America's Challenge: Effective Teachers for At-Risk Schools and Students

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NATIONAL COMPREHENSIVE CENTER FOR TEACHER QUALITY

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Innovation Configurations to Improve Teacher Preparation in Reading, Classroom Behavior Management, and Inclusive Practices

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Innovation Configurations to Improve Teacher Preparation in Reading, Classroom Behavior Management, and Inclusive Practices

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Innovation configurations (IC) involving tables specifying key components of an instructional practice or behavioral intervention on one dimension and levels of implementation on the other have been developed at the National Comprehensive Center for Teacher Quality (NCCTQ) by Vanderbilt University to improve teacher preparation and professional development. The ICs address the areas of reading instruction, classroom organization and behavior management, and inclusive practices. Many current teacher education and professional development programs do not implement the scientifically based research on reading (Smartt & Reschly, 2007; Steiner & Rozen, 2004; Walsh, Glaser, & Wilcox, 2006), behavior management (Horner & Sugai, 2000; Kellam, Xiange, Merisca, Brown, & Ialongo, 1998; Oliver & Reschly, in press), and inclusive practices (Scruggs, Mastropieri, & McDuffie, 2007; U.S. Department of Education, 2004). Inadequate implementation of this knowledge base in teacher preparation reduces the qualifications of teachers and undermines the national policy goals to improve achievement and other educational outcomes.

The ICs described in this chapter are designed to improve teacher preparation and professional development, which will, in turn, improve teacher qualifications and enhance educational outcomes. The reading instruction and behavior management ICs are based on research regarding improving achievement and other outcomes for children and youth. We believe improved teacher preparation reflecting these research-based approaches will improve teaching practices, which will, in turn, improve student achievement. The policy bases, as well as the need, development, and intended uses for the ICs are discussed in this chapter.

Federal Policy Priorities and Foundations for Scientifically Based Instruction

The ICs in reading instruction, behavior management, and inclusive practices are firmly grounded in federal policies established in the Elementary and Secondary Education Act of 2002 (ESEA), now known as the No Child Left Behind (NCLB) Act, and in the Individuals with Disabilities Education Act of 2004 (IDEA). Both statutes place high priority on improving results for all students with additional emphasis on the following:

> (2) meeting the educational needs of low-achieving children in our nation's highest-poverty schools, limited English proficient children, migratory children, children with disabilities, Indian children, neglected or delinquent children, and young children in need of reading assistance;
>
> (3) closing the achievement gap between high- and low-performing children, especially the achievement gaps between minority and nonminority students, and between disadvantaged children and their more advantaged peers… (NCLB, 2002, Section 1001)

Historically, different terms have been used to refer to the children described in NCLB Section 1001. Regardless of terminology, the focus is clearly on students with poor educational outcomes in terms of achievement levels; behavior regulation; school completion; career development; and assumption of positive citizenship roles, including economic self-support.

NCLB and IDEA Mechanisms

The key mechanisms for accomplishing NCLB goals are school reform, scientifically based instruction delivered by highly qualified teachers (HQTs), and accountability for improved results. IDEA also places strong emphasis on improving academic achievement and success in the general education curriculum for students with disabilities as well as improving broader outcomes, such as graduation with a regular diploma and positive early-adult outcomes.

NCLB emphasizes the use of instruction that is structured according to scientifically based research (SBR) as one of the key foundations for improving results in general and remedial education. The term *scientifically based* appears 181 times in the statute, a clear indication of the importance Congress placed on the implementation of instructional procedures grounded in science. As defined in NCLB, the research base for SBR was largely limited to randomized control designs. Although the NCLB and IDEA laws have not changed, terminology in recent discussions has evolved from *SBR* to *evidence-based research* for at least two reasons. First, the narrow criteria for SBR excluded evidence from less rigorous research methodologies. In addition, only a limited number of true randomized control trial experiments have been conducted on many important educational research questions. The criteria for evidence-based research include a broader array of evidence from different research methodologies and have the effect of including a much larger number of research studies on which to base instruction and interventions. Randomized control designs with clear implications for instruction and interventions, however, do exist in some areas, most notably for Vanderbilt University's work in reading and classroom organization and behavior management.

