Introductory Packet

Learning Problems and Learning Disabilities

(Revised 2015)

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The real difficulty in changing the course of any enterprise lies not in developing new ideas but in escaping old ones.

John Maynard Keynes

Learning Problems and Learning Disabilities

What the best and wisest parent wants for (her)/his own child
that must the community want for all of its children.
Any other idea... is narrow and unlovely.
John Dewey

Introduction

We are all called upon to do something about the many individuals who have trouble learning academic skills. To respond effectively, we will need a broad understanding of what causes learning problems (including learning disabilities) and what society in general and schools in particular need to do about them.

We are in an era of major changes related to schools and schooling. This is especially the case with respect to concerns about learning, behavior, and emotional problems and the respective roles of regular and special education policies and practices and public funding for private programs and schooling. It is within the context of such changes that we approach the integrally related topics of learning problems and learning disabilities.

Reauthorization of the federal Individuals with Disabilities Education Act (IDEA) is leading to widespread revisiting of the concept of learning disabilities (LD). Of particular concern has been the wholesale misuse of the term in nonprofessional applications and professional misdiagnoses. About 50% of those currently assigned a special education diagnosis are identified as having a learning disability. Because the numbers are so out of proportion with other disability diagnoses, there has been a growing backlash to LD.

However, the current discussion remains too limited in its nature and scope. The need is to put the specialized concept of learning disabilities into perspective with respect to commonplace learning problems. If current estimates are correct, about 80% of those currently diagnosed as having a learning disability actually do not. This is not to deny that they have a learning problem or that they don't deserve assistance in overcoming their problems. This also in no way is meant to underappreciate the problems experienced by those who have true learning disabilities.

This resource puts learning disabilities into perspective as one type of learning problem and offers frameworks and resources for dealing with all learning problems. In doing so, it highlights concerns about prevention, classroom intervention, the role of school-wide programs, and the importance of incorporating the invaluable understanding of human motivation that intrinsic motivation researchers have developed over the last 40 years.

It is time to move forward, putting learning disabilities into broad perspective as one type of learning problem, and approaching all learning problems in the context of fundamental ideas about learning and teaching, as well as comprehensive, multifaceted approaches to addressing barriers to learning and teaching.

To these ends, this packet focuses on a wide spectrum of learning problems. It is designed to provide some basic information for all who seek to broaden their understanding. It also emphasizes new directions for classification and intervention

In particular, a broad perspective is presented that captures a transactional understanding of the causes and correlation of learning difficulties. Learning is shaped by the continuous interplay between the learner and the overlapping, muti-layered contexts in which learning takes place. The well-being of a significant proportion of the nation's youth depends on schools and communities appreciating the full implications of this truism regarding human development. It also is true that such a broad perspective raises additional complexities for practitioners, researchers, and policy makers. In suggesting the need to confront the complexities, we represent a growing group of stakeholders who think that enabling all students to benefit more fully from their schooling depends on intervention strategies that go well beyond current instructional reforms. Leaving no child behind must be more than a maxim; it must represent a policy and practice agenda that effectively addresses all barriers to learning and teaching.

For an indepth look, see *Revisiting Learning & Behavior Problems: Moving Schools Forward* at http://smhp.psych.ucla.edu/pdfdocs/contedu/revisitinglearning.pdf

I. About Learning Problems and Learning Disabilities

A. Revisiting Learning Problems and Learning Disabilities

B. Incidence/Prevalence

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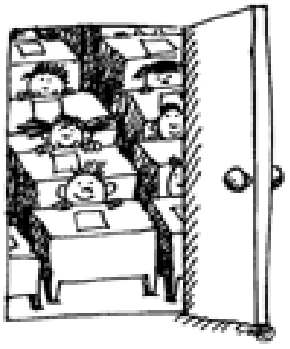

The single most characteristic thing about human beings is that they learn.
Jerome Bruner

I. A. Revisiting Learning Problems and Learning Disabilities

Lack of success at school is one of the most common factors interfering with the current well-being and future opportunities of children and adolescents. Thus, those concerned about the mental health of young people must strive to enhance understanding of the nature of learning problems and the issues surrounding the concept of learning disabilities.

Since the early 1960's, our work has focused on youngsters who manifest a range of learning, behavior, and emotional problems. Along the way, we have written extensively about the problem of who should and who shouldn't be designated as having a learning disability (see attached references for examples). It was evident from the time the term was adopted into law that problems of over-identification would arise, and at some point, there would be a policy backlash. Over the last 30 years, the LD label has been assigned to a growing number of students. By 2001, over 50% of those designated as in need of special education were labeled LD (see Exhibit on page 3).

From the onset of the Individuals with Disabilities Education Act (IDEA) reauthorization process in 2002, the policy backlash toward the LD label was in full force. Fundamental questions were raised about who is and who isn't appropriately diagnosed as having a learning disability.

In revisiting the topic of learning disabilities, we begin by putting it into the broad context of learning problems. Moreover, we consider all learning problems in the context of basic ideas about learning and teaching. (To move forward in dealing with all learning problems requires a fundamental appreciation of how to foster learning among persons with and without internal disabilities.) And, because socio-political and economic factors have such a pervasive influence on learning and teaching, we conclude by highlighting the societal context.

