

Abstract

The least restrictive environment (LRE) mandate has driven classroom placement decisions for the last five decades. It has been measured as the percentage of time students spend in general education contexts (i.e., Placement A = >80%; Placement B = 40-79%; Placement C = <40%). The mandate and its continuum of placements are predicated on the assumption that students can transition to less restrictive contexts, and that each placement will provide students with the skills needed to succeed in less restrictive contexts and, ultimately, in Placement A. Results from this descriptive analysis of survey responses from a sample of teachers and administrators of 98 elementary students with complex support needs indicate that less time in general education (Placements B and C) results in decreased access to single-grade classes, educator expertise, grade-aligned instructional materials, and general education curriculum. Further, for most of the variables analyzed, the data suggest that Placement B is more closely aligned with Placement C than with Placement A, suggesting that it may function as a restrictive placement. We argue that current LRE implementation is resulting in placement and progress stagnation. To allow students with complex support needs to have inclusive and equitable learning opportunities, LRE must shift away from the concept of percentage of time in general education to requirements of student access to instruction on state-adopted grade-level general education standards within general education contexts and curriculum.

A Secondary Analysis of Jackson et al., 2022: The Impact of Educational Placement for Students with Complex Support Needs

Driven by federal law (Individuals with Disabilities Education Act [IDEA], 2004) and the culture of practice in special education, conventional wisdom holds that students with complex support needs are best provided a free and appropriate education (FAPE) when an array of placement options is available (i.e., Least Restrictive Environment [LRE] mandate). This mandate aims to achieve a match between the services and supports students need to successfully learn and the individualized arrangement of contexts to achieve desired learning outcomes.

Federal law also mandates that students must have access to and make measurable progress in the general education curriculum (IDEA, 2004). Confidence that access to, and progress in, general education curriculum is high when instruction has been led by educators licensed in academic content areas, delivered in their classrooms, and provided support and collaboration from special educators. These outcomes challenge individualized education program (IEP) teams to justify student placements in any context other than a grade-level general education classroom. Nevertheless, the LRE mandate may be used to rationalize placements outside of general education, including placements mostly in segregated contexts (i.e., classes and schools), and placements comprising time in both general and special education settings.

IDEA (2004) regulations require schools to have a continuum of placement options to meet the needs of students with disabilities (see Sec. 300.115). To acknowledge the general education intention of the LRE mandate, a continuum of “percentage of time in general education” is employed in IDEA reporting requirements, which are found in Section 618 and specified in state performance plans/annual performance reports. These percentage intervals are: (a) 80% or more, (b) 40%-79%, (c) below 40%, and (d) 0% of the day. (Note: Following the

recommendation made by Kurth and Jackson, [2022], we will refer to these placements as Placements A through D, respectively. In addition, we will use *context* when referring to both the physical location [e.g., general education classroom] and its characteristics [e.g., curriculum, instruction, classmates, teacher expertise].)

Since the onset of the inclusive school movement in the 1980s, placement in general education contexts has come to be recognized as a positive contributor to FAPE, with studies showing an increasing trend in placing students in less restrictive contexts, particularly for students with mild disabilities. For example, Williamson et al. (2019) found that for students with learning disabilities, general education placements increased nationally by 171% between 1990 and 2015, and reliance on the more restrictive settings of Placements B, C, and D decreased for this group by 65%. Despite this finding, the educational system has failed to broadly recognize and use general education contexts as a viable option for students with complex support needs. Students with complex support needs are those who are perceived by IEP teams as: (a) requiring ongoing support across multiple domains (e.g., communication, academic); (b) having most commonly a disability label of intellectual disability, multiple disabilities, or autism; and (c) taking the state alternate assessment.

Despite federal intent and research and model demonstration project data showing the benefits of general education contexts and effective inclusive instruction (e.g., McCart, 2022; Sailor, 2012), relatively few students with complex support needs are taught within general education contexts (Morningstar et al., 2017). Giangreco (2020) noted that 16.9% of students with intellectual disability and 13.7% of students with multiple disabilities were placed in general education contexts for 80% or more of the day (Placement A). Further, Kleinert et al. (2015) reported that 93% of students taking alternative assessments were placed in self-contained

classrooms (Placement C) or in special schools or residential settings (e.g., Placement D), with only 3% of these students in general education contexts for 80% or more of the day (Placement A), and only 4% were in general education for 40%-79% of the day (Placement B). For students with complex support needs, placement in general education contexts has not increased over decades, as has been the case for students in other disability categories.

Researchers have suggested varied reasons why the placement of these students in general education contexts remains underused. These include: (a) implicit biases toward students with complex support needs and intersecting identities (Giangreco, 2020; Lansey et al., 2023), (b) lack of resources and capacity (Agran et al., 2020), (c) lack of teachers with expertise in complex support needs and willingness to plan for their placement in general education contexts (Agran et al., 2020; Gee et al., 2020), (d) lack of reliable information for parents about the differences across placements and research supporting placements in general education contexts (Swenson, 2020), and (e) lack of administrative leadership and support (McLeskey, 2020). These and other factors, likely in combination, impede efforts to place students in general education contexts when in fact placement decisions should be based first on the systematic assessment of individualized student supports and services needed for success in general education contexts.

Administrators play a key role in ensuring that high-quality supports and services in general education contexts are provided to students with complex support needs (McLeskey, 2020). Turnbull and Turnbull (2020) noted that administrators in effect pre-determine placements based on labels, rather than basing decisions on what the research suggest is best for students. Administrators need more in-depth knowledge about how best to serve these students, secure teacher and parent support, and ensure that placement in general education contexts both survives and thrives.

