Intellectual and Developmental Disabilities Instructional Content and Self-Determination in IEP Annual Goals for Students with Extensive Support Needs --Manuscript Draft--

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Abstract:	Under the Individuals with Disabilities Education Act (IDEA, 2004), annual Individualized Education Program (IEP) goals are required to enable students with disabilities to be involved in and make progress in the general education curriculum and to address other educational needs. This study reports findings from a content analysis of the annual goals in 88 IEPs for K-12 students with extensive support needs. Results reflect a lack of comprehensive academic content goals to promote involvement and progress in the general education curriculum, and limited opportunities for students to develop skills associated with self-determination. Findings also show a focus within goals on student compliance rather than the development of meaningful skills and knowledge. Implications for research and practice are provided.	

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Abstract

Under the Individuals with Disabilities Education Act (IDEA, 2004), Individualized Education Program (IEP) annual goals are required to enable students with disabilities to be involved in and make progress in the general education curriculum and to address other educational needs. This study reports findings from a content analysis of the annual goals in 88 IEPs for K-12 students with extensive support needs. Results reflect a lack of comprehensive academic content goals to promote involvement and progress in the general education curriculum, and limited opportunities for students to develop skills associated with selfdetermination. Findings also show a focus within goals on student compliance rather than the development of meaningful skills and knowledge. Implications for research and practice are provided.

Keywords: annual goals, Individualized Education Programs, self-determination, extensive support needs

Instructional Content and Self-Determination in IEP Annual Goals for Students with Extensive Support Needs

Under the Every Student Succeeds Act (ESSA, 2015), schools are required to promote high standards for all students, demonstrated in the emphasis on standards, assessments, and outcomes, with the ultimate goal of enabling students to achieve post-school success in higher education, employment, and beyond. A critical question to examine, then, is the focus of educational programming for students with extensive support needs. Students with extensive support needs are students who require ongoing pervasive supports across multiple life domains and are typically served under the educational classification of intellectual disability, autism, or multiple disabilities (Taub et al., 2017). In the unanimous decision in Endrew F. v. Douglas County School District RE-1 (2017; referred to as Endrew henceforth), the Supreme Court ruled that Endrew, a student with autism, was entitled to an educational program calculated to make progress appropriate considering his circumstances, rather than the previous standard of "merely more than de minimis" educational benefit. The Court additionally stated, "Every child should have the chance to meet challenging objectives." Following Endrew, the U. S. Department of Education (2017) emphasized that Individualized Education Programs (IEPs) function to provide meaningful opportunities for a student to make progress through appropriate academic and functional achievement. In this study, we examine the focus on instructional content and selfdetermination in IEP annual goals of students with extensive support needs, given the increased attention on robust educational programming for students with disabilities, including students with extensive support needs, in the wake of *Endrew*.

IEPs and Measurable Annual Goals

The IEP is fundamental to the educational experience for all students with disabilities,

including those with extensive support needs, with measurable annual goals as the keystone of the program (Yudin & Musgrove, 2015). The IEP must include measurable annual goals (both academic and functional) to enable the student to be involved in and make progress in the general education curriculum and meet other educational needs of the student resulting from their disability (20 U.S.C. § 1414[d][1][A][i][II]). In an analysis of the Supreme Court's decision in *Endrew*, Turnbull et al. (2018) emphasized that special education, related services, and supplementary aids and services must be based on peer-reviewed research to the extent practicable. The IEP team, including the student, family members, and school professionals, can develop IEP goals to address both standards-based academics and quality of life outcomes for students with extensive support needs tailored to students' individual needs (Hunt et al., 2012). IEP goals generally do not detail the process for instruction, but rather address the expectations of the IEP team for the student while, ideally, centering the student's voice (Goran et al., 2021).

Research continues to show that students with extensive support needs can learn core academic content (Hudson et al., 2018; Hunt et al., 2020; Kuntz & Carter, 2019); however, analyses of IEPs for students with extensive support needs consistently show goals not linked to academic standards or targeting non-functional skills. Kurth and Mastergeorge (2010) analyzed the IEP goals of students with autism ages 12 to 16 and found all students in the sample had goals derived from kindergarten through fourth-grade standards. Furthermore, students in general education settings for math and language arts had higher-quality goals (i.e., applied skill development) while students in segregated settings had lower-quality goals (i.e., rote and procedural skills). In another study, Ruble et al. (2011) found goals for a sample of young students with autism did not reflect or only partly reflected links to state academic standards. Similarly, LaSalle et al. (2013) examined IEPs of elementary and middle school students and found fewer academic-focused goals for students in middle school than for those in elementary school (LaSalle et al., 2013). In a review spanning from 1996 to 2010, Shurr and Bouck (2013) noted that only recently has there been a shift toward academic goals for students with extensive support needs, which we expand upon here.