Learning Problems as the Context for Understanding Learning Disabilities

Although reliable data do not exist, most would agree that at least 30 percent of the public school population in the United States are not doing well academically and could be described as having school learning problems. We approach the topic of learning disabilities with that large group in mind and apply the term *learning disabilities* to a subset found among the larger group.

There are many reasons for wanting to differentiate among individuals who have learning problems. One reason is that some learning problems can be prevented; another is that some learning problems are much easier to overcome than others.

Of course, differentiating among persons who have learning problems is not easy. Severity is the most common factor used to distinguish learning disabilities from other learning problems. However, there also is a tendency to rely heavily on how far behind an individual lags, not only in reading, but in other academic skills. Thus, besides severity, there is concern about how pervasive the problem is. Specific criteria for judging severity and pervasiveness depend on prevailing age, gender, subculture, and social status expectations. Also important is how long the problem has persisted. Still, in the final analysis the case for LD as a special type of learning problem must be made by differentiating learning disabilities from commonplace learning problems.

The Federal Definition of Learning Disabilities

The definition of *learning disabilities* proposed in the 1960s by the National Advisory Committee on Handicapped Children was given official status when it was incorporated (with minor modifications into federal legislation in 1969. As stated in the statute (U.S. Public Law 94-142 – the Education for all Handicapped Children Act of 1975), individuals with specific learning disabilities are those who have

> "a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage." (Federal Register, 1977, p. 65, 083)

This definition has been controversial from the onset. In particular: (1) use of the term "children" was seen as inappropriately excluding adolescents and adults; (2) the phrase "basic psychological processes" was seen as too vague and became the focus of debates between advocates of direct instruction and those concerned with treating underlying processing disabilities; (3) the list of inclusive conditions (e.g., perceptual handicaps, minimal brain dysfunction) was seen as out-dated and ill-defined; and (4) the "exclusion" clause was seen as contributing to misconceptions (e.g., that LD cannot occur in conjunction with other handicapping conditions, environmental, cultural, or economic disadvantage).

Learning and Teaching as the Context for Understanding Learning Problems

Although learning is not limited to any one time or place, problems in learning are recognized most often in classroom settings. Why are there so many learning problems? What can we do to make things better? We need to understand the factors that lead to learning and those that interfere. One critical set of such factors has to do with teaching, both in and out of schools.

From the perspective of learning and teaching, another way to differentiate among learning problems is to identify those caused primarily because of the way schooling is conducted. Given that there are schooling-caused learning problems, they ought to be differentiated from those caused by central nervous system dysfunctioning (i.e., LD).

When we do this, it becomes clearer that the prevention of some learning problems requires changes in school practices. And, such a perspective suggests that those with learning disabilities may require something more in the way of help.

We hasten to add, however, that the fundamentals of good teaching apply in helping anyone with a learning problem. Moreover, quality teaching can be seen as providing a necessary context for approaching all learning problems. And, excellence in teaching is best understood in the context of how people learn.

As Jerome Bruner has stated: "The single most characteristic thing about human beings is that they learn." This is not to say that all learning is the result of direct teaching. High quality teaching encourages learning beyond that which can take place during any lesson.

In part because of the limitations of current assessment practices, there has been widespread failure to differentiate learning disabilities from other types of learning problems – particularly with respect to cause. The result of this failure has been that most programs and research samples include individuals ranging from those whose learning problems were caused primarily by environmental deficiencies to those whose problems stem from internal disabilities. This source of sample variability confounds efforts to compare findings from sample to sample, limits generalization of findings, and makes translations to practice tenuous.

Because of the classification problem, a large proportion of research purporting to deal with LD samples has more to say about learning *problems* in general than about learning *disabilities.* In this regard, failure to differentiate underachievement caused by neurological dysfunctioning from that caused by other factors has been cited specifically as a major deterrent to important lines of research and theory and threatens the integrity of the LD field.

With respect to intervention practice and research, failure to differentiate learning problems in terms of cause contributes to widespread misdiagnosis and to unneeded specialized treatments (i.e., individuals who do not have disabilities end up being treated as if they do). In turn, this leads to profound misunderstanding of what interventions do and do not have unique promise for learning disabilities. In general, the scope of misdiagnoses and misprescriptions in the field has

Exhibit

Some Data and Some Controversy

Data from the National Center for Education Statistics (NCES, 2000) indicates that 37% of fourth graders cannot read at a basic level. Best estimates suggest that at least 20 percent of elementary students in the U.S. have significant reading problems. Among those from poor families and those with limited-English language skills, the percentage shoots up to 60-70%. At the same time, best estimates suggest that minimally 95% of all children can be taught to read.

By the late 1990s, about 50% of those students designated as in need of special education were labeled LD. This translates into 2.8 million children. (The proportion of school-age children so-labeled has risen from 1.8% in 1976-77 to 5.2% in 2001.) Reading and behavior problems were probably the largest source of the referrals that led to these students being so-designated (Lyons, 2002, Testimony before the Subcommittee on Educational Reform). Testifying before the U.S. Senate Subcommittee for Educational Reform in 2002, Robert Pasternack (Asst. Secretary for Special Education and Rehabilitative Services in the U.S. Dept. of Education) stated that 80-90% of those labeled as having a specific learning disability have their primary difficulties in learning to read, and "of the children who will eventually drop out of school, over seventy-five percent will report difficulties in learning to read."