Given the power and responsibility placed on IEP teams to determine student placement, IEP team members (e.g., teachers, administrators, and parents) require an in-depth understanding of the variables that affect the determination, structure, and delivery of quality educational services for students with complex support needs. Yet, apart from definitional differences associated with the dichotomy between Placement A and C, research has provided little information on how placements differ in curriculum, instruction, materials, and exposure to content expertise and classmates and how these contextual aspects affect student learning.

To address this limitation, Jackson et al. (2022) examined a large-scale data set addressing differences in the operating conditions and services provided to students with complex support needs across Placements A-D. The results showed clear benefits in less restrictive placements, especially in Placement A, in terms of teacher expertise, curriculum, and instruction. Drawing from these data, Jackson et al. argued that context, in and of itself, was a major determinant of the “education” provided to students with complex support needs. Further, more restrictive placements could impede the provision of a FAPE for these students. Put differently, configurations of expertise, curriculum, materials, expectations, instruction, and classmates are relatively fixed aspects of contexts, and the limited offerings of more restrictive placements reflect capacity and delivery parameters defined by their respective contexts.

Given the implications of the Jackson et al. study and other reports from the same research project (Jameson et al. 2022; Zagona et al., 2022), it is likely that many educators who serve this population are not fully cognizant of the educational opportunities and effects of the different contexts when they make placement decisions. A continuum is imagined in which Placement A means instruction in general education contexts, and Placements B, C, and D, respectively, utilize progressively more restrictive contexts for instruction while still honoring

federal law's intent of student access and progress in the general education curriculum and promoting access to general education. While this appears to be the intent of the law, the degree to which this is occurring remains largely unknown.

The Jackson et al. (2022) results did reveal several patterns that were consistent with the foregoing image of the continuum. For example, as students' placements became less restrictive, teachers reported that students were provided greater access to support from general and special educators within general education classrooms. However, the results also left no doubt that more restrictive placements were not providing access to general education contexts, curriculum, educators, materials, and peers. The study also uncovered some practices occurring in patterns that appeared inconsistent with the foregoing continuum as it is typically imagined. To illustrate, for placements comprising time in both general and special education (Placements A, B, and C), reported reliance on general education curriculum was incongruent with the expected more- to less-access pattern anticipated by the continuum. Especially concerning was Placement B. Although access to general curriculum was indeed higher in Placement B than in Placement C, the teachers also reported that more than half of the students were provided with commercially developed curriculum designed specifically for students with disabilities. This raises the question as to the degree to which general education curriculum is the primary curriculum for these students, or as observed in Placement C, commercially developed curriculum sources supersede general education curriculum. In short, is Placement B an intermediate, preparatory step to Placement A, or is it simply a variation of Placement C?

The purpose of this study was to examine selected characteristics of placements that provide access to general education contexts (i.e., A, B, and C) in elementary schools that serve students with complex support needs. Given that Placement D does not offer students access to

general education contexts, we excluded it from our analysis. Our focus was on four questions that were not fully addressed in the Jackson et al. study yet are pertinent to understanding of the curriculum taught and the quality of instruction provided across these three placements. These questions are: (a) What is the composition of classes (i.e., single-grade, multi-grade) across grade spans in general education and special education contexts representing Placements A, B, and C; (b) What is the distribution of general and special educator expertise across academic subjects in Placements A and B; (c) What is the relationship between the instructional materials selected in Placements A, B, and C and the grade-level general education curriculum; and (d) What is the type and purpose of curriculum content taught in Placements A, B, and C?

Method

The data reported here were drawn from a recent six-university study that examined the potential impact of *educational placement* on the academic, behavioral, social, and communication outcomes of students with complex support needs in the United States (see Kurth & Jackson, 2022). Our study is an extension of the Jackson et al. (2022) report which broadly examined how different ecological contexts impacted students' educational experiences and opportunities. We provide condensed descriptions of the larger study's methods given greater detail is offered in Jackson et al. and focus more on the methodology specific to this study.

Participant Selection

The selection of participating students was based on five criteria. The criteria were: (a) students were elementary-aged, between 5 and 12 years old; (b) received services through an IEP; (c) were assigned to a disability label of intellectual disability, autism, and/or multiple disabilities; (d) were eligible for their state's alternate assessment due to the severity of their cognitive impairment; and (e) attended school consistently. Students were selected to adequately

represent the four placement options of Section 618 of IDEA: *Placement A*: Students in schools where they were represented in natural proportions (i.e., approximately 1% of total school enrollees) and were educated 80% or more of the day within general education contexts; *Placement B*: Students in schools where they were represented disproportionately (i.e., 2% or greater of total school enrollees) and were educated 40% to 79% of the day in general education contexts; *Placement C*: Students in schools where they were represented disproportionately (i.e., 2% or greater of total school enrollees) and educated less than 40% of the day in general education contexts; and *Placement D*: Students were educated in special education schools with 0% of the day in general education contexts.

As Jackson et al. (2022) described, Institutional Review Board (IRB) requirements at the six participating universities were fully met before research activities were initiated.

Additionally, parents, teachers, and administrators provided written consent before data on student, classroom, and school/district characteristics were collected.

A total of 117 students with complex support needs across the array of placement options were participants in this study, along with 65 general educators and 81 special educators who served these students. Students were recruited across 11 states, receiving educational services in 59 different schools across 36 local education agencies. Six of the nine Census Bureau regions of the United States were represented: the Mid-Atlantic, East North Central, West North Central, South Atlantic, Mountain, and the Pacific Division.