Federal NCLB and IDEA policy clearly encourages instruction firmly grounded in science. Early identification and treatment of problems in general education are emphasized in both NCLB and IDEA, as well as the importance of HQTs to implement scientifically based instruction. Unfortunately, teacher preparation and professional development programs often do not provide adequate preparation in the key areas of reading, behavior management, and inclusive practices.

Innovation Configurations as Program Improvement Tools

ICs typically are established through tables that have two dimensions (Hall & Hord, 1987; Roy & Hord, 2004). Tables 1 and 2 (which appear later in this chapter) define the reading instruction and classroom organization and behavior management ICs. The essential components of the innovation or program are listed in the rows of the far left column, along with descriptors and examples to guide application of the criteria to coursework, standards, and classroom practices. The essential components of the ICs presented originate in research or policy (preferably both), with practice demonstrations and applications establishing the feasibility of wide dissemination and implementation. The research- and policy-based components are the critical features of ICs.

NCLB emphasizes the use of instruction that is structured according to scientifically based research (SBR) as one of the key foundations for improving results in general and remedial education.

The second dimension to be considered in the use of ICs is the degree of implementation. In the top row of the tables, several levels of implementation are defined. For example, no mention of the essential component is the lowest level of implementation and might be assigned a score of zero. Increasing levels of implementation are usually assigned progressively higher scores. Examples of higher implementation levels are as follows:

- The component is **mentioned** in the syllabus. (Score = 1)
- The component is **mentioned, plus readings/tests** are specified in the syllabus. (Score = 2)
- The component is **mentioned, plus readings/tests, and assignments, such as papers, or projects,** are required in the syllabus. (Score = 3)
- **All prior levels, plus supervised practice (field work) with feedback about degree of success** are required in the syllabus. (Score = 4)

The scores created to represent different levels of implementation are based on an ordinal scale—that is, a higher number indicates more of something, in this case more thorough implementation of an IC component. These scale points cannot, however, be interpreted as if the intervals between the scores are equal. For example, the difference between 1 and 2 cannot be assumed to be the same amount as the difference between 3 and 4. Furthermore, a score of 4 indicates more thorough implementation than a score of 2, but it cannot be interpreted as twice as much of some quality as a score of 2. Readers and potential users are urged to consider these limitations in the score scale when using it.

ICs have been used for at least 30 years in the development and implementation of educational innovations and methodologies (Hall & Hord, 1987; Roy & Hord, 2004). ICs have been used to evaluate programs and the fidelity of implementation of educational interventions (the degree to which the intervention was implemented as designed and intended).

ICs have been used most often as professional development tools to guide implementation of an innovation within a school and facilitate the change process. Some professionals use ICs for self-reflection and self-assessments. Other uses for ICs include program evaluation and research. We developed the reading instruction and classroom organization and behavior management ICs to evaluate and improve teacher preparation coursework and continuing professional development, focusing on the degree to which federal policies and SBR are implemented in coursework and supervised experiences. The ICs also are useful for examining professional association standards and state licensure and teacher education program approval requirements.

The reauthorization of IDEA (2004) further reflected Congressional commitment to the use of scientifically based reading instruction in the instruction and related services provided to students with disabilities.

Scientifically Based Reading Instruction IC

Related Federal Policy

NCLB, and by reference, IDEA (2004), were explicit regarding the adoption of scientifically based reading instruction. In this context, scientifically based reading instruction includes instruction in the five components of reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension), integration of the five components, systematic and explicit instruction, early universal screening for all children, and periodic progress monitoring and formative evaluation for struggling readers (National Reading Panel, 2000; Snow, Burns, & Griffin, 1998; see also the Florida Center for Reading Research website at www.fcrr.org and the Vaughn Gross Center for Reading and Language Arts website at www.texasreading.org).

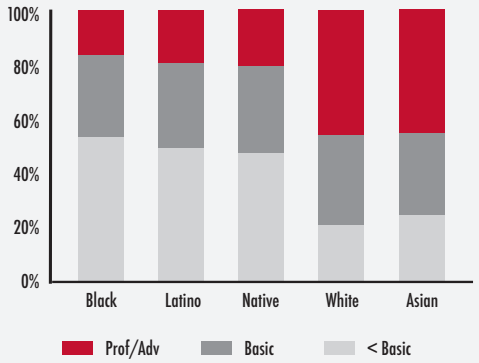
The reauthorization of IDEA (2004) further reflected Congressional commitment to the use of scientifically based reading instruction in the instruction and related services provided to students with disabilities. First, NCLB was cited frequently in the IDEA statute, typically around issues of alignment of requirements in such areas as HQTs, accountability mechanisms, data collection, and state reports

to the U.S. Department of Education. The clear intent was to produce closer alignment between what has been regarded as general, remedial, and special education. In addition, the criteria for scientifically based reading instruction were incorporated by reference into the IDEA explicitly at 34 C.F.R., Section 300.35. This provision established the same SBR and scientifically based reading instruction criteria in both NCLB and IDEA.

