

**THE RELATIONSHIP OF IEP QUALITY
TO CURRICULAR ACCESS AND ACADEMIC ACHIEVEMENT
FOR STUDENTS WITH DISABILITIES**

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The purpose of this study was to investigate the quality of Individualized Education Programs (IEPs) and its influence on academic achievement, inclusion in general education classrooms, and curricular access for students with disabilities. 130 teachers from the state of Indiana were asked to submit the most recent IEP of one of their students in either elementary or middle school who (a) had an identified disability and (b) achieved the lowest level of proficiency on the statewide standardized assessment. Teachers also were asked complete the Curriculum Indicators Survey (CIS) which provided information about their student's curriculum and instructional experiences. Ratings from the IEP analysis tool developed for and used in this study suggest that students' IEP goals were of variable quality across grade bands. Academic-focused IEP goals were more likely to include sufficient information about links to the curriculum standards and progress monitoring strategies, but less frequently included sufficient information about students' present levels of performance (PLOP) and the relevance of IEP goals to the students' educational needs. Additionally, the quality of progress monitoring information in academic-focused IEP goals demonstrated a negative association with student achievement. IEP quality demonstrated no significant relationship to inclusion in general education classrooms or two measures of curricular access.

Changes in United States educational policy included in the 2004 Reauthorization of the Individuals with Disabilities Education Act (IDEA) and the No Child left Behind Act (NCLB) are intended to promote increased access to the general education curriculum and improved academic performance for students with disabilities. These policy mandates have clearly resulted in increased participation in state and district accountability systems for students with disabilities (Altman et al., 2010). However, there is less definitive evidence that these policies have resulted in improved opportunities to learn and academic gains as measured state standardized assessments for students with disabilities. McCausland's (2005) review of IEP policies and research in Ireland, Australia, New Zealand, Canada, the United Kingdom, and the United States indicated a *key aspect of IEP policies examined is that they all stipulate that children with (disabilities) for whom IEPs are developed should continue to have their education based on the standard/general curriculum* (p. 52). Thus, research that investigates the relationship between IEP quality and curricular access has potential applicability for an international audience.

Legal Foundations for Access to General Education Classrooms and Curriculum

A number of U.S. court cases have established a long-standing precedent for creating more opportunities to learn and increased access to meaningful, age and grade appropriate curricula for students with disabilities. In *Debra P. v. Turlington* (1981), the court recognized for the need to align curriculum content and instruction with the constructs and skills that will be measured on standardized achievement tests. In the late 1970's, African American students disproportionately failed the Florida standardized achievement test because they were not allotted access to the curriculum that was assessed on these

measures due to placement in remedial classes that did not provide instruction on grade level content. Although the court's decision mandated that all students must have an equal opportunity to learn the academic content that will be presented on achievement tests prior to testing, this case also highlighted the difficulty involved in evaluating students' opportunity to learn because it is difficult to consistently monitor the extent to which students are engaged in grade level content (Buckendahl & Hunt, 2005; Pullin & Haertel, 2008; Roach, Chilungu, La Salle, Talapatra, Vignieri, 2009).

IDEA, also known as PL- 94142, first passed in 1975 and subsequently amended in 1997 and 2004, dictated that students with disabilities should be educated to the maximum extent possible with their peers without disabilities. IDEA requires student IEPs to address the impact of student's disabilities on their educational functioning, as well as including the goals and objectives that would be put in place to ensure that students with disabilities can be involved in and progress towards curricular goals [20 U.S.C. Sec. 1414(d)(1)(A)(iii)]. Several court cases have also addressed the extent to which students with disabilities should participate in instructional environments with peers who do not have disabilities.

Daniel R.R. v. State Board of Education (1989) was one of the first court cases to establish that students with disabilities should be educated in the least restrictive environment to the maximum extent possible. The Circuit Court developed a two-prong test to ensure school districts' compliance with the requirements set forth by IDEA; they were to establish if students with disabilities could be educated in the general education classroom with supplemental aids and services, and if that was not possible, then districts were to establish that the child had been mainstreamed to the maximum extent possible. The same procedures were implemented in *Greer v. Rome City School District* (1992) in order to determine if the costs of educating a student with disabilities in the general education classroom would be too substantial to maintain. The courts upheld that students with disabilities, who would otherwise benefit from the general educational curriculum, cannot be denied such access because of the added cost of supplemental aids and services. *Oberti v. Board of Education of the Borough of Clementon School District* (1993) upheld that students with disabilities should be educated in their home school, and placed the burden to meet the requirements set forth by IDEA on the school districts and not the families. This case upheld that *inclusion is a right, not a special privilege for a select few* (Oberti v. Board of Education of the Clementon School District, 1993). Additionally, the case also upheld that the federal regulations require schools to supplement and modify resources and practices that, in the absence of supplements and modification would otherwise result in unnecessary segregation of students with disabilities.