In terms of placements, 35 (29.9%) students were spending 80% of their day in general education contexts (Placement A), 34 (29.1%) students were spending 40-79% of their day in general education contexts (Placement B), 30 (25.6%) students were spending 0%-40% of their day in general education contexts (Placement C), and 18 (15.4%) students were in special

schools spending 0% of their day in general education contexts (Placement D). As previously noted, we restructured the analysis to focus on Placements A, B, and C because we wanted to explore how the characteristics of placements with access to general education contexts – particularly Placement B – differed from each other.

Data Collection and Instrumentation

Jackson et al. (2022) reported a four-level analysis, including: (a) student level, (b) class level, (c) school level, and (d) district level. This was accomplished using data from four survey instruments that were part of the larger study. These surveys were completed online by teachers and administrators for the 117 students using *Qualtrics*. Survey questions yielded categorical (i.e., multiple choice, select all that apply, matrix) and continuous (i.e., fill-in-the-blank) responses designed to yield descriptive information on settings, persons, curriculum, instruction, assessment, and services at the four levels. General and special educators completed student- and class-level surveys and school administrators completed school- and district-level surveys.

We selected survey questions that were aligned with our research questions focused on curriculum and instruction but were not explored in depth by Jackson et al. (2022). Questions from surveys at the student, classroom, and school levels were examined; no district-level questions directly aligned with our research questions. The *Student Demographic Survey* consisted of 24 total questions that addressed student demographics, teachers providing services, time in general education, curriculum, instructional materials, and supports. In addition to student demographic questions, three questions from this survey were used in this analysis. First, the multiple-choice question “Indicate how instructional materials for academic instruction are typically selected”. The second question used was “Identify any special curricula that are being used in instruction with the student”. For this matrix question, educators were asked about their

usage and intended purpose of 10 math and literacy special curriculums (e.g., “not used”, “used for materials and ideas”) and had space to add “other” special curriculums with their usage and purposes. The third and final question used from the *Student Demographic Survey* was only for educators who did not use special curricula. This multiple-choice question asked respondents if their curriculum and instruction were based primarily on adapted general education curriculum or on classroom teacher-selected meaningful and engaging activities.

The *Classroom Demographic Survey* included 33 total questions that examine teacher demographics, instruction and assessment, class composition, and related services. One question from the *Classroom Demographic Survey* was used in this analysis: “What classes/subjects do you teach the target student? (select all that apply)”. Response options included math, language arts, science, social studies, music, PE, art, and “other” which offered space to add additional classes. Finally, the *School Demographic Survey* was a 49-question survey sampling school demographics, service capacities, and grade-level ranges and organization. Two fill-in-the-blank questions from this survey were used in this analysis. Administrators were asked to specify the numbers of general and special education classes at each grade in the school (kindergarten to sixth grade, and multi-grade classes). These surveys are available from the first author.

Data Analysis

As in Jackson et al. (2022), our objective was to analyze variables that characterize the day-to-day educational experiences of students in Placements A, B, and C in relation to our research questions. We used Excel to organize survey data aggregated by students’ educational placement. We generated descriptive statistics, calculating frequencies, percentages, and means for student and teacher demographic data and all survey response items. Variables examined included students accessing single-grade versus multi-grade contexts (*School Demographic*

Survey questions); which educators (i.e., general or special) were students' source of instruction across academic subjects (*Classroom Demographic Survey* question); standards in the selection of academic materials for instruction (*Student Demographic Survey* question); and curriculum content reflecting content from the general education curriculum versus other curriculum sources (*Student Demographic Survey* questions).

Results

As described in Methods, we relied on descriptive statistics to quantify aspects of general education access. Specifically, we addressed reliance within Placements A, B, and C on single- versus multi-grade contexts, teachers responsible for content area instruction, academic instructional materials, and curriculum content. As described above, the data were drawn from three demographic surveys, representing the student-, classroom-, and school-levels.

Participants and Settings

Table 1 presents student demographic data organized by educational placement for students in Placements A, B, and C. These data were drawn from the *Student Demographic Survey*, which was completed for all 98 students in Placement A ($n = 35$), Placement B ($n = 34$), and Placement C ($n = 29$).

Based on data from the *Classroom Demographic Survey*, the responding teacher educators were primarily White (97.6%), non-Hispanic/Latinx (100%), and female (90.5%). They had a mean age of 38.8 (range: 24-60) and an average of 12.8 years of teaching experience (range: 1-38). All general educators ($n = 25$) across Placements A ($n = 9$), B ($n = 14$), and C ($n = 2$) were certified in elementary general education with six having additional certifications (e.g., mild or high-incidence disabilities, administration). Most Placement A special educators ($n = 6$) had certifications in severe or low-incidence disabilities ($n = 4$; 66.7%). Two others had cross-

categorical/generalist certifications (33.3%), one of whom also had a mild or high-incidence disabilities certification. Half of the Placement A special educators ($n = 3$; 50%) also had certifications in elementary general education. Most Placement B special educators had certifications in cross-categorical/generalist special education ($n = 6$; 46.2%). Three special educators had mild or high-incidence disabilities certification (23.1%), three had severe or low-incidence disabilities certification (23.1%), and one educator had both high and low-incidence certifications (7.7%). Seven of the Placement B special educators (53.8%) also had certifications in elementary general education. The two special educators in Placement C had certifications in severe or low-incidence disabilities (100%) and elementary general education (100%). One of these special educators also had certifications in mild or high-incidence disabilities (50%), cross-categorical/generalist special education (50%), and secondary general education (50%).