Involvement and Progress in the General Education Curriculum

Prioritizing access to the general education curriculum for students with disabilities does not mean abandoning instruction to meet students' individualized needs (e.g., self-determination, community participation, communication, social, and personal care skills), but rather providing equitable educational opportunities based upon high expectations for all students (Browder et al., 2007; Westling et al., 2021). Taub et al. (2017) **outlined** the many barriers to opportunities to learn grade-level standards-aligned content for students with extensive support needs and note the critical role of high expectations. The authors **emphasized** the importance of designing instruction and supports based on "(a) universal design for learning (UDL) principles, (b) ecologically identified individualized content embedded within the elements of OTL [opportunities to learn], and (c) supports and materials that enable students to fully and actively participate and make progress in the intended curriculum across the school day" (p. 129). In short, high expectations and meaningful opportunities to learn are essential for a more than *de minimis* educational benefit, as called for in *Endrew* (2017).

Self-Determination

Teaching grade-level content linked to the general education curriculum in inclusive settings to students with extensive support needs is essential to provide students with equitable opportunities to enhance their self-determination (Browder et al., 2007; Hughes et al., 2013). Self-determination is "a dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined people (i.e., causal agents) act in service to freely chosen goals" (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015, p. 258). Promoting skills associated with self-determination (i.e., choice-making, decision-making, problem solving, goal setting and attainment, planning, self-management, self-advocacy, self-awareness, and self-knowledge) leads to enhanced academic outcomes (e.g., Shogren et al., 2012) and post-school employment outcomes (e.g., Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015) for students with extensive support needs. Research shows students with extensive support needs who experience more opportunity for inclusion in their school and community also report significantly greater use of skills associated with self-determination (Hughes et al., 2013).

Learning opportunities to develop self-determination through educational experiences and interactions with peers are essential for students with extensive support needs. Furthermore, students learn their preferences and interests by exploring new concepts and learning new information during robust academic activities (Browder et al., 2007). Two ways in which IDEA (2004) incorporates self-determination in the IEP process are through requirements for (a) student involvement on the IEP team whenever appropriate (20 U.S.C. § 1414[d][1][B][vii]), and (b) consideration of students' strengths, interests, and preferences during transition planning (20 U.S.C. § 1401[34][B]). A strong body of research supports and describes involvement in the IEP process for students with extensive support needs (e.g., Cease-Cook et al., 2013; Diegelmann & Test, 2018), although researchers note that more work is needed with this population (Sanderson & Goldman, 2020). Research has also shown the positive relationship between selfdetermination and transition planning for students with extensive support needs (e.g., Seong et al., 2015; Wehmeyer et al., 2007), and a body of research supports interventions such as the *Self-Determined Learning Model of Instruction* to promote self-determination with transition-age youth with disabilities (e.g., Burke, Shogren et al., 2020; Shogren et al., 2020). Including selfdetermination and associated skills within students' annual goals can also ensure it as a focus of educational programming for students with extensive support needs, a concern noted in calls to action for promoting self-determination within school-wide models (Raley et al., 2022).

Purpose

The Endrew decision (2017) established that:

Every child should have the chance to meet challenging objectives... It cannot be right that the IDEA generally contemplates grade-level advancement for children with disabilities who are fully integrated in the regular classroom, but is satisfied with barely more than *de minimis* progress for children who are not. (pp. 9-15)

Under IDEA, IEP teams must design annual goals to meet the needs of the student resulting from their disability and to enable them to be involved in and make progress in the general education curriculum. Thus, we sought to examine the present state of IEP goals for students with extensive support needs. The purpose of this study was to examine the content of goals, including instructional domains and skills associated with self-determination. We addressed the following primary research questions:

- 1. What instructional domains are addressed in the IEP goals of students with extensive support needs?
- 2. What skills associated with self-determination (i.e., choice-making, decision-making, problem solving, goal setting and attainment, planning, self-management, self-advocacy, self-awareness, and self-knowledge) are addressed in the IEP goals of students with extensive support needs?

Method

Participants

A total of 41teachers in six states who worked with students with extensive support needs in grades K-12 provided one to three de-identified IEPs to members of the research team following university-approved human subjects procedures. Members of the research team were instructors of graduate-level special education courses for participating teachers. The first, fourth, and fifth authors of this study were doctoral students in special education at the time it was conducted. The second, third, and sixth authors are special education researchers with terminal degrees. The 88 IEPs in this analysis are part of a series of studies on IEP content for students with extensive support needs (Kurth, Ruppar, McQueston, et al., 2019; Kurth, Ruppar, Toews, et al., 2019). Teachers concealed student, family, and teacher names, student identification numbers, family contact information (i.e., phone number and address), and school information (i.e., school name, address, and phone number) with marker or white-out prior to providing them to the research team. Inclusion criteria for IEPs were as follows: (a) the IEP was for a student in grades K through 12, and (b) the IEP was for a student with extensive support needs (i.e., the 1% of students with significant cognitive disability typically serviced under the eligibility classifications of intellectual disability, autism, or multiple disabilities who are eligible for the alternate assessment). In a prior analysis of the same sample of IEPs, Kurth, Ruppar, McQueston, et al. (2019) reviewed students' present levels of academic and functional performance to verify the student met the criteria for extensive support needs, and we adopted the results of their review for inclusion in this analysis. In some cases, this included students with primary disability labels not typically associated with extensive support needs, such as one student with a primary classification of "other health impairment" but who had extensive medical support needs, used a speech-generating device, had intellectual disability, and impaired

vision.