Access to Grade-Level Curriculum for Students with Disabilities

While the inclusion of students with disabilities in general education classrooms is a positive initial step, further action must be taken to ensure that students are engaged in meaningful and intentional grade appropriate instructional content. Otis-Wilborn, Winn, Griffin, and Kilgore (2005) examined the attempts of special education teachers to promote access to the general education curriculum and participation in general education programs. Eighty-percent of teachers interviewed reported facing significant barriers in implementing the aforementioned IDEA 1997 requirements. Specifically, the special educators reported that they struggled to gain access to comparable curricular tools that were provided to general educators, taught in classrooms segregated from the general education classrooms and curricula, and that students with disabilities had limited opportunity to interact with their peers (Roach et al., 2009). Additionally, results of the study also found that special educators had a difficult time consulting with general education teachers because of limited time set aside for joint instructional planning.

The reauthorizations of IDEA have expanded the expectations for students with disabilities from simply being present in general education classrooms to include participate in meaningful, grade appropriate instructional content. While being present in the general education setting increases the likelihood that students with disabilities will have increased exposure to grade level content, the nature of a student's disability may inhibit students' meaningful involvement in curriculum and instructional tasks (Browder, Wakeman, Flowers, 2006); Browder, Wakeman, Flowers, Rickelman, Pugalee, & Karvonen, 2007; Wehmeyer, Lattin, Lapp-Rincker, & Agran, 2003). Wehmeyer et al. (2003) conducted an observational study to examine the amount of time that students with disabilities spent engaged in tasks linked to grade level standards in both general and special education settings. Wehmeyer and colleagues found that students who were included in general education classrooms were engaged in tasks linked to the grade content standards during 90% of observation intervals. Conversely, students with disabilities who were educated in the special education setting (e.g. resource room, special day class) were engaged in tasks linked to grade level content only 50% of the time. The results of this study suggest that inclusion in the

general education setting, for students with disabilities, appeared to increase the amount of time spent on instructional tasks that are linked to grade level content.

Fisher, Roach, and Frey (2002), as part of their review of inclusion literature, asserted that there is evidence beginning from the late 1980s that suggest that the segregation of students with disabilities in separate classes is injurious to their learning. Fisher and colleagues also indicated that students with disabilities who are educated in general education classes generally perform better than average in the regular classroom (p.71). For example, Waldron and McLeskey (1998) compared the performance of 71 elementary students with learning disabilities who were educated in the inclusive setting and 73 students who were educated in a special education setting. The students performed similarly on pre-test measures in reading, math, and on cognitive measures. However, post-test results indicated that students who received instruction in the general education setting showed significant gains in reading compared to students who were educated in the small group setting; in some cases, the rate of growth among these students approached the rate of growth for their counterparts without disabilities. The same results were not observed in math achievement; difference in findings among content areas may be attributed, in part, to a lack of specialized instruction across inclusion classrooms. However, these differences further illuminate that access to the general classroom, in and of itself, may not be sufficient to yield changes in student performance. Baker and Zigmond (1995), in their case study analysis of five students with learning disabilities, found that, while the students did appear to make some progress towards academic goals, they did not consistently receive instruction in the inclusive setting that was linked to grade level content standards. These studies further demonstrate the need to continuously collect data to ensure that students with disabilities have access to the general curriculum and are engaged in tasks that are linked to grade level content standards.