Classroom Composition

This analysis relies on data collected at the school-level, employing the *School Demographic Survey*. Data were available from 26 of the 48 schools, 54.1% of the student sample. Attempts were made to gather more school-level responses; however, the COVID pandemic cut these efforts short. These data addressed the way schools represented grade levels within their instructional contexts; that is, single or multi-grades within single contexts.

Multi-grade contexts for general education students were uncommon; only one of the 26 schools reported a multi-grade general education context with a span addressing students in grades 5 and 6. In contrast, across all three placement options, none of the schools reported having any special education contexts composed of single grades. Ten schools specifically reported having anywhere from one to four multi-grade special education contexts within their schools; five schools described their multi-grade special education classrooms as "cluster

classes", "SPED resource room," or "sped/segregated"; and five schools described their special education classes by grade span, including K-2 ($n = 3$), 3-5 ($n = 3$), and K-6 ($n = 2$).

Academic Subjects Taught by Special and General Educators

This analysis relies on data collected at the classroom-level, employing the *Classroom Demographic Survey*. Because our interest in this study is on the way content instruction is distributed among teachers who are either general or special educators, only students in which data were available from both educators could be used. A total of 58 surveys were completed for students in Placements A ($n = 20$), B ($n = 34$), and C ($n = 4$) by 46 different general and special educators. In some cases, the same teacher filled out multiple surveys, one for each participating student they taught. Ten students in Placement A and 17 students in Placement B had survey responses from both general and special educators, representing 29.4% and 54.8% of the student sample, respectively. These students shared similar demographic distributions to the entire sample (e.g., majority male, White, non-Hispanic/Latinx). We did not include students from Placement C in this analysis because only 2 of the 29 students had responses from both general and special educators, and not all of these students attended general education classes.

Table 2: Summary of Classroom Survey Results delineates subjects taught to the same students by general and special educators in Placements A and B. Table 2 also includes data on teacher-reported responsibilities for instruction in basic skills (e.g., social/communication, functional, and/or behavioral); however, these measures lie outside of our focus on academic content, and so they are not addressed in this paper. As shown in Table 2, general educators in Placement A reported teaching the students science and social studies much more often than special educators. Overlap in reported teaching responsibilities was high for general and special educators serving Placement A students in the content areas of language arts and math, with

100% of both sets of teachers reporting that they taught these content areas to these students.

With respect to Placement B, Table 2 shows that all special educators reported teaching students language arts ($n = 17$; 100%), and most reported teaching them math ($n = 16$; 94.1%), a pattern similar to that in Placement A. However, in contrast to Placement A, fewer general educators in Placement B reported teaching students language arts ($n = 12$; 70.6%) and math ($n = 8$; 47.1%). The teaching patterns of special and general educators with respect to science and social studies were also different in Placement B when contrasted with Placement A, with fewer general educators reporting teaching these students in these areas and more special educators addressing these areas.

Instructional Materials Selected

Drawing from the *Student Demographic Survey*, Table 3 describes how instructional materials for academic content areas were selected for students across the three placement options. For over half of the students in Placement A ($n = 18$; 51.4%), teachers reported selecting academic content area materials based on age and grade level, with or without modifications, similar to what would be expected for other students of the same age. Another 25.7% ($n = 9$) of the students had materials selected based on remedial curricula. In contrast, few students in Placement B ($n = 6$; 17.6%) and no students in Placement C ($n = 0$; 0%) had their academic content area materials selected based on their age and grade level, with or without modifications. Remedial curricula were reported as relied on for 26.5% ($n = 9$) and 17.2% ($n = 5$) of the students in Placements B and C, respectively; however, most students in Placement B ($n = 19$; 57.3%) and Placement C ($n = 20$; 68.9%) had their materials based on the skills and expectations of early childhood, preschool, or earlier grade levels. Further, 13.8% ($n = 4$) of students in Placement C did not use academic materials.

Curriculum Content

Table 3 also includes data on the content of the curriculum used by these teachers for their students with complex support needs and the reported purposes of that use across the three placements. One of the possible response options was that the general education curriculum at age level was mostly being used with or without adaptations. Other response options, which have been collapsed together for this analysis, point to curriculum sources other than local age/grade-level general education curriculum, including relying on *special* curricula or teacher-selected activities. For purposes of this analysis, *special* curricula are defined as either state, district, or school-designed curricula for students with complex support needs, or commercially developed curricula marketed as designed for students with complex support needs or other students with disabilities. When examining the reported purposes for their use of *special* curricula, teachers could provide multiple responses; thus, these numbers and percentages do not match the numbers and percentages of students at each placement option.

Overall, these data reflect a pattern similar to that of instructional materials; that is, teachers reported decreasing reliance on age/grade-level general education curriculum and increased use of *special* curricula as the placement option became more restrictive. Of the 34 students in Placement B, teachers reported that only three students (8.8%) had curriculum and instruction based primarily on general education curriculum that was adapted as needed and did not use any *special* curricula. For thirty-one (91.2%) of the students in Placement B, teachers reported using *special* curricula, and a large percentage of these teachers reported using *special* curricula as the primary curriculum for the students. Students in Placement B had the greatest percentage of teachers reporting that *special* curricula were the primary curriculum, compared to reports from teachers in other placement options.

For students in Placement C, no teachers reported using curriculum and instruction based primarily on general education curriculum that was adapted as needed and with no reliance on *special* curricula. Teacher-reported purposes for *special* curricula were highest for “materials and ideas,” and for supplementing their special education curricula.

In contrast to Placements B and C, nearly a third ($n = 11$; 31.4%) of students in Placement A had curriculum and instruction based primarily on general education curriculum that was adapted as needed, with no reported use of *special* curricula. Yet, teachers also reported that for 24 of the 35 students in Placement A (68.6%), special curricula were also being used and for several different purposes. *Special* curricula primarily were used for materials and ideas, but teachers also reported that about a third of the *special* curricula were used as primary curriculum sources for some students.