It is these types of data that have become the nexus for questioning whether many of the youngsters designated as LD are mainly displaying commonplace reading and related behavior problems. And, the basis for many of these problems is widely attributed to the way the students are being taught.

While there is a trend to focus on inadequate teaching as a cause of many learning problems, particularly reading problems, there is considerable controversy about this, as well as about how to improve the situation. On one side are those who emphasize the instructional literature. They stress use of direct reading instruction focused on ensuring students, especially in the early grades, learn to distinguish phonemic sounds, connect letters with the sounds they represent (phonics), decode words, and eventually learn to read fluently and with comprehension (NICHD, 2000).[1] With specific respect to LD, such direct instruction or "scientifically-based reading instruction" is being advocated as the key to reducing the numbers labeled. The claim is that findings from early intervention and prevention studies suggest that "reading failure rates as high as 38-40 percent can be reduced to six percent or less" (Lyons, 1998).[2] Thus, before a student is diagnosed, advocates argue that students should be provided with "well-designed and well-implemented early intervention" using the type of direct instruction described by the National Reading Panel sponsored by NICHD (2000). Direct instruction is heavily-oriented to development of specific skills, with the skills explicitly laid out in lesson plans for teachers in published reading programs and with frequent testing to identify what has and hasn't been learned.

On the other side of the controversy are critics who argue that the evidence-base for direct instruction is so limited that no one can be confident that the approach will produce the type of reading interest and abilities that college-bound students must develop. These professionals are especially critical of the work of the National Reading Panel, which they argue was overloaded with proponents of direct instruction and inappropriately relied on correlational data to infer causation.

[1] NICHD (2000) Report of the National Reading Panel: *Teaching Children to Read.* http://www.nichd.nih.gov/publications/nrp/upload/report_pdf.pdf

[2] G. Reid Lyons (1998). Reading: A research based approach. In California State Board of Education (Eds.). *Read all about it: Readings to inform the profession*. Sacramento, CA: Sacramento County Office of Education.

undermined prevention, remediation, research, and training and the policy decisions shaping such activity.

Given that the concept of LD is poorly defined and diagnosed, it is not surprising that there has been considerable misdiagnosis. And, given that those so diagnosed have become the largest percentage in special education programs, it is not surprising that the LD field has experienced a significant backlash in the form of criticism of current practice and policy.

Keeping LD in Proper Perspective

Because of the scope of misdiagnosis, it is obvious that assignment of the LD label is not a sufficient indication that an individual has an underlying dysfunction. Still, it remains scientifically valid to conceive of a subgroup (albeit a small subset) with neurologically based learning problems and to differentiate this subgroup from those with learning problems *caused* by other factors. A useful perspective for doing this is provided by a reciprocal determinist or transactional view of behavior. (Note that this view goes beyond taking an ecological perspective.)

A transactional perspective subsumes rather than replaces the idea that some learning problems stem from neurological dysfunction and differences. As Adelman and Taylor (e.g., Adelman, 1971; Adelman & Taylor, 1993) have elaborated over the years, a transactional view acknowledges that there are cases in which an individual's disabilities predispose him or her to learning problems even in highly accommodating settings. At the same time, however, such a view accounts for instances in which the environment is so inadequate or hostile that individuals have problems despite having no disability. Finally, it recognizes problems caused by a combination of person and environment factors. The value of a broad transactional perspective, then, is that it shifts the focus from asking whether there is a neurological deficit causing the learning problem to asking whether the causes are to be found in one of the following as *primary* instigating factors:

- *The individual* (e.g., a neurological dysfunction; cognitive skill and/or strategy deficits; developmental and/or motivational differences)

- *The environment* (e.g., the primary environment, such as poor instructional programs, parental neglect; the secondary environment, such as racially isolated schools and neighborhoods; or the tertiary environment, such as broad social, economic, political, and cultural influences)
- The reciprocal *interplay of individual and environment*

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The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.

Anatole France (1890)

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Type I, II, and III Learning Problems

No simple typology can do justice to the complexities involved in classifying learning problems for purposes of research, practice, and policymaking. However, even a simple conceptual classification framework based on a transactional view can be helpful. For example, it is valuable to use such an approach to differentiate types of learning problems along a causal continuum.

In most cases, it is impossible to be certain what the cause of a specific individual's learning problem might be. Nevertheless, from a theoretical viewpoint, it makes sense to think of learning problems as caused by different factors (see Exhibit on next page). And, of course, a similar case can be made for a range of mental health and psychosocial concerns related to children and adolescents (Adelman, 1995; Adelman & Taylor, 1994).

Failure to differentiate learning disabilities from other types of learning problems has caused a great deal of confusion and controversy. Currently, almost any individual with a learning problem stands a good chance of being diagnosed as having learning disabilities. As a result, many who do not have disabilities are treated as if the cause of their problems was some form of personal pathology. This leads to prescriptions of unneeded treatments for nonexistent or misidentified internal dysfunctions. It also interferes with efforts to clarify which interventions do and do not show promise for ameliorating different types of learning problems. Ultimately, keeping learning disabilities in proper perspective is essential to improving both research and practice.