Students ranged in age from 5 to 18 with a mean age of 10.9, across grades K through 12. Information on age was not available for one student as this information was redacted during deidentification. Over half of students (n = 46) were in elementary grades (K-5), with 20 students in middle school (6-8), and 12 students in high school (9-12). Grade band information was not available for 10 students due to information redacted during de-identification. There were 63 male students and 25 female students. The most common primary disability category was autism (n = 32), followed by intellectual disability (n = 18). Other disability categories included multiple disabilities (n = 7), other health impairment (n = 6), orthopedic impairment (n = 6), developmental delay (n = 4), speech language disorder (n = 3), emotional behavior disorder (n = 4)2), hearing impairment (n = 1), and deaf-blindness (n = 1); eight IEPs did not contain information on the primary disability category, although sufficient information was provided in the present levels of academic and functional performance to verify they met criteria for inclusion in the study. Forty-six students were identified as having complex communication needs (with this information not reported for one student), defined as significant difficulties producing natural speech to express daily communication needs (Beukelman & Miranda, 2013). Lastly, 32 students had behavior support plans. Information on race/ethnicity was not available (see Limitations).

Setting

The analysis included 88 IEPs for geographically diverse students in six different states from three regions of the United States: West (n = 6 IEPs), Midwest (n = 79 IEPs), and East (n = 3 IEPs). The IEPs included educational placement information for 81 students. We used setting categories from IDEA Section 618, Part B to describe and classify placements. The most common placement category was separate, with 38 students spending less than 40% of the school day in the general education setting. Twenty-four students spent 80% or more of the school day in the general education setting, and 19 students spent 41% to 79% of the school day in the general education setting. Researchers previously analyzed the least restrictive environment (LRE) statements for this sample of IEPs (Kurth, Ruppar, Toews, et al., 2019).

Procedures

Given the focus on understanding IEP annual goals for students with extensive support needs, we examined each de-identified IEP for information pertaining to personal factors (e.g., age, gender) and annual goals. Demographic information was generally available on the eligibility page(s), although in a few instances we referred to the present level of performance pages for age or grade information. We examined and coded the annual goals section of each IEP, described in the following section. We did not analyze short-term objectives unless the IEP goal was phrased to be non-specific without them (e.g., "[The student] will improve his reading skills so that he will meet the following objectives..."). In these instances, the objectives were included in the analysis as part of the text of the goal (n = 58 goals). Under IDEA, a description of short-term objectives (or benchmarks) are required with the statement of measurable annual goals for students who take alternate assessments.

Data analysis. Demographic information from all IEPs was available in a spreadsheet from the analysis by Kurth, Ruppar, McQueston, et al. (2019), and the first author cross-checked this data for each IEP. We used a directed approach to content analysis to examine the goal content (Hsieh & Shannon, 2005). The first and second authors agreed on initial themes for codes based on prior research, which included instructional domains (e.g., reading, math, writing, vocational/employment) and skills associated with self-determination (as articulated in Causal Agency Theory; Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015). Next, the first author read each IEP, applying the initial codes to the annual goals. An additional category was added as new insights emerged from coding, which was whether the goal only required student compliance (including goals only requiring students to imitate actions). The first and second authors met throughout the process to discuss agreements and disagreements about codes and operational definitions until we established a final codebook.

The final codebook included 10 categories for the primary instructional domain of each goal: (a) reading, (b) math, (c) writing, (d) science, (e) social studies, (f) social skills and communication, (g) functional or daily living skills, (h) motor skills, (i) behavior, and (j) vocational or employment. See Table 1 for operational definitions. Social skills and communication were grouped together because of the frequent combination of these labels for goals (i.e., "social/communication," "social communication"; see Limitations). We also coded how frequently both reading and math goals were present, as these two content areas are the federal requirements for annual statewide assessments under ESSA (2015). Additionally, the first author dichotomously coded all goals based on whether the goal addressed skills associated with self-determination ('0' for no, '1' for yes), using a set of keywords and an operational definition for each skill associated with self-determination (Shogren et al., 2019; see Table 2). For goals coded as '1', the first author assigned a numerical code for the primary skill addressed from the following list: (a) choice-making, (b) decision-making, (c) problem-solving, (d) goal setting and attainment, (e) planning, (f) self-management and self-regulation, (g) self-advocacy, and (h) selfawareness and self-knowledge.

The first author also applied a dichotomous code to each goal based on whether the goal required only compliance for the student to attain it successfully ('0' for no, '1' for yes).

Compliance was defined as complying or responding to a directive from another person (including imitation or copying). Goals were coded with a '1' for both compliance and imitation if the student only needed to imitate or copy an action to attain the goal successfully.