Examining specifically the use of commercially developed curricula marketed for students with complex support needs, we found that as placements became more restrictive, the use of commercially developed literacy and math curricula became more frequent. Early Literacy Skill Builder (ELSB), Edmark Reading Program (Edmark), and Unique Learning System (ULS) were the most frequently used commercially developed literacy curricula across the three placement options. For students in Placement B, Edmark was the most used commercially developed literacy curriculum ($n = 11$; 32.4%) and most often used as students’ primary curriculum ($n = 7$; 63.6%). ELSB ($n = 6$; 17.1%) and Edmark ($n = 5$; 14.3%) were the most used commercially developed literacy curricula for students in Placement A; however, teachers reported no students for whom these were primary curriculum sources. For students in Placement C, ELSB ($n = 10$; 34.5%) and ULS ($n = 11$; 37.9%) were the most often reported commercially developed literacy curricula used ($n = 5$; 50%), and the purpose reported most often was to

supplement other special education curricula ($n = 6$; 54.5%).

Frequently used commercially developed math curricula included ULS, Teaching to Standards: Math (TSM), and Equals (Ablenet) Math. In Placement B, ULS was the most common commercially developed math curriculum ($n = 4$; 11.8%) and was used most often as students' primary curriculum ($n = 3$; 75%). TSM also was commonly used for students in Placement B ($n = 5$; 14.7%) to augment other special education curricula ($n = 2$; 40%) or used as the primary curriculum ($n = 2$; 40%). TSM was the most used commercially developed curriculum for students in Placement A ($n = 5$; 14.3%) and was used either for materials ($n = 3$; 60%) or as a primary curriculum source ($n = 2$; 40%). In Placement C, TSM was the most used commercially developed math curriculum ($n = 7$; 24.1%) and was used most often for materials and ideas ($n = 4$; 57.1%). Similarly, ULS was frequently used in Placement C ($n = 6$; 20.7%) for materials and ideas ($n = 5$; 83.3%).

As shown in Table 3, teachers reported using across the three placement options a variety of curriculum materials in addition to or other than the local, age/grade level general education curriculum. Controlling for sample size, the average number of *special* curricula used per student were 0.54, 0.56, and 0.62 across Placements A, B, and C, respectively. Put differently, regardless of the placement option in which students were placed, reliance on commercially developed curricula for various purposes was proportionally high.

Discussion

Expanding on the work of Jackson et al. (2022), we examined survey data that offered insights into the selection of curriculum and delivery of instruction for elementary students with complex support needs served in Placements A, B, and C. These placement options, varying in their provision of access to general education classrooms, are intended to provide students with

individualized appropriate educational experiences, including opportunities to access general education contexts, curriculum, educators, materials, and peers, as well as special education supports and services for the provision of FAPE. We examined four areas of data across both segregated and general education contexts: (a) single and multi-grade classes, (b) content areas taught by special and general educators, (c) academic content area instructional materials, and (d) curriculum content. Each of these is discussed below.

First, regarding the organization of grade levels, we found that K-6 general education classes reflect the traditional K-6 grade structure in schools. However, there were no single-grade classes in special education in any school. All special education contexts were comprised of several grades, including up to seven grades (i.e., K-6) in a single context. These multi-grade classes present a context that is unlikely to promote acquisition and progress on grade-level general education curriculum for students with complex support needs (Jackson et al., 2008).

Second, we found that students in Placements A and B were taught language arts and math by special and general educators but only Placement A had a high percentage of students being taught science and social by general educators. These data add to the results reported by Jackson et al. (2022) who found that there was a clear drop in the number of students being taught by general educators during language arts and math when their percentage of time in general education dropped below 80% or higher level.

Some educators might argue that special education's increasing responsibility for instruction on all subjects matches what is to be expected when IEP teams determine that lower levels of general education access (i.e., Placement B) are "appropriate" for meeting a student's individual education needs. However, general educators are certified and qualified to provide instruction in grade-aligned subject areas, such as science and language arts, while special

educators are not required to have content certifications. Instead, general and special educators should collaborate to make the grade-aligned subject content and lessons accessible to all students (Ryndak et al., 2022). Our data suggest that students in Placement B infrequently experience the benefits of content expertise, thus missing the quality instruction associated with certified general educators. Lower levels of access to general education contexts, coupled with multi-grade classes in special education, might suggest that students' probability of experiencing FAPE is notably reduced in Placement B and largely nonexistent in Placement C.

Third, the primary finding regarding instructional materials was that both general and special educators of students in Placements B and C used materials that were mostly not grade-aligned. Consequently, it appears that curriculum content and instructional materials in Placements B and C closely resemble one another. In both placements, teachers reported that most students used materials from early childhood, preschool, or early grade levels, potentially reflecting educator perceptions of student incompetence and low expectations. To that point, educators reported selecting materials based on grade level for only about half the students in Placement A. The processes used for modifying grade-level material are well-established as sustainable and productive practices (Finnerty et al., 2019). Hence, we question why students who spend most of their day in general education contexts would have about a 50/50 chance of having their educational materials based on grade-level content. One possibility is that educators and curriculum developers define students' needs not in terms of learning the general curriculum to which access is mandated, but in terms of meeting "social needs."

