago Public Schools (n.d.). *Grade Levels Served*. <https://www.cps.edu/schools/grade-levels-served/>
- Cook, K. D., & Coley, R. L. (2017). School transition practices and children's social and academic adjustment in kindergarten. *Journal of Educational Psychology*, 109(2), 166–177. <https://doi.org/10.1037/edu0000139>
- Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Sage.
- Cortina, K. S., & Frey, K. (2009). Privatschulen in den USA: Geschichte und aktuelle Kontroversen [Private schools in the USA: History and current controversies]. *Zeitschrift für Pädagogik*, 55(5), 701–715. <https://doi.org/10.25656/01:4269>
- Daily, S., Burkhauser, M., & Halle, T. (2012). School readiness practices in the United States. *National Civic Review*, 100(4), 21–24. <https://doi.org/10.1002/ncr.20080>
- De Brey, C., Snyder, T.D., Zhang, A., & Dillow, S.A. (2021). *Digest of education statistics 2019 (NCES 2021-009)*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. <https://nces.ed.gov/pubs2021/2021009.pdf>
- Dutro, E., Selland, M. K., & Bien, A. C. (2013). Revealing writing, concealing writers: High-stakes assessment in an urban elementary classroom. *Journal of Literacy Research*, 45(2), 99–141. <https://doi.org/10.1177/1086296X13475621>
- Farrie, D., & Sciarra, D. G. (2022). *Making the grade: How fair is school funding in your state?* Education Law Center. <https://edlawcenter.org/assets/files/pdfs/publications/Making-the-Grade-2022-Report.pdf>
- Fetterman, D. M. (2020). *Ethnography: Step-by-step* (4th ed.). Sage.
- Fossum, P. R. (2020). The education system of the United States of America. In S. Jornitz & M. Parreira do Amaral (Eds.), *The education systems of the Americas*. Springer International Publishing. https://doi.org/10.1007/978-3-319-93443-3_14-1
- Fryer, R. G. (2013). Teacher incentives and student achievement: Evidence from New York City public schools. *Journal of Labor Economics*, 31(2), 373–407. <https://doi.org/10.1086/667757>
- Gallagher, C. (2016). Socialization to academic language in a kindergarten classroom. *Language and Education*, 30(5), 383–399. <https://doi.org/10.1080/09500782.2015.1118122>
- García, E., & Weiss, E. (2017). *Education inequalities at the school starting gate: Gaps, trends, and strategies to address them*. Economic Policy Institute. <https://files.eric.ed.gov/fulltext/ED588751.pdf>
- Goble, P., Eggum-Wilkens, N. D., Bryce, C. I., Foster, S. A., Hanish, L. D., Martin, C. L., & Fabes, R. A. (2017). The transition from preschool to first grade: A transactional model of development. *Journal of Applied Developmental Psychology*, 49, 55–67. <https://doi.org/10.1016/j.appdev.2017.01.007>
- Goyette, K. A. (2017). *Education in America*. University of California Press.
- Graue, E. (2006). The answer is readiness- now what is the question? *Early Education and Development*, 17(1), 43–56. https://doi.org/10.1207/s15566935eed1701_3
- Heuer, R., & Stullich, S. (2011). Comparability of state and local expenditures among schools within districts: A report from the study of school-level expenditures. U.S. Department of Education. <https://files.eric.ed.gov/fulltext/ED527141.pdf>
- Hill, K. D., & Burke, C. (2020). The education system of the USA: Equity in US K-12 and higher education. In S. Jornitz & M. Parreira do Amaral (Eds.), *The education systems of the Americas* (n.p.). Springer International Publishing. https://doi.org/10.1007/978-3-319-93443-3_23-1
- Hollingshead, A. (1949). *Elmtown's youth*. Johnn Wiley & Sons.
- Hustedt, J. T., Buell, M. J., Hallam, R. A., & Pinder, W. M. (2018). While kindergarten has changed, some beliefs stay the same: Kindergarten teachers' beliefs about readiness. *Journal of Research in Childhood Education*, 32(1), 52–66. <https://doi.org/10.1080/02568543.2017.1393031>