Inter-rater reliability (IRR) was based on the percentage of agreement across all ratings (dividing the number of agreements by the sum of the total number of ratings, then multiplying the number by 100). The first author trained the fourth author on the codebook by reviewing all categories and definitions with examples from IEPs in the sample not designated for IRR. The fourth author coded 19 of the 88 IEPs (21.6%), and overall IRR was 88.1%. IRR for individual variables was as follows: primary instructional domain – 85.4%, addresses skill associated with self-determination – 87.5%, specific skill associated with self-determination – 90%, compliance – 80.2%, and imitation – 99.0%. To achieve consensus, the second author reviewed the disagreements with the first and fourth authors and reached a final decision for each rating. Lastly, the first author reviewed coding for the remaining 69 IEPs and revised nine ratings to align with the final decisions made during the IRR process to ensure consistency in all coding.

Results

The 88 IEPs in this sample contained a total of 479 annual goals. The number of goals in each IEP ranged from 2 to 12, with an average of 5.4 goals per IEP.

Instructional Domains

The primary instructional domain of goals in order of frequency was social skills and communication (n = 143; 29.9%), reading (n = 75; 15.7%), math (n = 67; 14.0%), behavior (n = 52; 10.9%), motor skills (n = 43; 9.0%), writing (n = 41; 8.6%), functional or daily living skills (n = 36; 7.5%), vocational or employment (n = 21; 4.4%), and social studies (n = 1; 0.2%). No IEPs included goals related to science. Figure 1 contains information on the number of IEPs with

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one or more goal for each instructional domain and skill associated with self-determination. Only 51 IEPs (58.0%) included both a reading and a math goal. Furthermore, 19 IEPs (21.6%) did not include either a reading or a math goal.

Social skills and communication. There were 143 social skills and communication goals, of which 43 were designated as speech and language therapy. This was the most common instructional domain, making up 29.9% of all goals. Seventy-five of the 88 IEPs (85.2%) had at least one social skills and communication goal. Most goals focused on speech production and expressive and receptive language comprehension. Several goals targeted the student expressing their wants and needs or asking for help. Thirty-one goals addressed peer interactions (e.g., "ask questions to gain information from peers/adults," "participate in a social activity with his peers by interacting during an activity or game without refusal or aggression"), although no goals specified the location (i.e., segregated settings or general education environments), nor did any specify whether social interactions included peers with and without disabilities.

Reading. There were 75 reading goals across IEPs, comprising 15.7% of all goals. A total of 62 IEPs (70.5%) included one or more reading goals, while 26 IEPs did not include any reading goals. Reading comprehension goals were the most common (n = 25), while 23 goals incorporated multiple skill components, such as decoding and comprehension. Typical reading goals about phonics (n = 7) included identifying "all 26 upper and lowercase letters and the phonetic sounds associated with them" (a goal for a 9-year-old student). Goals for reading fluency (n = 5) included a targeted number of words read per minute. In several instances, IEPs had nearly identical reading goals, such as "[The student] will match 10 functional sight words to pictures" for two 5-year-old students. In one case, four IEPs for students ages 14 to 17 had the same goal, although there were variations in the criteria for attainment (e.g., 80% for one student,

90% for another student): "When presented with text at an instructional level, [the student] will independently read and answer comprehension questions related to the setting, character, and themes or central idea." Additionally, a number of goals displayed limited alignment to educational standards. The reading goal for one 12-year-old student in the sample was, "[The student] will improve her reading skills by identifying her nickname with 90% accuracy and spelling her nickname by matching 4 out of 4 letters..."

Math. There were 67 math goals (14.0%), and 58 IEPs (65.9%) had one or more math goals, while 30 IEPs had no math goals. The most common topics were operations (including equations and word problems; n = 20) and money (n = 16). Several goals (n = 4) included targeted attainment of a specified score on a curriculum-based measure (CBM) without providing information about the skills required or the meaning of the score. For example, "[The student] will score a 155 on the third grade Concepts and Applications curriculum based [*sic*] measure." CBM goals were often vague, such as "increased understanding of sixth grade math problems with modifications to the proficiency of a 2." As with reading goals, several students had identical or nearly identical math goals with only small differences in phrasing or criteria.

Behavior. There were 52 behavior goals (10.9%), and almost half of IEPs (n = 39; 44.3%) had at least one behavior goal. We categorized several goals that had been identified by IEP teams as reading, writing, or math goals as behavior goals because they did not incorporate skill development, but rather required the student to stay on-task (e.g., "attend to a math activity task for up to 15 minutes"). Most behavior goals (n = 30) concentrated on classroom and school behaviors like staying on-task with assignments or activities and transitioning between school environments. Other goals addressed following directions, emotional regulation, or multiple components. Negatively worded goals were common, with phrases such as "limit meltdowns,"

"refrain from using physical force against peers or staff," and "reduce engaging in unexpected behaviors (inappropriate vocalizations, property destruction, and elopement)".