Need for Improved Reading Instruction

Improved reading is critical to accomplishing the goals of NCLB and IDEA (2004). The magnitudes of the reading achievement gaps across groups are apparent in the National Assessment of Education Progress 2005 (NAEP) results for fourth-grade students. The proportion of children reading below basic levels is too high for all groups but is particularly disturbing for African-American (58 percent), Hispanic (54 percent), and Native American (52 percent) groups (see Figure 1). High achievement in most academic subjects, socioeconomic mobility, and access to jobs with good incomes are largely dependent on reading and other complex literacy skills. Poor reading markedly undermines later achievement because the school curriculum from fourth grade on increasingly requires students to read to learn. Moreover, students who read below basic levels in fourth grade are unlikely to read competently as young adults.

Figure 1
NAEP Fourth-Grade Reading Results (2005)



Most graduates of current teacher preparation programs are not adequately prepared to implement scientifically based reading instruction in classrooms (Smartt & Reschly, 2007; Walsh et al., 2006). Only 11 of 72 programs in the study by Walsh et al. taught all five of the critical components of reading specified in NCLB. Smartt and Reschly (2007) also reported significant inadequacies in teacher preparation programs, national standards from scientific-professional associations, and state standards and credentialing requirements. These elements are connected. For example, teacher licensure examinations attempt to enhance content validity by reflecting what professional-scientific organizations specify and what is taught in university programs, which, in turn, are strongly influenced by professional standards and state licensure requirements.

Recent analysis substantiates the existence of inadequate scientifically based reading instruction in special education teacher preparation programs (Reschly, Holdheide, Smartt, & Oliver, 2007). Scientifically based reading instruction is not taught thoroughly in teacher preparation programs, nor is it represented adequately in special education professional association standards. Reading difficulties occur at very high frequencies among students with disabilities, yet not all scientifically based reading instruction elements appear in standards related to special education teacher preparation (Smartt & Reschly, 2007).

Development of the Scientifically Based Reading Instruction IC

The scientifically based reading IC, as detailed in Table 1, was developed as a tool to assist regional centers, states, and teacher preparation programs improve the reading instructional skills of teachers. The key components are derived from the scientific literature on reading instruction (Adams, 1990; Foorman et al., 2006; Lyon et al., 2001; Moats, 1999; National Reading Panel, 2000; Smartt & Reschly, 2007; Snow et al., 1998; Snow, Griffin, & Burns, 2005; Torgesen et al., 2001).

Table 1. Scientifically Based Reading Innovation Configuration

	Score = 0	Score = 1	Score = 2	Score = 3	Score = 4	Rating
Instructions: Place an X under the appropriate level of implementation for each course syllabus that meets the criteria specified from 0 to 4. Score and rate each item separately. Descriptors and/or examples are bulleted below each of the components.	**No evidence** that the component is included in the class syllabus.	Syllabi **mention component** in class syllabus.	Syllabi mention component in class and required **readings and tests and/or quizzes.**	Syllabi mention component in class with readings, tests, and **assignments and projects for application:** observations, lesson plans, classroom modeling.	Syllabi mention component in class with readings, tests, assignments, projects, **and teaching with application and feedback:** field work (practicum), tutoring.	The rating in this column is the highest score for any syllabus on each of the respective components.
Scientifically Based Reading Instruction, NCLB, IDEA • *Preventing Reading Difficulties in Young Children* (1998) • National Reading Panel Report (2000) • Reading success for all students • Scientifically based research (randomized studies, peer reviewed, replicated, minimize bias) • NCLB law (mandates scientifically based reading instruction) • Research-based strategies • Five essential elements of reading						
Phonemic Awareness (This is ideally subsumed under the broader topic phonological awareness.) • Individual speech sounds, phonemes • Precursor to phonics • Detect, segment, blend, and manipulate phonemes (sounds) (e.g., /b/ /a/ /t/ = bat) • Rhyming, alliteration in PK–K • Ability to manipulate sounds at the phoneme (sound) level • Elkonin boxes—common activity						
Column Subtotals						