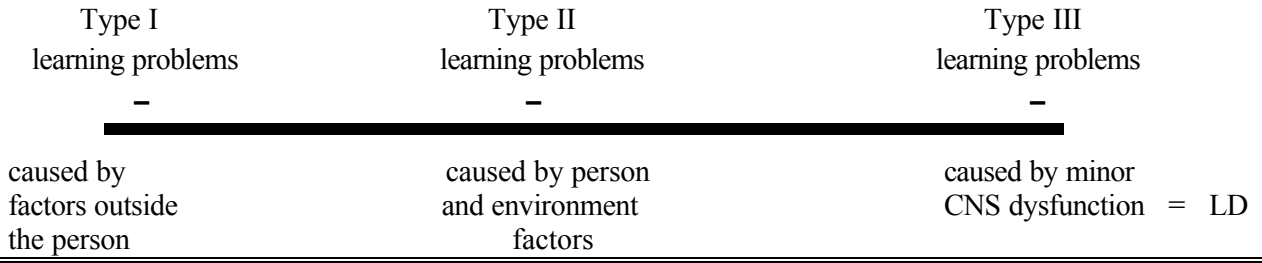
(text cont. on page 5)

Learning Problems and Learning Disabilities: A Causal Continuum

By way of introduction, think about a random sample of students for whom learning problems are the *primary* problem (that is, the learning problem is not the result of seeing or hearing impairments, severe mental retardation, severe emotional disturbances, or autism). What makes it difficult for them to learn? Theoretically, at least, it is reasonable to speculate that some may have a relatively minor internal disorder causing a *minor* central nervous system (CNS) dysfunction that makes learning difficult even under good teaching circumstances. These are individuals for whom the term *learning disabilities* was created. In differentiating them from those with other types of learning problems, it may help if you visualize learning disabilities as being at one end of a learning problems continuum. We call this group Type III learning problems.

At the other end of the continuum are individuals with learning problems that arise from causes outside the person. Such problems should not be called learning disabilities. Obviously, some people do not learn well when a learning situation is not a good one. It is not surprising that a large number of students who live in poverty and attend overcrowded schools manifest learning and psychosocial problems. Problems that are primarily the result of deficiencies in the environment in which learning takes place can be thought of as Type I learning problems.

To provide a reference point in the middle of the continuum, we can conceive of a Type 11 learning problem group. This group consists of persons who do not learn or perform well in situations where their individual differences and vulnerabilities are poorly accommodated or are responded to with hostility. The learning problems of an individual in this group can be seen as a relatively equal product of the person's characteristics and the failure of the learning and teaching environment to accommodate to that individual.



Society as the Context for Teaching and Learning

Education is a social invention. All societies design schools in the service of social, cultural, political, and economic aims. Concomitantly, socialization is the aim of a significant portion of the teaching done by parents and other individuals who shape the lives of children. This is especially the case for populations labeled as problems. Because society has such a stake in teaching and learning, it is critical to discuss these topics within a societal context.

Society shapes the content and context of teaching, the definition of learning problems, and the way teachers are held accountable for outcomes. The field of learning disabilities exemplifies these points. It was created and is maintained through political processes. Prevailing definitions and prominently proposed revisions are generated through political compromises. Guidelines for differentiating LD from other learning problems, for planning what students are taught, and for evaluating what they learn – all are established through political processes.

Moreover, as Nicholas Hobbs (1975) has stated:

> *Society defines what is exceptional or deviant, and appropriate treatments are designed quite as much to protect society as they are to help the child.... "To take care of them" can and should be read with two meanings: to give children help and to exclude them from the community.*

Inevitably, exploration of teaching and learning and of learning problems and disabilities touches upon education and training, helping and socializing, democracy and autocracy. Schools, in particular, are places where choices about each of these matters arise daily. The decisions made often result in controversy.

It is only through understanding the role society plays in shaping teaching practices and research that a full appreciation of the limits and the possibilities of ameliorating learning problems can be attained. And, it is only through addressing the barriers and promoting full development (including engendering protective factors) that we can hope to stem the rising tide of emotional and behavioral problems.

Concluding Comments

While it's good to give special help to those who need it, the tendency to ignore the fact that not all learning problems are learning disabilities has compromised the integrity of research and practice. As long as some people think there is no such thing as a learning disability and others use the term to label every learning problem, confusion and controversy will reign supreme. It is time to move forward and put learning disabilities firmly into perspective as one type of learning problem and to approach all learning problems in the context of fundamental ideas about learning and teaching. By doing so, we will enhance all efforts to address the mental health and psychosocial problems confronting so many children and adolescents.

A Few References

Adelman, H.S. (1971). The not so specific learning disability population. *Exceptional Children, 8*, 114-120.

Adelman, H.S. (1995). Clinical psychology: Beyond psychopathology and clinical interventions, *Clinical Psychology: Science and Practice, 2,* 28-44.

Adelman, H.S. & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

Adelman, H.S. & Taylor, L. (1994). *On understanding intervention in psychology and education*. Westport, CT: Prager.

Adelman, H.S. & Taylor, L. (2006). *The School Leader's Guide to Student Learning Supports: New Directions for Addressing Barriers to Learning.* Thousand Oaks, CA: Corwin Press.

Adelman, H.S. & Taylor, L. (2006). *The Implementation Guide to Student Learning Supports: New Directions for Addressing Barriers to Learning.* Thousand Oaks, CA: Corwin Press.