Several goals across IEPs had unclear alignment with grade-level priorities for behavioral expectations and/or utilized negative framing as opposed to strengths-based language:

- A behavior goal for one 12-year-old student was, "With no more than one prompt each, [the student] will follow the one-step directions outlined in the benchmarks below: by the end of the 4th quarter, 2015-16, [the student] will look at the person calling her name in the natural classroom environment. By the end of the 1st quarter, 2016-17, [the student] will 'stop' when asked. By the end of the 2nd quarter, 2016-17, [the student] will come when called from greater and greater distances, up to 9 feet. By the end of the 3rd quarter, 2016-17, [the student] will transition to a designated location within the classroom."
- An 8-year-old student had the following behavior goal: "Within the IEP year, when demonstrating compliance and safe behavior, [the student] will gain access to general education peers an average of 250 minutes per day."
- Lastly, the following behavior goal was for a 7-year-old student: "By January [the student]'s class will need to be evacuated <= [sic] to 1 time per 6 weeks due to his disruptive behavior."

Motor skills. A total of 41 goals met these criteria, of which 9 were labeled as physical therapy and 5 were labeled as occupational therapy. Several students had motor skills goals that were unclear in their relation to educational standards (such as physical education or adaptive physical education) and/or emphasized one-on-one adult-student interaction as opposed to peer engagement opportunities (e.g., "dribble independently with control for 6 consecutive dribbles, tap a balloon in the air 5 times independently and 10 times back and forth with an adult, and

using a short handled [sic] implement to strike a balloon or ball in the air 3 consecutive times").

Writing. Writing goals (n = 41) made up 8.6% of all goals, and 36 IEPs (40.9%) had at least one writing goal. Most writing goals (n = 14) had a focus on composition, such as this goal for a 12-year-old student: "[The student] will write 2-3 [sic] sentences about one topic 50% of the time." Fourteen of the writing goals pertained to handwriting, with students "copying" or "imitating" words or sentences for six of these goals. The function of several handwriting goals appeared to be fine motor skills, with criteria such as "will write within 1/16' [sic] of the baseline." Multi-skill goals (e.g., incorporating mechanics and composition) comprised nine of the writing goals. Many writing goals were more functional than academic, such as handwriting goals for students to write personal information, with one goal requiring a 14-year-old student to write their "personal information (name, address, phone #, age, birthday, and shoe size)."

Functional or daily living skills. A total of 36 goals (7.5%) across 31 IEPs (35.2%) were classified in this domain, including six goals labeled in the IEP as occupational therapy. Self-care or self-help goals, with the aim of supporting students to "don/doff coat," "brush hair, brush teeth," or "complete the process of using the bathroom and washing hands," were the most common (n = 10). Goals also focused on daily living skills, such as writing checks and balancing a checkbook register, and carrying a school identification card more regularly.

Vocational or employment. There were 21 vocational/employment goals (4.4%) across 20 IEPs (22.7%), including three goals labeled as occupational therapy on the IEP. The ages of students whose IEPs included one or more vocational or employment goal ranged from 10 to 18. The goal for one 10-year-old student was described as "pre-vocational" in the goal description and involved the student completing (unspecified) school jobs. Five students of all students ages 16 to 21 in the sample did not have an employment or vocational goal; under IDEA (2004),

students ages 16 and older are required to have a transition plan, with goals related to post-school education, employment and adult living (20 U.S.C. § 1414[d][1][A][i][VIII]).

Only four goals included elements of career exploration or job search skills (e.g., developing a resume, interviewing), while 16 vocational/employment goals focused solely on task completion. Many students had the same vocational/employment goals, with four sets of two or three students with identical goals. One such duplicate goal was, "When presented with a 4 step [sic] novel task/workbox and a visual strip, [the student] will independently complete all the steps in the task/workboxes." Only one student had a goal for specific job skills, which included "delivering newspapers, recycling, wiping table [sic], and/or can crushing." This goal, however, was labeled on the IEP as addressing math standards, specifically the number system, rather than as a vocational or employment goal.

Social studies. Only one goal (0.2%) focused on this domain, as a goal for a 7-year-old student to complete five tasks: placing events on a timeline, describing laws, rules, and communities, selecting and using resources to state facts about science and social studies units, recognizing and stating their home address, and stating the current month and year. While this goal was labeled as a "science/social studies" goal on the IEP, we classified it as social studies because that was the primary topic of the content.

Goal Components

Skills associated with self-determination. A total of 69 goals (14.4%) addressed skills associated with self-determination across 52 IEPs (59.1%). Self-advocacy was incorporated most often into goals (n = 34; 7.1%), followed by problem-solving (n = 15; 3.1%), choice-making (n = 12; 2.5%), self-awareness and self-knowledge (n = 4; 0.8%), and self-management and self-regulation (n = 4; 0.8%). No goals addressed decision-making, goal setting and attainment, or

planning. Figure 1 shows the number of IEPs with one or more goal for each skill.

Almost all goals including self-advocacy centered around social and communication skills, such as asking for help, communicating wants, needs, and preferences, and making requests. Most goals addressing problem-solving focused on academic content (e.g., "solve problems presented in graphs, tables and charts," "solve one-step, real world addition and subtraction problems"). Several social and communication goals (n = 6) included choice-making, such as choosing and requesting a preferred object. Nine behavior goals incorporated skills associated with self-determination, most often self-management and self-regulation (n = 4). An example of a goal including self-management and self-regulation was for a student to "increase self-monitoring of his shout-outs."