- Im, H., Kwon, K.-A., Jeon, H.-J., & McGuire, P. (2020). The school-level standardized testing policy and math achievement in primary grades: The mediational role of math instructional approach. *Studies in Educational Evaluation*, 66, 100877. <https://doi.org/10.1016/j.stueduc.2020.100877>
- IN DOE (n.d.a). *Early learning*. Indiana Department of Education. <https://www.in.gov/doe/students/indiana-academic-standards/early-learning/>
- IN DOE (n.d.b). *Nonpublic schools*. Indiana Department of Education. <https://www.in.gov/doe/it/accountability-dashboard/nonpublic-schools/>
- IN DOE (2018). *ILEARN Policy Performance Level Descriptors (PLDs)*. Indiana Department of Education. <https://www.in.gov/doe/files/ILEARN-Policy-PLDs.pdf>
- IN DOE (2023a). *2022-2023 Choice Scholarship Program annual report*. Indiana Department of Education. <https://www.in.gov/doe/files/2022-2023-Annual-Choice-Report-0504.pdf>
- IN DOE (2023b). *2023 Indiana academic standards: Grade 1 English/Language Arts*. Indiana Department of Education. https://media.doe.in.gov/standards/indiana-academic-standards-grade-1-english_language-arts.pdf
- IN DOE (2023c). *2023 Indiana academic standards: Kindergarten English/Language Arts*. Indiana Department of Education. https://media.doe.in.gov/standards/indiana-academic-standards-kindergarten-english_language-arts.pdf
- IN DOE (2023d). *2023 Indiana academic standards: Kindergarten Mathematics*. Indiana Department of Education. <https://media.doe.in.gov/standards/indiana-academic-standards-kindergarten-mathematics.pdf>
- IN DOE (2023e). *Indiana's consolidated state plan under the Every Student Succeeds Act*. Indiana Department of Education. <https://www.in.gov/doe/files/IN-ESSA-Plan-2022-Addendum.pdf>
- IN DOE (2024a). *Early learning assessment system - Kindergarten Readiness Assessment (KRA). Frequently asked questions (FAQs)*. Indiana Department of Education. <https://www.in.gov/doe/files/Early-Learning-Assessment-KRA-FAQ.pdf>
- IN DOE (2024b). *Indiana homeschool laws. Frequently asked questions (FAQs)*. Indiana Department of Education. <https://www.in.gov/doe/files/Homeschool-FAQ.pdf>
- Indiana Charter School Board (n.d.). *Charter school FAQs*. <https://www.in.gov/icsb/families-and-students/charter-school-faqs/>
- Jacobsen, W. C., Pace, G. T., & Ramirez, N. G. (2019). Punishment and inequality at an early age: Exclusionary discipline in elementary school. *Social Forces*, 97(3), 973–998. <https://doi.org/10.1093/sf/soy072>
- Kozlowski, K. P. (2022). *The hidden academic curriculum and inequality in early education*. Routledge. <https://doi.org/10.4324/9780429276361>
- Link, L. J., & Guskey, T. R. (2022). Is standards-based grading effective? *Theory into Practice*, 61(4), 406–417. <https://doi.org/10.1080/00405841.2022.2107338>
- Logan, J. R., Minca, E., & Adar, S. (2012). The geography of inequality: Why separate means unequal in American public schools. *Sociology of Education*, 85(3), 287–301. <https://doi.org/10.1177/0038040711431588>
- Magnuson, K. A., Meyers, M. K., Ruhm, C. J., & Waldfogel, J. (2004). Inequality in preschool education and school readiness. *American Educational Research Journal*, 41(1), 115–157. <https://doi.org/10.3102/00028312041001115>
- Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. Alliance for Childhood. <https://files.eric.ed.gov/fulltext/ED504839.pdf>
- NCES. (2016). *National teacher and principal survey. Public school data file 2015–16*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. https://nces.ed.gov/surveys/ntps/tables/ntps1516_20180307001_s1n.asp
- NCES. (2023). *Revenues and expenditures for public elementary and secondary school districts: FY 21*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. <https://nces.ed.gov/pubs2024/2024303.pdf>

- NCES. (2024a). *Digest of education statistics*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. https://nces.ed.gov/programs/digest/current_tables.asp
- NCES. (2024b). *State education practices*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. <https://nces.ed.gov/programs/statereform/index.asp>
- Owens, A., & Candipan, J. (2019). Social and spatial inequalities of educational opportunity: A portrait of schools serving high- and low-income neighbourhoods in US metropolitan areas. *Urban Studies*, 56(15), 3178–3197. <https://doi.org/10.1177/0042098018815049>
- Pearland Independent School District (n.d.). *Schools*. <https://www.pearlandisd.org/about-us/school>
- Pianta, R. C., & Rimm-Kaufman, S. (2006). The social ecology of the transition to school: classrooms, families, and children. In K. McCartney & D. Phillips (Eds.), *Blackwell handbook of early childhood development* (pp. 490–507). Blackwell. <https://doi.org/10.1002/9780470757703.ch24>
- Purtell, K. M., Valauri, A., Rhoad-Drogalis, A., Jiang, H., Justice, L. M., Lin, T.-J., & Logan, J. A. (2020). Understanding policies and practices that support successful transitions to kindergarten. *Early Childhood Research Quarterly*, 52(Part B), 5–14. <https://doi.org/10.1016/j.jecresq.2019.09.003>
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. Basic Books.
- Rebarber, T., & Zgainer, A. C. (Eds.). (2014). *Survey of America's charter schools*. The Center for Education Reform. <https://2024.edreform.com/wp-content/uploads/2014/02/2014Charter-SchoolSurveyFINAL.pdf>
- Repko-Erwin, M. E. (2017). Was kindergarten left behind? Examining US kindergarten as the new first grade in the wake of *No Child Left Behind*. *Global Education Review*, 4(2), 58–74.
- Spring, J. H. (2020). *American education* (19th ed.). Routledge.
- Tatto, M. T. (2021). Teacher education in the United States of America: An overview of the policies, pathways, issues and relevant research. In D. Mayer (Ed.), *Teacher education policy and research: Global perspectives* (pp. 177–194). Springer. https://doi.org/10.1007/978-981-16-3775-9_13
- Walker, D. F. (2003). *Fundamentals of curriculum: Passion and professionalism* (2nd ed.). Lawrence Erlbaum Associates.
- Watson, A. R. (2024). Homeschool participation: post-pandemic persistence and growth trends. *Journal of School Choice*, 18(4), 444–460. <https://doi.org/10.1080/15582159.2024.2422742>
- Winter, S. M., & Kelley, M. F. (2008). Forty years of school readiness research: What have we learned? *Childhood Education*, 84(5), 260–266. <https://doi.org/10.1080/00094056.2008.10523022>
- Yoon, H. S. (2015). Assessing children in kindergarten: The narrowing of language, culture and identity in the testing era. *Journal of Early Childhood Literacy*, 15(3), 364–393. <https://doi.org/10.1177/1468798414548778>

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