Hobbs, N. (1975). *The Future of Children:Categories, Labels, and their Consequences*. San Francisco: Jossey-Bass.

Lyon, G.R., Fletcher, J.M., Shaywitz, S.E., Shaywitz, B.A., Torgesen, J.K., Wood, F.B., Schulte, A. & Olson, R. (2001). Rethinking Learning Disabilities. In Finn, Jr., C.E., Rotherham, A.J., & Hokanson, Jr., C.R. (Eds.). *Rethinking Special Education for a New Century*. Washington, DC: Thomas B. Fordham Foundation.

Smith, C.R. (1997). *Learning Disabilities The Interaction of Learner, Task, and Setting,* 4th Edition. Needham Heights, MA: Allyn & Bacon.

Excerpt from
U.S. Department of Education.
Promoting educational excellence for all Americans

Responsiveness to Intervention in the Specific Learning Disabilities (SLD) Determination Process

(http://www.osepideasthatwork.org/toolkit/ta_responsiveness_intervention.asp)

The reauthorized Individuals with Disabilities Education Improvement Act of 2004 (P.L.108-446) (IDEA 2004) was signed into law on December 3, 2004, by President George W. Bush. IDEA 2004 includes provisions that could lead to significant changes in the way in which students with SLD are identified. Of particular relevance to the process of SLD determination are the following provisions of the statute:

1. Local educational agency (LEA) shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability (IDEA 2004).

2. LEAs may use response to scientific-based instruction.

3. "Responsiveness to Intervention" (RTI) is not specifically identified in the law.

4. LEAs are given flexibility in determining SLD implementation options.

5. Using special education funding to provide early intervening for all students is permitted.

This movement toward change stems from criticisms of current SLD determination components, procedures, and criteria. Although the focus and scope of the debate varies, much of the criticism stems from discrepancies between conceptual definitions and operational definitions of SLD (Reschly & Hosp, 2004). Most notably, although conceptual definitions are multi-faceted, operational definitions have typically reduced the construct of SLD to a single dimension, a discrepancy between achievement and ability. In improving the process of SLD determination, understanding the components of the conceptual definition of SLD is important. In general, SLD involves learning and cognition disorders intrinsic to the individual, which are specific in that they each significantly affect a relatively narrow range of academic and performance outcomes (Bradley, Danielson, & Hallahan, 2002). The Individuals with Disabilities Education Act of 1997 regulations define SLD as follows:

SPECIFIC LEARNING DISABILITY - 20 U.S.C. § 1401(26)(A); 34 C.F.R. § 300.7(c)(10)

(A) GENERAL - The term means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations.

(B) DISORDERS INCLUDED - The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia.

(C) DISORDERS NOT INCLUDED - The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural or economic disadvantage.

(cont. on next page)

SLD identification procedures, therefore, need to adequately address the components in the conceptual definition in a systematic and analytical fashion to accurately identify the presence of a learning disability. Ideally, identification of SLD should include a student-centered, comprehensive evaluation and problem-solving approach that ensures students who have a learning disability are efficiently identified. Additionally, general education must assume significant responsibility for delivery of high-quality instruction, research-based interventions, and prompt identification of individuals at risk while collaborating with special education and related services personnel (2004 Learning Disabilities Roundtable, 2005).

Previous SLD determination procedures and practices have been faulted in several areas: irrelevance of aptitude-achievement discrepancy and cognitive measures to instructional planning or outcomes; lack of equitable treatment across educational settings; and delays in disability determination. Another criticism of practices has been that students were judged to have an SLD without assessing the availability and use of general education interventions that have proven their effectiveness for youngsters presenting similar behaviors of concern (e.g., limited reading acquisition). One could not be confident that the achievement and behavior problems that a child presented were inherent to the child or attributable to shortcomings in the instructional settings.

Earlier statutes regarding the determination of SLD included a provision for evaluating the extent to which students had received appropriate learning experiences. However, no systematic process was outlined in the earlier regulations for ensuring that the "learning experiences" provided before referral for evaluation were those that have been found to be typically effective for the child's age and ability levels (i.e., "appropriate"). The responsiveness to scientific-based intervention (e.g., RTI) concept in IDEA 2004 is an elaboration or greater specification of this basic concept. With this emphasis, school staffs may consider how a youngster's performance in general education and, more specifically, the youngster's performance in response to specific scientific research-based instruction, informs SLD determination.

I. B. Incidence/Prevalence

ies NATIONAL CENTER FOR EDUCATION STATISTICS http://nces.ed.gov/programs/coe/indicator_cgg.asp