IEPs Link to Curricular Access and Student Performance

Federal regulations require that students with disabilities have access to the general curriculum and work towards the same goals as all students; however, the unique needs of students with disabilities must also be taken into account in designing appropriate services. Thus, students' IEPs must include documentation regarding consideration of the most appropriate levels and modes of access to the general curriculum (Roach & Elliott, 2006). The process of designing an educational program based on individual student needs is intended to address all aspects of the educational experience *including formal and informal curriculum (what), instruction (how), and placement (where)* (Wehmeyer, Lattin, & Agran, 2001, p. 333). The Office of Special Education and Rehabilitative Services (OSERS, July 2001) reported that the IEP process is one of the most critical tools in ensuring that effective teaching, learning, and increased achievement occurs for all students with disabilities (Thompson, Thurlow, Whetstone, 2001). Unfortunately, little research regarding the effect of IEP quality on student access to the general curriculum and student performance on standardized assessments is available.

The 2004 amendments to IDEA were intended to transform IEPs from documents that reflected procedural compliance monitoring and were developed as parallel or separate curricular frameworks for students with disabilities, to programs that increasingly reflect educational goals and services that are in place to aid students in their learning of core academic content and skills (Thompson et al., 2001). As Karvonen and Huynh (2007) asserted, understanding the relationship between IEPs and large-scale assessments for students with disabilities provides evidence about students' opportunities to learn the general curriculum and how such opportunities subsequently influence performance on standardized assessments.

Purpose

The purpose of the present study was to investigate the quality of IEPs and provision for curricular access for students with disabilities. Specifically, this study examined the relationship between the percentage and quality of standards-based IEP goals and teacher-reported curricular access for students with disabilities. In light of the significant attention that has been given to curricular access and accountability for students with disabilities, it was hypothesized that IEP quality would be associated with (a) improved student performance on the state standardized test; (b) the time that students with disabilities spend in general education classes, and (c) access to the general curriculum as measured by scores on nationally recognized measure of the curricular experiences of students with disabilities.

Method

As part of a larger study to validate modified test items for possible inclusion on an alternate assessment based on modified achievement standards (AA-MAS), teachers from across the state of Indiana were

asked to submit data for one of their students. Students identified for data collection (a) had an identified disability and (b) had achieved minimum proficiency on the Indiana Statewide Testing for Educational Progress (ISTEP) during the fall 2008 admission. Under the proposed federal guidelines, these students would have been eligible for participating in AA-MAS. Teachers of participating students also were asked to complete the Curriculum Indicators Survey (CIS), which provided information about the student curriculum and instructional experiences. In addition to the completed surveys, teachers were also asked to submit a copy of the student's most recent IEP. All extant student data reviewed by the research team was de-identified by the Indiana State Department of Education.

Participants

Teachers ($n = 130$) from the state of Indiana were asked to submit data regarding one of their students. Purposive sampling was used to ensure that participating teachers represented districts from all regions of the state and urban, suburban, and rural communities. The majority of the teachers in the sample were White (94.6%) and female (86%). Additionally, 93.0% of participants had special education teaching credentials and 85.4% obtained a master's degree or higher.

The majority of the students in this study were White (86.2%) and male (66.9%), which approximated the gender imbalance in the state's Special Education placements. The most frequent disability categories represented in the sample were Learning Disabilities (53.8%), Speech/Language Impairments (24.6%), Intellectual/Cognitive Disabilities (19.2%), and Autism Spectrum Disorder (10.8%). These numbers also appear to approximate the representation of disability categories among Indiana students in special education, with the exception of students with specific learning disabilities who appear to be over-represented in this sample compared to prevalence rates for the special education population. The over-representation of students with LD in the sample was, however, reflective of the group of students expected to qualify for the proposed AA-MAS.

Measures

Curriculum Indicators Survey. The Curriculum Indicators Survey (CIS) was developed by Karvonen, Wakeman, Flowers, and Browder, (2006) as a teacher-report measure of the curricular access. The CIS asked teachers to describe their expectations for student performance and their perceptions of student skill levels as well as the extent to which students are engaged in grade-level instruction. The questionnaire includes two sections intended to measure the implemented curriculum in grades K-12. The first section of the survey includes information about the teacher's background, training and professional development, classroom characteristics, instructional resources, use of assessments, and instructional influences. Teachers' responses are intended to reflect their perceptions of the curriculum and instruction provided to students on their caseloads or in their classrooms. The second part of the CIS was completed with regard to the education experiences of the student that was selected for this study. This section of the CIS lists specific topics related to either mathematics or English/Language Arts (ELA) and specific content within those areas. Teachers rate the intensity of coverage of each item within the topics, the highest performance expectation or cognitive demands that the teacher believes that the students can achieve, grade level(s) from which instructional materials are adapted, and the intensity of use for a variety of instructional activities. For the purpose of this study, the teachers provided ratings for the intensity of instructional coverage for a series of concepts and skills in the domains of Language, Reading, Writing, and Media. For each concept or skill, ratings range from 0 = no coverage to 4 = intense/systematic coverage.