	Score = 0	Score = 1	Score = 2	Score = 3	Score = 4	Rating
Instructions: Place an X under the appropriate level of implementation for each course syllabus that meets the criteria specified from 0 to 4. Score and rate each item separately. Descriptors and/or examples are bulleted below each of the components.	**No evidence** that the component is included in the class syllabus.	Syllabi **mention component** in class syllabus.	Syllabi mention component in class and required **readings and tests and/or quizzes.**	Syllabi mention component in class with readings, tests, and **assignments and projects for application:** observations, lesson plans, classroom modeling.	Syllabi mention component in class with readings, tests, and **assignments and projects for application:** observations, lesson plans, classroom modeling.	The rating in this column is the highest score for any syllabus on each of the respective components.
Phonics • Correspondence of sounds and letters • Phoneme-grapheme correspondences • Blending, decoding, encoding • Syllable types • Prefixes, suffixes, base words • Nonsense words (assessment) • Alphabetic principle • Word analysis • Words composed of letters (graphemes) that map to phonemes • Letters, sounds work in systematic way						
Fluency • Rate, accuracy, and prosody • Repeated readings • Fluency training • Partner reading • Measurable goals • Chart progress						
Column Subtotals						

Vocabulary • Taught directly and indirectly • Preteach • Oral language • Multiple contexts, meanings • Choosing, leveling words for explicit instruction • Word consciousness • Context • Morpheme						
Comprehension • Questioning strategies (i.e., before, during, and after reading) • Summarize/predict/retell • Metacognitive strategies • Teach both narrative and expository text structure • Collaborative strategic reading						
Integration • Planned connections of instruction for five essential elements of reading • Weaving of five essential components of reading (or any combination) first taught in isolation, always placed back in meaningful context • Integrated						
Column Subtotals						

	Score = 0	Score = 1	Score = 2	Score = 3	Score = 4	Rating
Instructions: Place an X under the appropriate level of implementation for each course syllabus that meets the criteria specified from 0 to 4. Score and rate each item separately. Descriptors and/or examples are bulleted below each of the components.	**No evidence** that the component is included in the class syllabus.	Syllabi **mention component** in class syllabus.	Syllabi mention component in class and required **readings and tests and/or quizzes.**	Syllabi mention component in class with readings, tests, and **assignments and projects for application:** observations, lesson plans, classroom modeling.	Syllabi mention component in class with readings, tests, and **assignments and projects for application:** observations, lesson plans, classroom modeling.	The rating in this column is the highest score for any syllabus on each of the respective components.
Systematic Instruction • Planned/purposeful/sequential • Step-by-step • Example: Teach from easy to difficult, such as certain letters (*b*, *m*, *a*) before others (*y*, *x*, *tch*). • Directions for determining whether reading programs use skills sequence and provide adequate practice						
Explicit Instruction • Direct/straight forward, (e.g., this is the letter *b* representing the \b\ sound) • No room for guessing • I do it, we do it, you do it.						
Column Subtotals						

Screening Assessment • Early identification and prevention • Brief measures • All students • Identifying those who require extra support • Valid and reliable instruments						
Progress Monitoring • Ongoing and frequent assessment for those requiring additional support • Providing additional support, monitor every 1–2 weeks • Instructional modifications made accordingly • Reflects appropriateness of the teacher's intervention						
Column Subtotals						
Column Totals (All Pages)						

Two websites provide additional information on scientifically based reading instruction (www.fcrr.org and www.texasreading.org). The content validity of the reading configuration is based on the correspondence of the components (see far left column of Table 1) to the scientific literature on reading instruction.

The scientifically based reading IC was applied in a study of required coursework syllabi from 26 of 31 special education teacher preparation programs in a large-population state. Interjudge reliability was approximately .85 for exact ratings from two independent judges. This level of reliability is sufficient for program evaluation purposes—in this case, examination of the content of teacher preparation coursework (Reschly et al., 2007).

Suggested uses of this scientifically based reading IC are as follows: evaluation and improvement of teacher preparation and professional development in reading instruction, examination and improvement of scientific-professional association standards for teacher preparation, and improved state teacher licensure standards and teacher preparation program approval.