Consistent with Jackson et al. (2022), our final major finding was that as placements became more restrictive, there was less reliance on grade-aligned general education curricula and more reliance on *special* curricula. We note two patterns, both matching the pattern related to

instructional materials. First, despite requiring a combination of general and special education contexts, Placement B bears more similarity to Placement C than it does to Placement A. Second, despite a greater reliance on general education contexts in Placement A, less than a third (31.4%) of teachers exclusively used the general education curriculum in planning for students' education. In fact, *special* curricula were still reported as the "primary curriculum" for some students in Placement A. Although some commercially developed curricula advertise alignment with grade-level standards, researchers have found little evidence to support such alignment (Taub et al., 2020). As with materials, evidence-based practices for accomplishing full alignment of students' educational learning opportunities with grade-level general education curricula exist. Ryndak et al. (2022) described a process of *research-based curriculum practice*, in which a local, grade-aligned general education curriculum is collaboratively examined by a team of special and general educators. Using basic principles of universal design for learning (UDL), this team can identify and teach learning objectives to facilitate access to and progress in grade-level content in general education contexts.

Federal law intends for students with disabilities to access the general education curriculum in general education contexts and to make progress in the general education curriculum (IDEA, 2004). Summarizing our results, and consistent with Jackson et al. (2022), the overall pattern across placements is that students in less restrictive placements have increased access to general education contexts and curricula. However, several caveats are supported by our results. First, Placement B, which is intended to facilitate students' access to general education contexts and curriculum, fails to achieve its purpose. Although additional research is required about this discrepancy, it appears that Placement B more closely resembles Placement C in its use of curriculum and instructional materials than Placement A.

Second, the expectation that there would be greater reliance on the general education curriculum and materials in Placement A was only partially realized. Placement A might increase the likelihood of a student's access to general education curriculum and contexts, but it in no way guarantees that increase. Students with complex support needs "included" in general education for most of the day may still be perceived by many IEP team members as having greater learning needs outside of the general education curriculum which take priority over access to general education content. A second possibility is that special and general educators may be coming out of teacher training programs unprepared to implement UDL and inclusive practices, operating instead from a remedial perspective when planning for these students. A third possibility lies with the impact of a restrictive placement culture, and the lack of administrative and leadership support (Turnbull & Turnbull, 2020). In such contexts, special and general educators may be encouraged to operate separately, with the medical model still strongly supported in today's schools concerning students with complex support needs (Agran et al., 2020). Many special educators of students with complex support needs may operate from a segregated context perspective because that is where most of their students have been placed (Giangreco, 2020). Hence, their vision, expectations of students, and instructional practices are biased in the direction of seeing students who rely on them in segregated contexts. This suggests that FAPE, especially concerning access to general education contexts and curriculum, is not being realized for most students with complex support needs within our nation's schools.

Implications

Too often, the word "environment" in LRE is operationalized as a place; that is, a percentage of time in general and special education contexts. The presumed logic of LRE is that the educational experiences in each placement option will prepare students to transition to less

restrictive placements and, ultimately, to Placement A. However, this is not what occurs because the experiences associated with being prepared for greater involvement in general education contexts and curriculum are not systematically provided and, most likely, cannot be provided in segregated contexts. Consistent with previous research (Jackson et al., 2022; Jameson et al., 2022), our results suggest that the further away students are from general education contexts, the less engagement they have with general education curriculum, educators, materials, and peers who could model the expectations of general education contexts. As a result, the “place” concept and its corresponding LRE implementation logic lead to placement stagnation (Morningstar et al., 2017; Williamson et al., 2019). Restrictive contexts become essentially activity centers for students with disabilities and lack the true mission of preparation for engagement in school-based and adult life. Hence, the current LRE implementation of “place” essentially perpetuates historical inequities of institutionalization rooted in our educational system (Lansey et al., 2023). The reality is that the array of context options specified in the LRE mandate is not a continuum at all; rather, it is a “fixed” system and a barrier to students’ general education experiences.

Although there are limitations to our study, the results add to decades of research supporting the value and benefits of general education contexts (e.g., Gee et al., 2020; Zagona et al., 2022). Expanding on findings from Jackson et al. (2022), our results suggest that if students with complex support needs are to have access to the general education curriculum, educators, materials, and peers they must receive services in general education contexts (i.e., Placement A). Changes in federal and state laws, regulations, and policies are critical in three areas to support this placement outcome. These areas are: (a) extending the definition of *placement* beyond a percentage of time in a context to include supports and services provided within general education contexts; (b) requiring access to state-adopted grade-level general education standards

during the instruction of students without disabilities within general education contexts; and (c) supporting the allocation of special education personnel to collaboratively co-plan, co-teach, and co-assess specially-designed instruction within general education contexts.

To accomplish this, we recommend that federal and state laws, regulations, and policies no longer support Placement C as a viable option to meet students' learning needs. If removal from Placement A is deemed necessary to better prepare a student who is having trouble adapting to classroom life and participation, then a working plan should be developed. This plan should include steps of re-entry that can be evaluated not only in terms of the student but also in terms of implementation by school personnel. The intent should always be students' speediest return to Placement A with supplementary supports as intended by the LRE process.

We propose shifting the measurement of LRE from a "percentage of time in general education" to a "process" with a more complex idea of how context, content, and instruction needs are addressed (Ryndak et al., 2013). Specifically, we propose an LRE process driven to maximize access to instruction on state-adopted grade-level general education standards within general education contexts and curriculum, and accountability for access to and progress in this curriculum. Standards define the knowledge, skills, and competencies that students should acquire, ensuring a consistent and rigorous education for all learners (Common Core State Standards Initiative, 2010). The adoption of general education standards as the foundation for accountability recognizes the importance of clear learning expectations for *all* students. In addition, shifting the focus from "place" to access and accountability would emphasize removing barriers and promoting individualized support and supplemental services in general education contexts. This approach recognizes that students have diverse support needs to acquire the content provided for all students and that appropriate accommodations, modifications, and

specially designed instruction should be provided to support their progress (IDEA, 2004).