Compliance. Ninety-eight goals (20.5%) required only compliance for the student to meet expectations. Several goals focused on following "commands" or "demands," generally without a specified purpose. For example, "By the end of the IEP year, [the student] will follow 4 different directions on command (stop, sit, come here, stand up, etc.) without physical or visual cues." Another goal stated, "[The student] will be able to maintain his progress in following through with a demand with no more than 1 incident of physical aggression per day."

Within goals categorized as compliance, 17 goals had student imitation (i.e., the student only imitates or copies an action shown by someone else) as criteria. Some imitation goals included specific speech skills; for instance, "imitating vocal consonant-vowel (CV) or vowel-consonant (VC) combinations." Other imitation goals included copying writing from a visual or imitating functional skills. One such goal was, "When shown an action with an object (e.g., putting on deodorant), [the student] will imitate that action on demand, with 90% accuracy."

Discussion

The purpose of this study was to analyze the content (i.e., instructional domains and skills associated with self-determination) of IEP annual goals for a sample of students with extensive support needs. Overall, results show social skills and communication goals were the most common (29.9% of all goals), and 21.6% of IEPs did not have a goal for either primary content area of reading or math. Other findings include the low frequency of goals incorporating skills associated with self-determination (14.4%) and a subset of goals emphasizing student compliance (20.5%). These findings reflect ongoing concern about both goal content (i.e., insufficient number of IEPs with goals linked to grade-level, general education curriculum) and focus and language (i.e., overemphasis on compliance and common use of negatively worded goals). As federally mandated and continually emphasized by leaders in the special education field, family advocates, and students, IEP goal development must begin from a place of high expectations for all students, including those with extensive support needs (U.S. Department of Education, 2015). Furthermore, the IEP must include measurable annual goals (both academic and functional) to enable the student to be involved in and make progress in the general education curriculum and meet other educational needs of the student resulting from their disability (20 U.S.C. § 1414[d][1][A][i][II]).

The present findings lead to concerns about both the focus and language of goals in the sample, suggesting ongoing issues with a lack of focus on challenging, as well as meaningful, goals. Instead of framing a goal around class "evacuations" due to a student's behavior or around a student following directions "on command (stop, sit, come here, stand up, etc.)," educators can reflect high expectations for students by developing goals for students that leverage their strengths and enable them to pursue their hopes for the future. Additionally, care must be taken to avoid stigmatizing students when functional skills related to their individualized needs are

taught. For example, the goal, "When shown an action with an object (e.g., putting on deodorant), [the student] will imitate that action on demand, with 90% accuracy" may be reframed with consideration for natural opportunities and context for personal care.

Furthermore, 19 IEPs in this sample did not include annual goals for either of the two major academic content areas of reading and math addressed in annual state assessments (ESSA, 2015). Only one IEP had a goal for either social studies or science. Most students in this sample (n = 57; 64.8%) spend less than 80% of the day in the general education classroom, and research has shown significant differences in educational programs for students in inclusive versus non-inclusive settings (Kurth & Mastergeorge, 2010). The segregated placements of students in this sample may interact with the content of their IEP goals, resulting in educational programs not well aligned with IDEA's mandate of involvement and progress in the general education curriculum, although more research is needed. In the following sections, we explore implications for research and practice based on the results of this study.

Implications for Practice

Students with extensive support needs continue to lag behind peers with and without disabilities in post-school outcomes, such as enrollment in postsecondary education programs, employment, and community living (Shogren & Plotner, 2012), underscoring that changes are needed to educational practices for supporting this population. In the unanimous ruling in *Endrew* (2017), the Supreme Court stated that while "goals may differ... every child should have the chance to meet challenging objectives." To provide a free and appropriate public education, schools must enable each student to be involved in and make progress in the general education curriculum, reflected in IEP goals linked to grade-level standards and incorporating robust content. Similar to the findings of Kurth and Mastergeorge (2010) in an examination of IEP

goals for student with autism, the largest percentage of goals in this analysis were social and communication. Instruction on social and communication skills is undoubtedly critical for students with extensive support needs, but does not supersede the need for robust academic instruction linked to grade-level standards. The IEPs in this sample included 143 social skills and communication goals, while there were only 75 reading goals, 67 math goals, 41 writing goals, 1 social studies goal, and no science goals. Three recommendations on how to enhance IEP goals for students with extensive support needs are outlined below.

First, results reflect the need for enhanced teacher training for IEP goal development, particularly for students with extensive support needs, and accountability in schools for the content of IEP goals in accordance with the requirements of IDEA. Existing literature (e.g., Courtade & Browder, 2016; Goran et al., 2021) and training models/strategies (e.g., Hunt et al., 2012; Rowland et al., 2015) outline how to craft meaningful, measurable annual goals. Even so, the findings of this study and related research (LaSalle et al., 2013; Ruble et al., 2010) suggest the need to improve current preparation and training models for teachers on writing IEP goals for students with extensive support needs. In this sample, 98 goals (20.5%) included expectations only for compliance (i.e., for the student to respond to a directive from another person without learning or using a specific skill). Both teacher preparation programs and in-service teacher development programs should increase the emphasis on writing standards-based IEP goals in service of progress in the general education curriculum for students with extensive support needs. Ruppar et al. (2022) have developed a two-stage framework for making and evaluating decisions when teaching students with extensive support needs. Key factors include what to teach, how to teach, who should provide instruction, and whether decisions are inclusive, dignifying, student-centered, and evidence-based. Furthermore, states and school districts should

consider a review process based upon this framework to ensure IEP goals for all students promote "more than *de minimis educational* benefit" (*Endrew F. v. Douglas County School District RE-1*, 2017) from a social justice lens (Ruppar et al., 2022).