Children and Youth with Disabilities

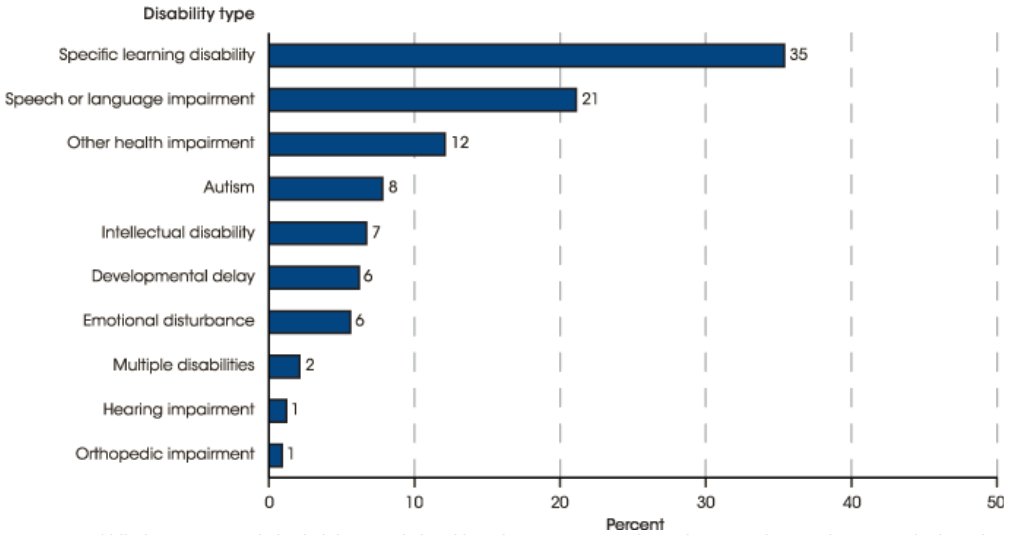
(Last updated May 2015)

The number of children and youth ages 3–21 receiving special education services was 6.4 million, or about 13 percent of all public school students, in 2012–13. Some 35 percent of students receiving special education services had specific learning disabilities.

Enacted in 1975, the Individuals with Disabilities Education Act (IDEA), formerly known as the Education for All Handicapped Children Act (EAHCA), mandates the provision of a free and appropriate public school education for eligible children and youth ages 3–21. Eligible children and youth are those identified by a team of professionals as having a disability that adversely affects academic performance and as being in need of special education and related services. Data collection activities to monitor compliance with IDEA began in 1976.

From school years 1990–91 through 2004–05, the number of children and youth ages 3–21 who received special education services increased, as did the percentage of total public school enrollment they constituted: 4.7 million children and youth ages 3–21, or about 11 percent of public school enrollment, received special education services in 1990–91, compared with 6.7 million, or about 14 percent, in 2004–05. Both the number and percentage of children and youth served under IDEA declined from 2004–05 through 2011–12, with some evidence of leveling off in 2012–13. By 2012–13, the number of children and youth receiving services under IDEA had declined to 6.4 million, corresponding to 13 percent of total public school enrollment.

Figure 1. Percentage distribution of children ages 3–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by disability type: School year 2012–13

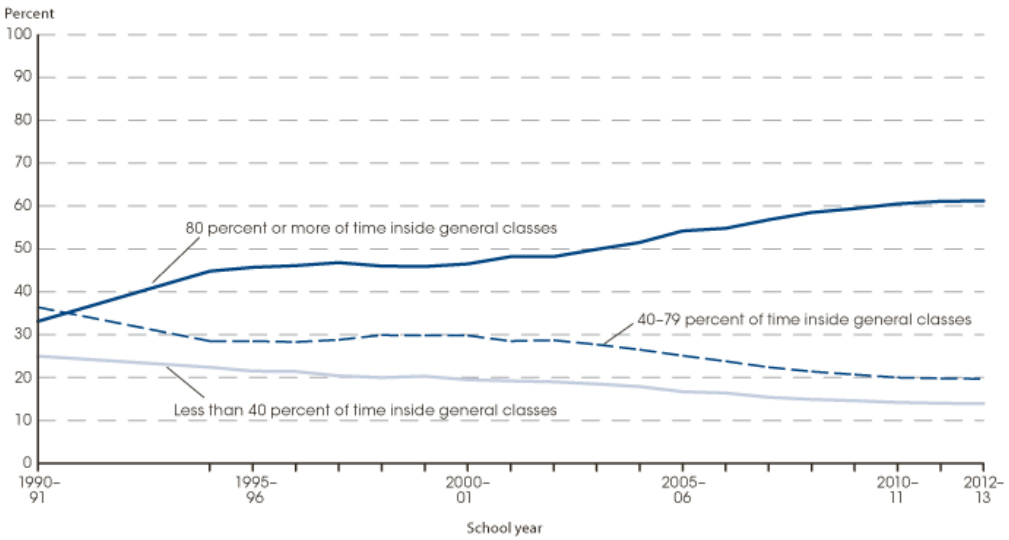


NOTE: Deaf-blindness, traumatic brain injury, and visual impairments are not shown because they each account for less than 0.5 percent of children served under IDEA. Due to categories not shown, detail does not sum to total.

SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved October 3, 2014, from https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259. See *Digest of Education Statistics 2014*, table 204.30.

In school year 2012–13, a higher percentage of children and youth ages 3–21 received special education services under IDEA for specific learning disabilities than for any other type of disability. A specific learning disability is a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. In 2012–13, some 35 percent of all children and youth receiving special education services had specific learning disabilities, 21 percent had speech or language impairments, and 12 percent had other health impairments (including having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes). Children and youth with autism, intellectual disabilities, developmental delays, or emotional disturbances each accounted for between 6 and 8 percent of students served under IDEA. Children and youth with multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, traumatic brain injuries, or deaf-blindness each accounted for 2 percent or less of those served under IDEA.