To build the capacity to instruct students with complex support needs on grade-level general education standards within general education contexts, the role of educators must also shift. Teams of special and general educators, related services personnel, and others must collaborate in co-planning, co-teaching, and co-assessing specially designed instruction (Ryndak et al., 2022). When planning unit, weekly, and daily instruction education teams would begin by developing whole-class instruction that embodies the principles of UDL. Following, they would identify the “big ideas” being taught to the class and develop accommodations that support the engagement, representation, and action and expression of a student with complex support needs participating in the class-wide activities. Finally, they would facilitate students’ engagement in instruction by providing the necessary support and services (Taub et al., 2020).

A second change is related to the IEP process. IEP goals are often based on students' educational placements, with Placement A students having more grade-level academic goals than students in more restrictive placements who often have goals focused on developmental and functional skills (Kurth et al., 2021). Hence, there is a need for a reconceptualization of the IEP process to require goals related to: (a) grade-level general education standards, with supports and services to meet those goals within general education contexts; and (b) essential skills needed for sustaining or moving students into general education contexts, as well as back into the schools they would attend if they did not have disabilities. To ensure student participation in the general education curriculum, IEP goals must be based on grade-level general education standards, as well as specify the supports and services the student needs to meet those goals within general education contexts. Essential skills for engaging in instruction within general education contexts should be explicit in students’ IEP goals to ensure prioritization and success.

A third change is a clarification related to the appropriate use of commercially developed curricula. We strongly urge that commercially developed curricula are not used as primary curricula (Taub et al., 2020). They should only be used for materials and instructional ideas to supplement general education instruction in general education contexts, which is based on state-adopted general education standards. Other uses of commercially developed curricula have resulted in justification to segregate students with complex support needs in special education contexts (i.e., Placement B and C).

These three areas of change in federal and state laws, regulations, and policies would require intentional and coordinated sustainable systemic change efforts at the federal, state, district, and school levels. Though efforts for this type of systemic change have begun across state, district, and school levels (SWIFT, 2023; TIES National Technical Assistance Center for Inclusive Policies and Practices, 2023), federal laws, regulations, and policies have not been revised for almost 20 years (IDEA, 2004). As federal-level efforts are addressed, state departments of education would need to organize and facilitate changes in state regulations and policies. Additionally, states would need to support districts' efforts to engage in sustainable systemic change focused on including students with complex support needs as full citizens in the schools and general education contexts they would attend if they did not have disabilities.

Limitations

We recognized that our data set represents a particular slice of three of the array of placement options used in schools, and we cannot be certain whether a sample more representative of placement demographics would yield the same results. For example, student representation in our sample is greater for Placement A, when most students with complex support needs served in public schools are in Placement C (Morningstar et al., 2017).

The COVID pandemic stopped us from collecting a second round of data in the spring, which might have told a different story about what students were experiencing across placements. Moreover, gathering school-level data was cut short by the pandemic, resulting in only a 54% representation of the schools attended by these students. Nevertheless, as noted by Jackson et al. (2022), a sample of this size and its regional representation provides a sound base to begin exploring characteristics and differences in educational services across placement options. Further, our study examines questions about how the three placement options provide general education access that have not been addressed adequately in previous studies.

Another limitation is that we did not apply significance testing. We chose to make this paper an extension of the Jackson et al. (2022) paper by using the same data set and descriptive-analytical approach. Again, because our sample is relatively large and regionally dispersed, these data provide a starting point for showing important differences in the educational opportunities provided to students across placement options. We recommend that future researchers formulate questions based on the differences we found in relative frequencies.

Finally, we acknowledge four other limitations related to the data collection instruments and the data collected and analyzed. First, the survey instruments' items often addressed what teachers perceived as occurring, but seldom addressed the question of "why." Hence, we do not know what teachers would have said if asked, "Why are services in X placement configured in this manner"? We might have learned of local situational factors that are important for understanding our results. Second, we did not collect data on educators' experiences in supporting students with complex support needs or training in inclusive education. Teacher preparation varies across states likely resulting in educators having different credential requirements and experiences. Future research should explore the relationship between teacher

preparation, teacher competence, and student learning. Third, we did not have external corroboration through multiple data sources, such as classroom observations (e.g., Zagona et al., 2022), in this analysis. Although our results are consistent with Jackson et al. (2022) and results from the larger study (Jameson et al. 2022; Zagona et al., 2022), we did not analyze multiple sources of data to substantiate what teachers reported was the same as what an outsider might have seen. Fourth and lastly, we did not collect data from parents or students, which might have given us other perspectives on context, curriculum, and instruction issues that we addressed.

Conclusion

The LRE mandate and its continuum of placements are predicated on the assumption that students will progressively transition from restrictive to less restrictive contexts. Further, each placement option will provide students with the tools and skills needed to succeed in less restrictive contexts and, ultimately, in Placement A. Relatedly, the intent of this study was two-fold. First, we sought to better understand the quality of instruction delivered and the curriculum used for students with complex support needs across Placements A, B, and C. Second, we wished to determine what functional role Placement B served. Does Placement B tend to provide students with educational experiences resembling those in Placement A or C?