Second, practitioners must pay careful attention to the priorities for educational aims and expectations for students with extensive support needs reflected within the content and language of IEP goals. Special education teachers often juggle full caseloads of students while also planning for and delivering instruction and supports and communicating with families, among many other responsibilities. We suggest support for teachers at a school leadership level (i.e., special education directors, principals, assistant principals). Teachers and leaders can establish systems of cross-checking IEPs for the content addressed (e.g., Are all academic and functional needs of the student addressed in goals? Do all goals reflect high-priority content linked to the general education curriculum?) and the language used (e.g., Does it reflect respect for the student? Is it strengths-based?).

Third, the findings of this study reflect that the IEP goals examined fall short in promoting student self-direction and self-determination. While researchers have explored the promotion of self-determination through student participation in the IEP process (e.g., Barnard-Brak & Lechtenberger, 2010; Seong et al., 2015), there is little evidence to date for how selfdetermination is addressed within IEPs. The present findings show that while some skills associated with self-determination are being incorporated into IEP goals for students with extensive support needs, the focus of many goals is still passive compliance. Ninety-eight goals in the present analysis were focused on student compliance rather than active learning. Further, given the centrality of goal-directed actions in promoting skills associated with selfdetermination (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015), it is troubling that no goals focused on teaching goal setting and attainment skills. When students are problem solving, making choices, and setting and working toward goals, there are two benefits: (a) students will benefit from the positive educational and post-school outcomes associated with self-determination (Burke, Raley et al., 2020); and (b) IEP goals will be fundamentally more action-oriented, giving students opportunities to develop the higher-order thinking skills promoted in national standards (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010).

Implications for Research

Researchers can pursue several pathways for advancing the knowledge base around instruction and enhancing IEP goals for students with extensive support needs. We propose three areas of focus for future research. First, while court rulings (most recently, Endrew) have addressed requirements for IEP goals to be measurable, little case law or research documents challenges to the academic and functional content of IEP goals. As shown in the results of this study, many IEP goals do not align with the IDEA requirement for students to be involved in and make progress in the general education curriculum. Quite simply, when a student's math goal is can-crushing, as it was for one student in this analysis, there can be no reasonable expectation of progress in the general education mathematics curriculum. The reasons for the absence of case law are unclear and warrant exploration by researchers to identify how families perceive the IEP goals of their students in relation to IDEA requirements and the avenues available to them to advocate for enhanced rigor (such as procedural due process; IDEA, 2004), when perceived as an issue. Relatedly, researchers should examine the degree to which IEP goals drive instruction. Research shows that IEPs often become the primary curriculum for students with disabilities (Kurth et al., 2019) even though a standards-based IEP is not the same as the general education

curriculum (Browder et al., 2010).

The second recommendation is for researchers to examine how best to plan for and implement standards-based academic instruction for students with extensive support needs, a recommendation previously put forth by Browder et al. (2007). Despite the breadth of research on writing IEP goals, general and special education teachers consistently report concerns over how to appropriately adapt and modify the general education curriculum for students with extensive support needs (Ballard & Dymond, 2017). This inconsistency between supports for writing IEP goals and supports and training for adaptations and modifications to the general education curriculum indicates teachers may feel they are missing the prerequisite skill to writing standards-based IEP goals, which is how to adapt and modify the general education curriculum for students with extensive support needs. Researchers should continue to develop and examine the efficacy of training and supports that enable teachers to write IEP goals centered around the general education curriculum while meeting students' support needs.

Lastly, the way skills associated with self-determination were included in IEP goals may reflect how practitioners interpret skills associated with self-determination and the degree to which they prioritize them. Within this study, 50 of the 88 IEPs included skills associated with self-determination in at least one goal. However, many goals addressed skills only in relation to academic content (e.g., solving word problems). Other goals that addressed self-determination were largely teacher-directed, such as the teacher asking the student to choose from a set of predetermined options. Some goals incorporated skills with self-determination as a method of reducing negative behavior (e.g., "[The student] will increase self-monitoring of his shout-outs"), as opposed to promoting individual capacity to set and go after self-directed goals (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015). Work is needed to define how the skills associated with self-determination proposed in Causal Agency Theory are operationalized in practice and how teachers can embed them in IEP goals. Recommendations for teaching the skills associated with self-determination outlined in Causal Agency Theory are included in the *Self-Determined Learning Model of Instruction Teacher's Guide* (Shogren et al., 2019). Additional research and resources are needed on embedding these skills in IEP goals to ensure they are included as a targeted focus of educational programming for students with extensive support needs.