IEP analysis tool. An IEP analysis tool (see appendix) was created for use in this study. The evaluative ratings were based on guidelines for creating standards-based IEPs developed by the National Association of State Directors of Special Education (2007). The IEP analysis tool included 4 items which asked raters to evaluate the extent to which each IEP goal (a) aligned with state standards, (b) provided data on presented level of performance, (c) identified students' educational needs, and (d) described methods for documenting student progress. Ratings on content alignment item focused on whether the IEP goal clearly specified a corresponding content standard and addressed skills and concepts that closely matched or aligned to the identified standard. The present level of performance item asked raters whether the IEP goal included specific assessment data describing the student's current performance on goal-related concepts and skills. Ratings on the educational needs item indicated whether an IEP goal included an explanation of how the student's disability adversely affected progress towards the skills and concepts addressed by the IEP goal as well as grade-level content standards. The Progress monitoring item asked raters whether the IEP goal defined the baseline level of performance and included reasonable rigorous targets or outcomes in measurable terms. A 3-point Likert scale was used

to rate the extent to which each IEP goal included each of the aforementioned components with a rating of 2 indicating full attainment of the criteria, 1 indicating partial attainment, and 0 indicating non-attainment.

Procedure

Students' IEP goals were evaluated by a research team comprised of one faculty member and three advanced graduate students in school psychology; three of the team members also had extensive experience as special education teachers. Prior to completing ratings of the *research* IEPs, the team used the IEP analyses tool to evaluate *practice* IEPs (collected as part of a previous study). Each team member individually used the tool to evaluate these *practice* IEPs, then the team met to compare ratings, and discuss and resolve any discrepancies. This process continued until inter-rater agreement exceeded 90% for ratings on all components of the IEP analysis tool. At this point, two members of the research team independently rated each IEP, this process resulted in 74.8% inter-rater agreement across dimensions. Any discrepancies in the independent ratings were reviewed and discussed by the first and second authors who then reached consensus on the most appropriate final rating.

Results

Descriptive statistics (means and standard deviations) were calculated for the IEP analyses tool for the entire sample and for each grade band (i.e., elementary and middle school). In addition, one-sample t-tests were conducted to identify significant differences in the means for each grade band. Participating students' IEPs had between three and four IEP goals (mean = 3.5) with 73% of those goals addressing academic content (Table 1). The mean percentage of academic-focused IEP goals was significantly greater for elementary school students' IEPs (79.0%) than for middle school students' IEPs (64.3%). The mean ratings on the IEP analysis tool for academic-focused goals suggested variation in attainment of the quality criteria. Academic-focused IEP goals on participating students' IEPs received a mean rating of 1.6 on the Curricular Access criterion and 1.4 on the Progress Monitoring criterion, suggesting these are areas of relative strength in teachers' IEP goal development. Conversely, mean ratings on the Present Level of Performance (0.6) and Educational Needs (0.6) dimensions were lower for academic-focus IEP goals. In addition, a statistically significant difference also was observed between elementary (1.6) and middle school students' (1.3) mean Progress Monitoring ratings on the academic-focused IEP goals.

Table 1. Descriptive Statistics for IEP Analysis Tool

Grade Band	IEP Goals		Academic-Focused IEP Goals IEP Analysis Ratings				
	Total <i>M (SD)</i>	Academic- Focused <i>M (SD)</i>	Percent Academic- Focused* <i>M (SD)</i>	Curricular Access <i>M (SD)</i>	PLOP <i>M (SD)</i>	Educational Needs <i>M (SD)</i>	Progress Monitoring <i>M (SD) *</i>
Elementary (<i>n</i> = 76)	3.5 (2.2)	2.6 (1.8)	79.0 (28.6)	1.6 (0.7)	0.6 (0.7)	0.7 (0.6)	1.6 (0.6)
Middle School (<i>n</i> = 54)	3.4 (1.5)	2.3 (1.3)	64.3 (31.6)	1.6 (0.8)	0.5 (0.7)	0.6 (0.6)	1.3 (0.8)
Total (<i>N</i> = 130)	3.5 (2.0)	2.5 (1.6)	73.0 (30.6)	1.6 (0.7)	0.6 (0.7)	0.6 (0.6)	1.4 (0.7)