Regarding the first purpose, it was discouraging to learn that the more restrictive the context, the less often students were given access to the general education curriculum, and the less often they were taught using grade-aligned instructional materials. Segregated contexts also served students in multi-grade contexts, and with minimal, if any, access to general education content experts. These results supported and expanded those of Jackson et al. (2022), the latter showing that students served in less restrictive contexts had greater access to the general education curriculum, spent more time doing academic coursework, and received more support

from general educators. Regarding the second purpose, Placement B by and large provided students with educational experiences that resembled those in Placement C. Placement B appeared to function more as a continuation of the limited experiences students received in Placement C, rather than a placement option designed to prepare students for Placement A. For most of the variables analyzed, from grade-level general education instructional materials, to access to the general education curriculum and academic content experts, to whether students are educated in single or multi-grade contexts, the data strongly suggest that Placement B appears to offer experiences that are more closely aligned to Placement C than with Placement A.

The principal aim of the federal grant of which this study was a product was to determine if there were contextual factors across the array of placement options, independent of students' capacity and specific learning needs, that would predispose a student to a less or more quality educational experience. The results presented in this study, as did the results in Jackson et al. (2022), suggested that there were differences in the quality and value of educational experiences that students receive across placement options. Less restrictive contexts – specifically, Placement A – have the greatest potential to follow best practices and provide students with complex support needs with educational experiences similar to those of students without disabilities. In contrast, more restrictive contexts – specifically Placements B and C – minimize access to grade-level general education curriculum, minimize instruction in general education academic content, and debilitate students' progress toward placement in general education contexts. We hope that our results will inform IEP team members and partners about the particularities of specific placement options, and how “placement” in and of itself impacts students' experiences. We also hope that these results will facilitate meaningful change in federal and state laws, regulations, and policies, as well as the services provided to students with complex support needs.

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Table 1*Student Demographic Data by Educational Placement*

	Placement A		Placement B		Placement C	
	N	%	N	%	N	%
Grade						
K	7	20	2	5.9	3	10.3
1	7	20	6	17.6	5	17.2
2	4	11.4	4	11.8	1	3.4
3	6	17.1	10	29.4	5	17.2
4	5	14.3	3	8.8	5	17.2
5	4	11.4	4	11.8	6	20.7
6	2	5.7	5	14.7	4	13.8
Disability Label(s)^a						
Autism Spectrum Disorder	11	31.4	11	32.4	5	17.2
Intellectual Disability	9	25.7	9	26.5	9	31
Multiple Disabilities	5	14.3	7	20.6	10	34.5
Developmental Disability	5	14.3	2	5.9	3	10.3
Other Health Impairment	5	14.3	5	14.7	2	6.9
Speech Language Impairment	1	2.9	4	11.8	1	3.4
Hearing Impairment	0	0	1	2.9	0	0
Gender						
Female	17	48.6	11	32.4	15	51.7
Male	18	51.4	23	67.6	14	48.3
Race^b						
White	26	78.8	25	75.8	21	84
Black or African American	3	9.1	2	6.1	2	8
American Indian or Alaska Native	1	3	1	3	0	0
Asian	1	3	2	6.1	1	4
Native Hawaiian or Pacific Islander	0	0	0	0	1	4
Multiracial	2	6.1	3	9.1	0	0
Ethnicity^b						
Hispanic or Latinx	4	12.5	3	9.4	7	26.9
Not Hispanic or Latinx	28	87.5	29	90.6	19	73.1
Total	35		34		29	

Note. Percentages are out of the total number of applicable students in a placement. ^aDisability Label(s) may include multiple responses per student; each percentage is out of the total number of students in a placement. ^bMissing Race and Ethnicity data are not included.

Table 2*Summary of Classroom Survey Results*

	Placement A				Placement B			
	Special Educator		General Educator		Special Educator		General Educator	
	N	%	N	%	N	%	N	%
Subjects Taught to Participating Student								
Language Arts	10	100	10	100	17	100	12	70.6
Math	10	100	10	100	16	94.1	8	47.1
Science	0	0	8	80	7	41.2	10	58.8
Social Studies	1	10	9	90	8	47.1	10	58.8
Electives	0	0	8	80	2	11.8	0	0
Functional, Social, Behavior, or Communication Skills	6	60	1	10	1	5.9	0	0
Other	0	0	0	0	0	0	3	17.6
Total number of teachers	10		10		17		17	

Note. Each percentage is out of the total number of special or general education teachers in a placement. Electives include physical education, art, and music.

Table 3*Summary of Student Survey Results*

	Placement A		Placement B		Placement C	
	N	%	N	%	N	%
Selection of Materials for Academic Instruction						
Academic materials are not used	0	0	0	0	4	13.8
Based on early childhood/preschool children	1	2.9	5	16.1	5	17.2
Based on, or the same as, earlier grade-level materials	7	20.0	14	41.2	15	51.7
Based on remedial curriculum materials	9	25.7	9	26.5	5	17.2
Based on the student's age and grade level with or without modifications	18	51.4	6	17.6	0	0
Curriculum Content						
Used special curricula or teacher-selected activities	24	68.6	31	91.2	29	100
Only used adapted general education curriculum	11	31.4	3	8.8	0	0
Total number of students	35	100	34	100	29	100
Purpose of Special Curricula^a						
Used for materials and ideas	17	33.3	6	9.1	35	40.7
Used as a primary curriculum source	15	29.4	33	50	14	16.3
Used to supplement special education curriculum	7	13.7	12	18.2	28	32.6
Used to supplement general education curriculum	12	23.5	15	22.7	9	10.5
Total number of reported purposes	51	100	66	100	86	100
Commercially Developed Curricula						
Total number of commercially developed curricula reported	19		19		18	
Mean number of commercially developed curricula per student	0.54		0.56		0.62	

Note. ^aMay include multiple responses per student; each percentage is out of the total number of reported purposes of special curricula used in a placement.