Classroom Organization and Behavior Management IC

Related Federal Policy

Reciprocal relationships between behavior and achievement (see Horner & Sugai, 2000; Shinn, Stoner, & Walker, 2002) are at least implicitly recognized in NCLB and IDEA (2004). Section 2122 of NCLB requires the following:

> (9) a description of how the local educational agency (LEA) will provide training to enable teachers to—
>
> > (A) teach and address the needs of students with different learning styles, particularly students with disabilities, students with special learning needs (including students who are gifted and talented), and students with limited English proficiency;
> >
> > (B) **improve student behavior in the classroom and identify early and appropriate interventions to help students described in subparagraph (A) learn;…** [emphasis added]

A critical Congressional finding that appeared in an early section of the IDEA (2004) statute endorsed schoolwide literacy, behavior supports and management, and prevention of disabilities (20 U.S. 1400.602[c]):

> (5) Almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by—
>
> > (F) providing incentives for whole-school approaches, scientifically based early reading programs, positive behavioral interventions and supports, and early intervening services to reduce the need to label children as disabled in order to address the learning and behavioral needs of such children;

Both NCLB and IDEA (2004) place significant emphasis on the prevention of poor achievement, learning and behavior problems, and disabilities through intensive instruction in general and remedial education. IDEA now allows LEAs to use up to 15 percent of their Federal IDEA funding for early intervening services in general education. If significant minority disproportionality exists in the special education program, LEAs are required to allocate 15 percent of these monies for prevention efforts. Early intervening services are designed to prevent misidentification and overidentification of students with disabilities through general and remedial education interventions focused on "scientifically based academic and behavioral interventions, including scientifically based literacy instruction …" (34 C.F.R. 300.226).

Need for Improved Classroom Organization and Behavior Management

The need for the classroom organization and behavior management IC is based on the following evidence (Oliver & Reschly, in press):

- Achievement and behavior are reciprocally related.
- The learning opportunities of individuals and groups of children are compromised by disruptive behavior.
- Inclusion of students with disabilities in general education classrooms and curricula is often undermined by disruptive behavior.
- Teacher preparation programs do not provide adequate training in classroom organization and behavior management.
- Teacher attrition is related to problems in classroom behavior management.

Student discipline issues are a significant source of teacher stress and burnout (Brouwers & Tomic, 2000) and a significant reason why teachers leave the profession (Coggshall, 2006; Ingersoll & Smith, 2003).

A recent report suggests that teacher turnover is enormously costly (National Commission on Teaching and America's Future, 2007). If teachers are not able to manage student behavior effectively, instructional time is lost. This leads to reduced opportunities to learn essential content, skills, and competencies. Teacher preparation and support for new teachers that includes content and supervised experiences with classroom management and interventions for disruptive behavior can thus improve teacher retention and effectiveness.

Disruptive behaviors frequently reduce access to general education curricula and classrooms for students with disabilities and diminish the benefits of instruction for students with at-risk characteristics and disabilities, regardless of setting. For example, inattention and disruptive behaviors diminish the effects of small-group, tutoring interventions in reading (Torgesen et al., 1999; Vaughn, Linan-Thompson, & Hickman, 2003; also see the Vaughn Gross Center for Reading and Language Arts website at www.texasreading.org/3tier/). Moreover, sustained effects of small-group interventions depend heavily on more efficient learning in general education classrooms.

Development of the Classroom Organization and Behavior Management IC

The seven key components in the classroom organization and behavior management IC, shown in Table 2, are as follows: (1) structured environment, (2) active supervision and student engagement, (3) schoolwide behavioral expectations, (4) classroom rules, (5) classroom routines, (6) encouragement of appropriate behavior, and (7) behavior reduction strategies. *Behavior reduction strategies* refer to methods to reduce or eliminate undesirable, disruptive behaviors that interfere with the learning opportunities of individuals and groups of students. An example of an intervention to reduce disruptive behavior is response cost, which involves withdrawing reinforcing events such as loss of privileges being made contingent on the occurrence of disruptive behavior.

Teacher preparation and support for new teachers that includes content and supervised experiences with classroom management and interventions for disruptive behavior can thus improve teacher retention and effectiveness.