* $p < .05$

Descriptive statistics (means and standard deviations) were calculated for the CIS results (table 2) for the entire sample and for each grade band (i.e., elementary and middle school). The CIS also required teachers to identify the intensity of instructional coverage for a series of 27 concepts and skills Language Arts (including Oral Language, Reading, Writing, and Media). Intensity of coverage was rated on a four point scale, ranging from 0 = no coverage (not an expectation for this topic this school year) to 4 = intensive/systematic coverage (daily or almost daily instruction throughout the year). The mean total Intensity of Coverage rating for Language Arts skills and concepts was 2.23, which indicates that the rated topics generally received moderate coverage (11-20 lessons over the course of the year). In addition, the CIS asked teachers to report the amount of time spent on a series of 18 Language Arts instructional activities (e.g., engaging in read aloud activities, engaging in the writing process) as well as

level of student participation in each of these activities. Instructional time ratings ranged from 0 = none to 4 = Considerable, 8 or more hours/week. The mean rating for participating students' time on instructional activities was 1.63, which was between the *little* (1 hour or less/week) and *some* (2 to 4 hours/week) ratings. There was no significant difference between the mean CIS ratings across the two grade bands. Teachers reported that participating students spent approximately three-fourths of their time in general education contexts (table 2). Although the difference was not statistically significant, teachers did report that middle school students spent more time (77.3%) in general education contexts than elementary school students (69.6%).

Table 2. Descriptive Statistics for Curricular Indicators Survey

	CIS Intensity of Coverage <i>M (SD)</i>	CIS Time on Instructional Activities <i>M (SD)</i>	Percent Time in General Education <i>M (SD)</i>
Elementary (<i>n</i> = 76)	2.25 (0.66)	1.68 (0.51)	69.6 (26.4)
Middle School (<i>n</i> = 54)	2.19 (0.56)	1.54 (0.57)	77.3 (20.1)
Total (<i>N</i> = 130)	2.23 (0.63)	1.63 (0.54)	72.7 (24.2)

Is IEP Goal Quality Predictive of Students' ISTEP Performance?

Multiple regression analysis was used to examine the influence of IEP quality on the students' ISTEP scores. The following predictors were entered into the model: 1) percentage of academic-focused IEP goals and mean ratings for academic-focused IEP goals for each of the following criterion 2) curricular access, 3) educational need; 4) present level of educational performance; and 5) progress monitoring. Predictors were entered in forward fashion with a .05 significance cut-off. Table 3 provides a summary of the results of the analysis. The results indicate that the mean Progress Monitoring rating for academic-focused IEP goals accounted for a small amount ($R^2 = .04$) of variation in students' ISTEP performance. The regression coefficient for the Progress Monitoring ratings was negative, indicating that the inclusion of progress monitoring procedures in students' academic-focus IEP goals was associated with lower performance on the statewide achievement test.

Table 3. Variables That Predict Students' ISTEP Performance

Predictor	Partial Regression Weights		
	Raw	Standardized	Sig.
ELA Expectations	-23.483	-.20	.04
Intercept	405.9		
Summary Statistics	$R = -.20$	$R^2 = .04$	

Is IEP Quality Associated with Curricular Access and Inclusion in General Education?

A series of three multiple regression analyses was used to examine the relationship of IEP quality to teacher-reported percentage of time in the general education classroom and to two measures of students' curricular access: (a) CIS Instructional Intensity ratings; and (c) CIS Time of Instruction ratings. The following predictors were entered into the model: 1) percentage of academic-focused IEP goals and mean ratings for academic-focused IEP goals for each of the following criterion 2) curricular access, 3) educational need; 4) present level of educational performance; and 5) progress monitoring. Predictors were entered in forward fashion with a .05 significance cut-off. The results indicated that none of the IEP quality metrics were significantly associated with time spent in general education classrooms or the two measures of curricular access.