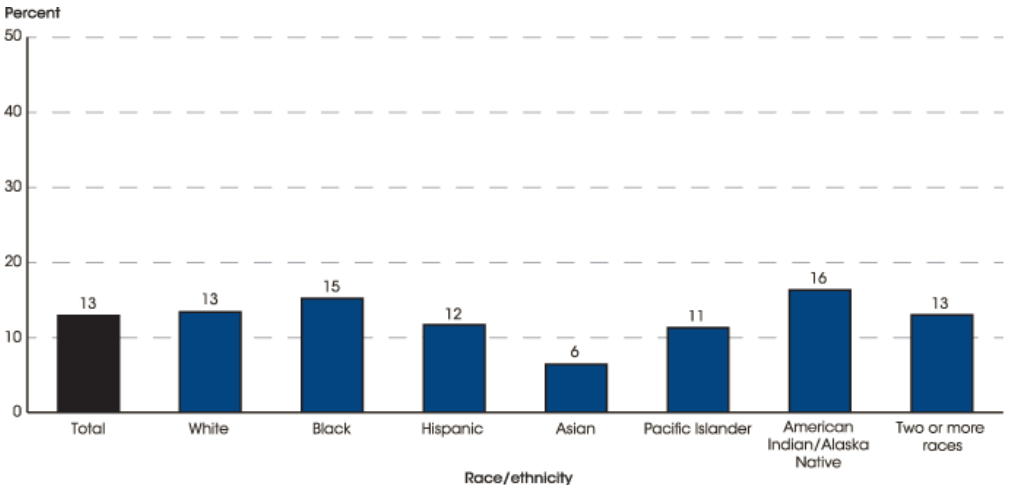
Figure 2. Percentage of students ages 6–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, placed in a regular public school environment, by amount of time spent inside general classes: Selected school years 1990–91 through 2012–13



SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved October 3, 2014, from https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259. See *Digest of Education Statistics 2014*, table 204.60.

About 95 percent of school-age children and youth ages 6–21 who were served under IDEA in 2012–13 were enrolled in regular schools. Some 3 percent of children and youth ages 6–21 who were served under IDEA were enrolled in separate schools (public or private) for students with disabilities; 1 percent were placed by their parents in regular private schools; and less than 1 percent each were in separate residential facilities (public or private), homebound or in hospitals, or in correctional facilities. Among all children and youth ages 6–21 who were served under IDEA, the percentage who spent most of the school day (i.e., 80 percent or more of time) in general classes in regular schools increased from 33 percent in 1990–91 to 61 percent in 2012–13. In contrast, during the same period, the percentage of those who spent 40 to 79 percent of the school day in general classes declined from 36 to 20 percent, and the percentage of those who spent less than 40 percent of time inside general classes also declined from 25 to 14 percent. In 2012–13, the percentage of students served under IDEA who spent most of the school day in general classes was highest for students with speech or language impairments (87 percent). Approximately two-thirds of students with specific learning disabilities (67 percent), students with visual impairments (64 percent), students with other health impairments (64 percent), and students with developmental delays (62 percent) spent most of the school day in general classes. In contrast, 16 percent of students with intellectual disabilities and 13 percent of students with multiple disabilities spent most of the school day in general classes.

Figure 3. Percentage of children 3–21 years old served under the Individuals with Disabilities Education Act (IDEA), Part B, by race/ethnicity: School year 2012–13



NOTE: Race categories exclude persons of Hispanic ethnicity.
SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved October 3, 2014, from https://inventory.data.gov/dataset/8715a3e8-bf48-4eef-9deb-fd9bb76a196e/resource/a68a23f3-3981-47db-ac75-98a167b65259; and National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2012–13. See *Digest of Education Statistics 2014*, table 204.30 and table 204.50.

In school year 2012–13, the number of children and youth ages 3–21 who were served under IDEA as a percentage of total enrollment in public schools differed by race/ethnicity. The percentage of children and youth served under IDEA was highest for American Indians/Alaska Natives (16

percent), followed by Blacks (15 percent), Whites (13 percent), children and youth of Two or more races (13 percent), Hispanics (12 percent), Pacific Islanders (11 percent), and Asians (6 percent). In most racial/ethnic groups, the percentage of children and youth receiving services for specific learning disabilities combined with the percentage receiving services for speech or language impairments accounted for over 50 percent of children and youth served under IDEA.

The percentage distribution of children and youth ages 3–21 who received various types of special education services in 2012–13 differed by race/ethnicity. For example, the percentage of students with disabilities served under IDEA for specific learning disabilities was lower among Asian children (23 percent) than among children overall (35 percent). However, the percentage of students with disabilities who received services under IDEA for autism was higher among Asian children (18 percent) than among children overall (8 percent). Additionally, students who received services for emotional disturbances accounted for 8 percent of Black children served under IDEA, compared with 6 percent of children overall. Among children and youth who received services, the percentages of Pacific Islanders (9 percent), American Indians/Alaska Natives (9 percent), and students of Two or more races (14 percent) who received services for developmental delays under IDEA were higher than the percentage of children overall (6 percent).