Limitations

Several limitations should be considered in interpreting the results of this study and implications for research and practice. First, we did not have access to information about classroom practices for each of the students in the sample or the process for developing the IEPs (e.g., family involvement and advocacy) and were only able to examine the content of the IEPs. Second, names of schools and teachers were removed during de-identification, so conclusions cannot be drawn about whether students with identical or nearly identical goals were in the same class or school. Third, we examined the content of IEP goals without analyzing associated shortterm objectives unless no information could be derived from the goal (i.e., "[The student] will meet the following reading objectives..."), which applied to 58 goals. The decision to focus on the annual goals exclusively was based on the large quantity of objectives across the 479 goals in the sample and the duplication of text within the annual goals and short-term objectives apparent when the first author initially reviewed all IEPs. Fourth, we did not examine the age or grade appropriateness of all IEP goals because information on links to grade-level standards was rarely included in the IEPs. Fifth, the decision to code social skills and communication as a single category means that the frequency of goals focused on social skills or communication alone

cannot be examined. Future research should explore concrete definitions for these domains, particularly as they are often intertwined within IEPs. Last, results should be generalized cautiously, given the size of the sample (n = 88 IEPs) and limited demographic information (e.g., no data on race/ethnicity, socioeconomic status). Future research is needed to explore larger samples of IEPs for students with extensive support needs with diverse personal factors.

Conclusion

State academic content standards (e.g., the Common Core State Standards Initiative) lay out expectations for students to apply rigorous content knowledge through higher-order thinking skills in preparation for success in higher education, careers, and modern life in our global economy (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). In the present study of IEP goals, findings reflect limited standards-based content and a focus on compliance rather than self-determination and suggest the same high expectations may not be present for students with extensive support needs. Educators may benefit from training and support to develop IEP goals linked to the general education curriculum and individually determined student needs. Researchers can continue to explore the application of IDEA requirements and emerging case law, such as *Endrew*. Such work includes how to plan for and implement standards-based instruction for students with extensive support needs and how to incorporate skills associated with self-determination into IEP goals. To give all students equitable opportunities for achievement in school and in life, high expectations within IEP annual goals for students with extensive support needs are critical to enrich educational opportunities and outcomes.

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Table 1

Primary Instructional Domains and Operational Definitions

Primary Instructional	Operational Definition	
Domain		
Reading	Addressed skills such as phonics, fluency, and comprehension	
Math	Addressed skills such as number sense, operations, money,	
	measurement, and time	
Writing	Addressed skills such as mechanics, composition, and handwriting	
Science	Addressed skills such as scientific processes and methods, physical	
	science, life science, earth and space science, and/or science and	
	technology	
Social Studies	Addressed skills such as history, geography, current affairs, and/or	
	government	
Social Skills and	Addressed social interactions or communication (e.g., oral language,	
Communication	augmentative and alternative communication)	
Functional or Daily	Addressed skills used at home, school, work, and in the community	
Living Skills	that are not covered under other instructional domains (e.g., cleaning,	
	using the bathroom, cooking)	
Motor Skills	Addressed fine motor (e.g., coordination of hands and fingers) or	
	gross motor (e.g., larger movements with arms or legs) skills	
Behavior	Addressed skills such as following class or school rules, safety to self	
	and others, attention to instruction, or following teacher directions	
	(unrelated to content)	
Vocational or	Addressed skills such as interviewing, job-specific training, or job	
Employment	exploration	

Table 2

Skills Associated	Operational Definitions (Shogren	Keywords
with Self-	et al., 2019)	
Determination		
Choice-Making	Identifying options and selecting from two or more options based on one's goals, interests, and needs	Choose, choice, express preference, select, selection, pick
Decision-Making	Deciding on a course of action based on identifying and weighing options and associated outcomes	Decision, decide, prioritize, priority, identify options/alternatives, determine consequences
Problem-Solving	Using strategies to define a problem, identify one or more solutions, implement a solution, and evaluate the effectiveness of the solution	Problem, fix, solution, solve, make judgment
Goal Setting and Attainment	Considering one's strengths, interests, and aspirations to set specific, measurable, and observable goals and using concrete and specific methods to achieve self-selected goals	Goal, set, attain, action steps, pathways
Planning	Arranging one's schedule based on needs and preferences to achieve a self-selected goal	Plan, schedule, initiation, future thinking
Self-Management	Using a variety of skills to	Self-manage, self-monitor, self-
and Self-	determine if one is taking actions	instruct, self-talk, self-evaluate, self-
Regulation	aligned with a self-selected goal and adjusting those actions when needed	schedule, self-regulate
Self-Advocacy	Expressing and explaining one's needs when working toward a goal	Advocate, assert, lead, use resources, ask for help, request
Self-Awareness	Identifying one's support needs,	Self-aware, identify needs, identify
and Self-	interests, abilities, and how one's	interests, identify abilities/strengths,
Knowledge	actions affect others	effect on others, self-image, self- confidence, self-knowledge, action control

Skills Associated with Self-Determination, Operational Definitions, and Keywords