Discussion

As schools and educators work towards increased expectations for greater access to and improved performance on general education skills and concepts, it is important to review and examine the factors that aid students with disabilities in attaining these goals. The results of this study provide evidence

regarding the quality of IEPs and provision for curricular access for students with disabilities. Ratings on the IEP analysis tool suggest that students' IEP goals are of variable quality. Academic-focused IEP goals were more likely to include sufficient information about links to the curriculum standards and progress monitoring strategies, but less frequently included sufficient information about students' present levels of performance (PLOP) and the relevance of IEP goals to the students' educational needs. Supporting better data collection and reporting about students' PLOP may be an important training objective because it appears to influence access to the general curriculum and also the type of instructional tasks they are provided. In his review of various nations' IEP policies, McCausland (2005) suggested that policymakers endorse the use of a variety of assessment strategies rather than solely relying on standardized assessments. In particular, he highlighted the key principals of assessment identified by the New Zealand Ministry of Education, including the following:

1. The assessment process should be part of the learning process whenever possible;
2. Assessment methods and contexts may vary according to the needs of individual students; and
3. No single assessment procedure should be used as the sole means of identifying the needs of a student (p. 25).

Helping teachers utilize a variety of classroom-based assessment and data collection strategies (e.g., curriculum-based measurement, portfolios, anecdotal records) remains a challenge regardless of national context.

Ratings on the IEP analysis tool generally did not suggest differences in quality of IEP goals across grade bands. There was, however, a significant difference in the mean percentage of academic-focused IEP goals with elementary students' IEPs including a greater percentage of academic-focused goals. This may be due to the inclusion of more transition-focused goals at the middle school level or the difficulties of making middle school reading, mathematics, and social studies concepts accessible for students with disabilities. The inclusion of transition-related plans and services is a concern of a variety of nations' IEP policies. McCausland (2005) makes a number of recommendations for including transition elements in IEPs, including *ensuring that students with disabilities have access to the full range of general education curricular options and learning experiences* (p. 54). Additional work is needed to help secondary teachers identify resources and modifications that facilitate students' access to grade-level curricular concepts and skills.

The quality of IEP goals demonstrated a very limited relationship to students' large-scale test performance. In fact, greater specification of progress monitoring strategies was associated with lower performance on the ISTEP. Moreover, IEP quality ratings demonstrated no significant association with a variety of measures of curricular access and inclusion. These results are disappointing in light of the resources many educational systems commit to professional development and resources to support IEP quality. In addition, these results represent a disconnect with national policies (Ahern, 2006; McCausland, 2005; USDE, July 2007) that promote standards-based IEPs as a pathway to curricular access and improved student performance. For example, in the United Kingdom, the effectiveness of IEPs are evaluated on whether educational services *close the gap in attainment between a student and his/her peers—or stops the gap growing* (McCausland, 2005, p. 62). If, as our results suggest, there is a limited relationship between IEP quality and test scores, the utility of this metric for evaluating IEP effectiveness is questionable.

Potential Limitations and Future Directions for Research

The sample in this study may limit its generalizability to the larger population of special education teachers and students with disabilities. The participating teachers were not randomly sampled but rather selected to represent the different geographic regions of a single state in the United States—Indiana. In addition, these teachers had an average of 13.9 years of teaching experience. It is possible that the inclusion of less-experienced teachers in the sample may have resulted in different IEP characteristics and reported levels of curricular access. Additional investigations could include a random sample of special educators, drawn from a variety of states or nations. This study was conducted as part of a larger study to validate potential test items for use on an alternate assessment based on modified achievement standards (AA-MAS). Because of this, the IEPs of persistently low-achieving students (as defined by the federal guidelines for AA-MAS) were selected for analysis. The focus on this sub-group of students may have resulted in a restricted range for the outcome measures of interest (i.e., state test results, CIS

ratings). Future research using the IEP analysis tool should include the IEPs of a stratified random sample of students with disabilities.

Conclusions

Across a variety of nations, educational policy for students with disabilities is intended to lead to greater access to the curriculum and grade level standards for students with disabilities. Results of this study that IEP quality was not a significant predictor of test performance or curricular access. Results from this study reflect previous research that suggests that IEP practices do not consistently impact students' access to or involvement in the general education curriculum. For example, Fisher and Frey (2001) found a disconnect between information found in students' IEPs and the actual curriculum and instruction provided to students in inclusive settings. In order for IEPs to serve as the primary means of facilitating curricular access and to improve student academic outcomes for students with disabilities, educational systems need to provide professional development and increased IEP quality monitoring to ensure that the goals and services outlined in the IEP are monitored and implemented as planned (Roach et al., 2009). The promotion of the standards-based IEPs in policy and regulations only increases the need for additional research and professional training to support quality IEP goal development.