Classroom management and student engagement can sometimes be improved dramatically by relatively inexpensive continuing education and relatively small changes in the classroom environment. We are impressed with a randomized control study by Kellam, Xiange et al. (1998) in a large urban school district with high proportions of economically disadvantaged, minority, and low-performing schools. The relatively simple procedure was the Good Behavior Game (Barrish, Saunders, & Wolf, 1969) taught to randomly assigned teachers

in one afternoon of continuing education with a half-day follow-up a few months later. Control group teachers received the same amount of continuing education but on different topics—the alignment of state standards, curricula, and high-stakes assessments.

The Good Behavior Game involves constituting two or more groups of children in a classroom who attempt to display the highest rate of appropriate behaviors, such as following classroom rules, engaging in academic tasks, and completion of work. The group with the highest rate of appropriate behavior wins a daily prize (e.g., lining up first for recess or assisting the teacher with classroom tasks such as passing out papers). Elementary age children generally are highly motivated by these arrangements. Applications also exist for middle and high schools (e.g., homework pass consequences). Rates of disruptive and aggressive behaviors declined significantly and immediately in the experimental classrooms. Engaged time and academic productivity increased. The decline in aggressive behaviors for boys in the experimental group compared to controls persisted through sixth grade (Greer-Chase, Rhodes, & Kellam, 2002; Kellam, Mayer, Rebok, & Hawkins, 1998). Three conclusions from Kellam, Xiange et al. (1998) are as accurate today as they were 10 years ago:

- Teacher training typically does not provide effective methods and experience in classroom behavior management. (p. 182)
- Teachers' skills at classroom management were then critical to children's socialization, particularly in the face of family poverty. (p. 182)
- The policy implications are that teachers' colleges and inservice training need to include specific training in classroom behavior management as an important part of the socialization role of the classroom. (p. 182)

The behavior innovation configuration was used in the study of course syllabi described briefly in a prior section (Reschly et al., 2007). The reliability of exact agreements across two independent judges was again approximately .85. Reliability at this level is sufficient to support the use of the instrument in evaluation studies—in this case, evaluation of teacher preparation in classroom organization and behavior management. The intended uses for the classroom organization and behavior management IC are the same as those for the reading IC: improving teacher preparation and professional development experiences, prompting greater attention to classroom behavior management in professional association standards, and improving state licensure and teacher preparation program approval standards.

There is one important caution: Before presenting the behavior IC in this chapter, it is important to emphasize that providing challenging instruction at the student's instructional level and using a variety of teaching methods are prerequisites to effective classroom organization and behavior management. For example, matching instruction to the child's skill level in reading using a variety of methods is much more effective than instruction that may require reading competencies at two or more grade levels above the child's current reading level. Research literature clearly indicates that good instruction, although necessary, is not sufficient to produce high achievement; application of behavior strategies is a second necessary component.

Table 2. Classroom Organization and Behavior Management Innovation Configuration

	Score = 0	Score = 1	Score = 2	Score = 3	Score = 4	Rating
Instructions: Place an X under the appropriate level of implementation for each course syllabus that meets the criteria specified from 0 to 4. Score and rate each item separately.	**No evidence** that the component is included in the class syllabus.	Syllabi **mention** content related to the component by listing it (e.g., classroom environment, structure).	Syllabi mention the component and require **readings** (at least two, either textbooks or journal articles) on the topic.	Syllabi mention the component; require readings; and have either an **assignment, project, or test** on the topic.	Syllabi mention the component; require readings; have assignments, projects, or tests and **supervised practice** related to the concept through student teaching activities.	The rating in this column is the highest score for any syllabus on each of the respective components.
Structured Environment • Predictable routines established and taught (e.g., turning in homework, transitions, bathroom requests) and daily schedule posted. • Environment arranged for ease of flow of traffic and distractions minimized. **Active Supervision and Student Engagement** • Teacher scans, moves in unpredictable ways, and monitors student behavior. • Teacher uses more positive to negative teacher-student interactions. • Teacher provides high rates of opportunities for students to respond. • Teacher utilizes multiple observable ways to engage students (e.g., response cards, peer tutoring).						
Schoolwide Behavioral Expectations • A few, positively stated behavioral expectations, posted, systematically taught, reinforced, and monitored.						
Column Subtotals						