References

- Ahearn, E. (2006). *Standards-Based IEPs: Implementation in Selected States*. Alexandria, VA: National Association of State Directors of Special Education.
- Altman, J. R., Lazarus, S. S., Quenemoen, R. F., Kearns, J., Quenemoen, M., & Thurlow, M. L. (2010). *2009 survey of states: Accomplishments and new issues at the end of a decade of change*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
- Browder, D. M., Spooner, F., Algozzine, A., Ahlgrim-Delzell, L., Flowers, C., & Karvonen, M. (2003). What we know and need to know about alternate assessment. *Council for Exceptional Children, 70* (1), 45-61
- Browder, D.M., Wakeman, S. Y., & Flowers C., (2006). Assessment of progress in the general curriculum for students with disabilities. *Theory Into Practice, 45* (3), 249-259. doi:10.1207/s15430421tip4503_7
- Browder, D.M., Wakeman, S. Y., Flowers, C., Rickelman, R., Pugalee, D., & Karvonen, M. (2007). Creating access to the general curriculum with links to grade level content for students with significant cognitive disabilities: An explication of the concept. *Journal of Special Education, 41*, 2-16. doi:10.1177/00224669070410010101
- Buckendahl, C., & Hunt, R. (2005). Whose rules? The relation between the *rules* and *laws* of testing. In R. P. Phelps (Ed.), *Defending standardized testing* (pp. 147–158). Mahwah, NJ: Erlbaum.
- Cortiella, C. (2007). *Learning opportunities for your child through alternate assessments: alternate assessments based on modified academic achievement standards*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
- Daniel R.R. v. State Board of Education, 874 F. Supp. 1036 (5th Cir. 1989)
- Debra, P. v. Ralph D. Turlington, 644 F. Supp. 397 (5th Cir. 1981)
- DiPerna, J. C., & Elliot, S. N. (2009). Development and validation of the academic competence evaluation scales. *Journal of Psychoeducational Assessment, 17*(3), 207-225. doi: 10.1177/073428299901700302
- Fisher, D., & Frey, N. (2001). Access to the core curriculum: Critical ingredients for student access. *Remedial and Special Education, 22*(3), 148-157. doi: 10.1177/074193250102200303 2001 22:
- Fisher, D., Roach, V., & Frey, N. (2002). Examining the general programmatic benefits of inclusive schools. *International Journal of Inclusive Education, 6*(1), 63-78
- Greer v. Rome City, 967 F. Supp. 470 (11th Cir. 1992)
- Individualized Classroom Accountability Network (n.d.). Retrieved from ICAN Project: <https://ican.doe.state.in.us/beta/istart7.htm>. doi: 10.1080/13603110010035843
- Individuals with Disabilities Education Act Amendments of 2004, Pub. L. No. 105-17, 111 Stat. 37 (codified as amended 20 U.S.C. §1400e t seq.).
- Karvonen, M., & Huynh, H. (2007). Relationship between IEP characteristics and test scores on an alternate assessment for students with significant cognitive disabilities. *Applied Measurement in Education, 20* (3), 273-300.
- Lazarus, S. S., Thurlow, M., Christenson, L. L., & Cormier, D. (2007). *State's alternate assessments based on alternate achievement standards (AA-MAS) in 2007 (Synthesis Report 67)*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- Lee, S. S., Wehmeyer, L., Soukup, J., & Palmer, S. (2010). Impact of curriculum modifications on access to the general education curriculum for students with disabilities. *Exceptional Children*, 76 (2), 213-233.
- McCausland, D. (2005). *International experience in the provision of individual education plans for children with disabilities*. Dublin: National Disability Authority.
- National Association of State Department of Special Educators (2007, June). A seven-step process to creating standards-based IEPs. Retrieved from <http://www.nasde.org/Portals/0/SevenStepProcessToCreatingStandards-basedIEPs.pdf>
- Oberti v. Board of Education, 995 F. Supp. 1204 (3rd Cir. 1993)
- Pullin, D., & Hartel, E., (2008). Assessment through the lens of *opportunity to learn*. In P.A. Moss, D.C. Pullin, J. P. Gee, E. H. Heartel, & L. J. Young (Eds.), *Assessment, equity, and opportunity to learn* (pp. 17-41). New York: Cambridge University Press
- Roach, A. T., Chilungu, N., La Salle, T. P., Talapatra, D., & Vignieri, M., (2009). Opportunities and options for facilitating and evaluating access to the general curriculum for students with disabilities. *Peabody Journal of Education*, 84, 511-528. doi:10.1080/01619560903240954
- Roach, A. T., & Elliot, S. T. (2006). The influence of access to education curriculum on alternate assessment performance of students with significant cognitive disabilities. *Educational Evaluation and Policy Analysis*, 28 (2), 181-194. doi:10.1080/01619560903240954
- Schragg, J. (1996) The IEP: benefits, challenges and future directions. final report. Alexandria, VA. National Association of State Directors of Special Education
- Thompson, S. J., Thurlow, M. L., Qunemoen, R. F., Esler, A., & Whetstone, P. (2001). Addressing standards and assessments on state IEP forms (Synthesis Report 38). Minneapolis, MN: SUniversity of Minnesota, National Center on Educational Outcomes.
- U.S Department of Education. (2008). Validity evidence for alternate assessments based on modified achievement standards. National Technical Advisory Council. Washington, D.C: Government Printing Office.
- United States Department of Education (2009). Office of Special Education Programs: Data tables for OSEP state reported data. Washington, DC: Author.
- United States Department of Education (2010). Office of Special Education Programs: Data tables for OSEP state reported data. Washington, DC: Author.
- Wehmeyer, M. L., Lattin, D., & Agran, M. (2001). Achieving access to the general curriculum for students with mental retardation: a curriculum decision making model. *Education and Training in Mental Retardation and Developmental Disabilities*, 36 (4), 327-342.

Appendix

Student ID:	Grade Level:	School District:						
Directions								
Step 1. Determine whether each IEP goal is academic-focused (i.e. addresses reading, language arts, mathematics, science, or social studies content).								
Step 2. For each IEP goal, complete the ratings for content alignment, present level of performance, educational need, and progress monitoring.								
Step 3. Calculate goal-level and overall IEP scores								
Evaluation Criteria	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Acad Goals (Mean)	All Goals (Mean)
Academic-Focused IEP Goal Does this goal address language arts, mathematics, science, or social studies content and/or skills?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No		
Content Alignment 2 = IEP goal clearly specifies a corresponding content standard and addresses skills/concepts that closely match or align to the identified standard. 1 = IEP goal clearly specifies a corresponding content standard and addresses skills/concepts that are a partial match (e.g., related or prerequisite) to the identified standard. 0 = IEP goal does <u>not</u> identify a corresponding content standard, <u>or</u> IEP goal addresses skills/concepts that are <u>not</u> related to the identified standard.								

<p>Present Level of Performance</p> <p>2 = IEP goal includes specific assessment data describing the student's current performance on goal-related concepts and skills.</p> <p>1 = IEP goal includes a general description (without assessment data) of student's current level of performance.</p> <p>0 = IEP goal does <u>not</u> include any assessment data or description of student's current level of performance.</p>								
<p>Educational Needs</p> <p>2 = IEP goal includes an explanation of how the student's disability adversely affects progress towards (a) skills and concepts addressed by the IEP goal; and (b) grade-level content standards.</p> <p>1 = IEP goal includes an explanation of how the student's disability adversely affects progress towards skills and concepts addressed by the IEP goal, but does not connect this information to grade-level content standards.</p> <p>0 = IEP goal does <u>not</u> include an explanation of how the student's disability adversely affects progress toward skills and concepts addressed by the IEP goal.</p>								
<p>Progress Monitoring</p> <p>2 = IEP goal defines the baseline level of performance AND reasonable rigorous target/outcomes in measurable terms.</p> <p>1 = IEP goal does define EITHER baseline level of performance OR reasonable rigorous target/outcomes in measurable terms (but not both).</p> <p>0 = IEP goal does define NEITHER baseline level of performance NOR reasonable rigorous target/ outcomes in measurable terms.</p>								
<p>Total Score for Goal</p>								