	Score = 0	Score = 1	Score = 2	Score = 3	Score = 4	Rating
Instructions: Place an X under the appropriate level of implementation for each course syllabus that meets the criteria specified from 0 to 4. Score and rate each item separately.	**No evidence** that the component is included in the class syllabus.	Syllabi **mention** content related to the component by listing it (e.g., classroom environment, structure).	Syllabi mention the component and require **readings** (at least two, either textbooks or journal articles) on the topic.	Syllabi mention the component; require readings; and have either an **assignment, project, or test** on the topic.	Syllabi mention the component; require readings; and have assignments, projects, or tests and **supervised practice** related to the concept through student teaching activities.	The rating in this column is the highest score for any syllabus on each of the respective components.
Classroom Rules • A few, positively stated behavioral rules linked to schoolwide expectations. • Posted, systematically taught, reinforced, and monitored.						
Classroom Routines • Classroom routines are systematically taught, reinforced, and monitored within the context of the classroom (e.g., turning in homework, requesting assistance).						
Column Subtotals						

Encourage Appropriate Behavior • Procedures to acknowledge appropriate behavior at the group level (e.g., specific, contingent praise, tokens, activities, group contingencies, "Good Behavior Game"). • Procedures to encourage appropriate behavior at the individual student level (e.g., specific, contingent praise, behavior contracts). • Data collection on frequency of appropriate behavior within classroom environment.						
Behavior Reduction Strategies • Antecedent strategies to prevent inappropriate behavior (e.g., precorrection, prompts, environmental arrangements). • Multiple procedures to respond to inappropriate behavior. • Procedures to teach replacement behaviors and to re-teach appropriate behavior (e.g., overcorrection). • Differential reinforcement (e.g., reinforcing other, competing behaviors). • Effective use of consequences (e.g., planned ignoring, time-out from positive reinforcement, reinforcing around target student).						
Column Subtotals						
Column Totals (All Pages)						

Listen to NCCTQ's National Issues Forums Online

Preparing Special Education Teachers

NCCTQ convened an invitational issue forum for the regional comprehensive assistance centers on June 27, 2007, in Arlington, Virginia. The roundtable discussion focused on special education issues—including recent policy, research, and practice—with an emphasis on teacher preparation.

Information and materials are available online (www.ncctq.org/events.php).

Implementing the Highly Qualified Teacher Plans

NCCTQ convened an invitational issue forum March 28–29, 2007, in Washington, D.C., to assist regional comprehensive assistance centers and state education agencies move toward implementation of the highly qualified teacher plans.

Information and materials are available online (www.ncctq.org/issueforums/hqplans/).

Addressing Personnel Shortages and the Recruitment of Special Education, Mathematics, and Science Teachers in At-Risk Schools

On May 24–25, 2006, NCCTQ hosted its inaugural issue forum, "Addressing Personnel Shortages and the Recruitment of Special Education, Mathematics, and Science Teachers in At-Risk Schools." The primary goals of the meeting were as follows:

- Build knowledge and resource foundation.
- Learn emerging strategies and practices.
- Build capacity to share and apply knowledge base.
- Use applicable tools and resources to identify data trends around special education, mathematics, and science.

Information and materials are available online (www.ncctq.org/issueforums/atrisk/).

Inclusive Practices IC

Related Federal Policy

The first recommendation in the President's Commission on Excellence in Special Education's 2002 report, *A New Era: Revitalizing Special Education for Children and Their Families*, was that all children with disabilities are general education students, regardless of the category or severity of their disability. The current high priority placed on fuller integration of students with disabilities in general education classrooms is a continuation of the well-established Least Restrictive Environment (LRE) Principle from the Education of All Handicapped Children Act (1975). One of the current priorities in IDEA (2004) is the improved integration of students with disabilities into general education classrooms.

Nationwide Need for Inclusive Practices

Currently, states and local districts vary enormously in the implementation of the LRE principle (see www.ideadata.org). Nationally, approximately 54 percent of students with disabilities participate in general education classrooms for 80 percent or more of the school day; however, state patterns for participation in the general education classrooms for 80 percent or more of the school day vary greatly—from 23 percent in Hawaii to 79 percent in North Dakota (www.ideadata.org/tables29th/ar_2-2.xls). Moreover, a recent metasynthesis of qualitative studies regarding integration practices identified significant variations in the roles of teachers, student participation, and curricular emphases (Scruggs et al., 2007). Current policy clearly assumes that low implementation of LRE diminishes opportunities for full participation in the general education curriculum and likely reduces educational outcomes.

Development of the Inclusive Practices IC

The need for the inclusive practices IC is based on the policy mandates to improve the integration of students with disabilities in general education settings and curricula. The content for this IC is based on the extensive literature on integration of students with disabilities into general classroom settings (e.g., Scruggs et al., 2007; U.S. Department of Education, 2004). The work also capitalizes on findings established at two technical assistance centers funded by the U.S. Department of Education's Office of Special Education Programs, the Center on Improving Teacher Quality (www.ccsso.org/projects/), and the Center on Personnel Studies in Special Education (www.copsse.org). We have attempted to build on the work of these two centers by developing a tool that specifies the required content and experiences in teacher preparation coursework that improves collaboration among general and special education teachers and, in turn, improves access to the general education curriculum for students with disabilities.

The inclusive practices IC is a tool to evaluate and improve practices to more fully and effectively integrate students with disabilities in general education settings.

The current version of the inclusive practices IC identifies five key components based on the literature cited previously: (1) collaborative planning; (2) instructional strategies, accommodations, and modifications; (3) services in inclusive settings; (4) social opportunities, relationships, and self-advocacy; and (5) family involvement. Each of these components is firmly grounded in the inclusive practices literature. This literature, however, consists primarily of small sample qualitative studies that do not generate efficacy information for the specific components of inclusive practices (Scruggs et al., 2007). The degree to which the inclusive practices actually produce higher achievement has not yet been firmly established; thus, these components cannot be regarded at this time as being "evidence-based." The justification for developing the inclusive practices IC rests on policy mandates requiring such practices rather than on evidence-based research that supports such practices.

The inclusive practices IC is a tool to evaluate and improve practices to more fully and effectively integrate students with disabilities in general education settings. This IC has been applied in one study of course syllabi described in prior sections (Reschly et al., 2007). Interjudge reliability in this study was .79, closely approximating the level required for use in evaluation studies. The IC is in the final stages of development and will be available on the NCCTQ website (www.ncctq.org) in the near future.

Realization of the NCLB and IDEA (2004) goals requires HQTs who apply scientifically based interventions for all children.

Summary

Many teacher preparation programs do not implement scientifically based research or evidence-based programs for reading instruction (Smartt & Reschly, 2007; Steiner & Rozen, 2004; Walsh et al., 2006), behavior management (Horner & Sugai, 2000; Kellam, Xiange et al., 1998; Oliver & Reschly, in press), and inclusive practices (Scruggs et al., 2007; U.S. Department of Education, 2004). ICs were developed in scientifically based reading instruction and classroom organization and behavior management as tools to align teacher preparation and professional development with federal policies and evidence-based research. Improvements in teacher preparation and professional development are likely to produce changes in teaching practices, aligning them more closely with evidence-based instruction and interventions that produce improved achievement for children and youth.

Ameliorating large gaps in achievement related to group and socioeconomic status is a high priority in NCLB (2002). Enormous gaps exist, for example, among racial and ethnic groups according to National Assessment of Educational Progress (2005) reading results. Implementation of more effective reading instruction firmly grounded in science (Snow et al., 1998) is a promising approach to reducing these achievement gaps and improving results. Furthermore, teachers report dealing with discipline and classroom behavior as a major reason for leaving the teaching profession (Coggshall, 2006; Ingersoll & Smith, 2003). Academic instruction, effective classroom organization, and behavior management are reciprocally related. Reading and behavior ICs presented in this chapter are designed to improve teacher preparation, leading to improved teaching practices and resulting in improved student performance.

The foundation for the inclusive practices IC rests primarily on NCLB and IDEA policy mandates. Currently, the specific inclusive practices components cannot be regarded as being evidence-based, in the sense of the components having demonstrated clear empirical connections to improved student achievement. Instead, these inclusive practices are designed to implement policy mandates and enhance access to the general education curriculum for students with disabilities. Accomplishment of the latter likely sets the stage for improved achievement for students with disabilities.

Realization of the NCLB and IDEA (2004) goals requires HQTs who apply scientifically based interventions for all children. A prerequisite is teacher preparation and professional development that incorporates policy goals and scientifically based instruction. The ICs described here are designed to improve the degree to which teacher preparation programs implement SBR and scientifically based reading instruction, classroom organization and behavior management, and inclusive practices leading to improved teacher qualifications, improved teaching practices, and improved student achievement.

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