Glossary terms: Disabilities, children with, Individuals with Disabilities Education Act (IDEA), Regular school
Data Source: Individuals with Disabilities Education Act (IDEA)

PDF

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Reference Tables

Table 204.30 (Digest 2014): Children 3 to 21 years old served under Individuals with Disabilities Education Act (IDEA), Part B, by type of disability: Selected years, 1976-77 through 2012-13

Table 204.50 (Digest 2014): Children 3 to 21 years old served under Individuals with Disabilities Education Act (IDEA), Part B, by race/ethnicity and type of disability: 2011-12 and 2012-13

Table 204.60 (Digest 2014): Percentage distribution of students 6 to 21 years old served under Individuals with Disabilities Education Act (IDEA), Part B, by educational environment and type of disability: Selected years, fall 1989 through fall 2012

Schools and the Challenge of LD and ADHD Misdiagnoses*

Youngsters manifesting learning problems, misbehavior, and emotional upset commonly are assigned psychiatric labels that were created to categorize internal disorders. Thus, there is increasing use of terms such as learning disabilities (LD), attention deficit/hyperactivity disorder (ADHD), depression, and so forth. This happens despite the fact that the problems of most youngsters are not rooted primarily in internal dysfunctioning. Indeed, many of the troubles manifested by youngsters would not have developed if their environmental circumstances had been appropriately different.

Currently at schools, LD and ADHD are the two most commonly diagnosed learning and behavior problems. Informed researchers, practitioners, and policy makers in the U.S. and in other countries have cautioned about widespread misapplications of the terms and large numbers of *false positive* misdiagnoses resulting from indiscriminate use and classification practices that leave much to be desired. The problem of false positives has become an increasing concern because a significant number of older students are feigning symptoms of LD and ADHD to obtain special accommodations in the classroom and in academic testing situations (Harrison, Edwards, & Parker, 2007, 2008; Harrison & Rosenblum, 2010; Sullivan, May, & Galbally, 2007).

Labeling students as LD and ADHD clearly is a serious matter. Strong images are associated with these diagnostic labels. Sometimes the images are useful generalizations; sometimes they are harmful stereotypes. Sometimes they guide practitioners toward good ways to help; sometimes they contribute to "blaming the victim" – making young people the focus of intervention rather than improving system deficiencies that are causing the problems in the first place. In all cases, diagnostic labels can profoundly shape a person's future and influence what is and isn't done to ensure equity of opportunity at school.

Many of the concerns related to diagnosing LD and ADHD have been discussed widely (e.g., Adelman & Taylor, 2010). What often is not well understood is the bias that results from making a *differential diagnosis* using the prevailing classification schemes (i.e., special education diagnostic labels, the Diagnostic and Statistical Manual of Mental Disorders – DSM -V, the International Classification of Diseases, 10th edition – ICD-10). Such taxonomies offer choices only among categorical labels that denote internal dysfunctions. The problem

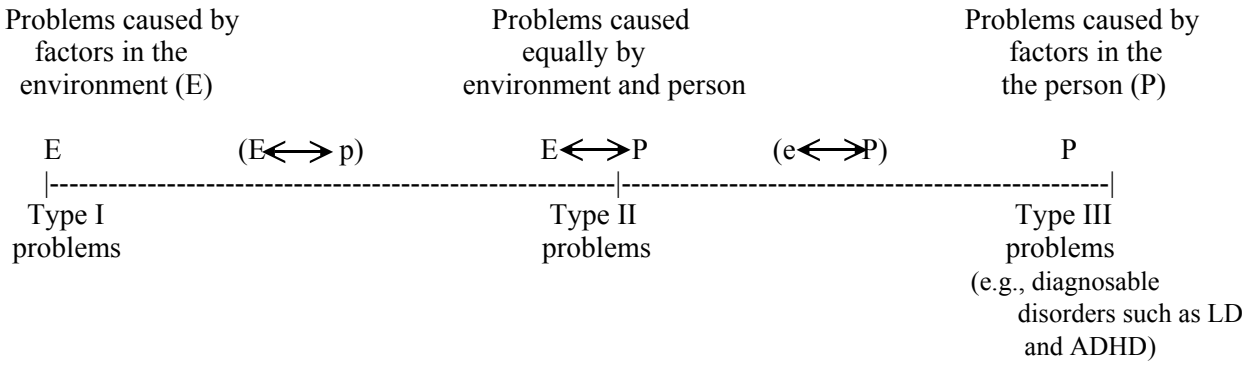
*

is compounded by subtyping effortsthat focus only on differentiating within the diagnosed group. All this ignores the reality that learning and behaviors *problems* often begin with environmental factors. .Understanding the initial causes of students' learning and behavior problems is best done from the perspective of a transactional paradigm (i.e., reciprocal determinism) and dimensional labeling(Adelman & Taylor, 1995; Bandura, 1978; Rutter, Moffitt, Caspi, 2006). A transactio nal perspective ensures full consideration o f ecological viewpoints, while not losing site of the individual's contribution to a given problem. Exhibit 1 illustrates the point.

Exhibit 1

A Continuum of Problems Based on a Transactional Understanding of Cause*

PRIMARY SOURCE OF CAUSE



- caused primarily by environments and systems that are deficient and/or hostile
- problems are mild to moderately severe and narrow to moderately pervasive

- caused primarily by a significant *mismatch* between individual differences and vulnerabilities and the nature of that person's environment (not by a person's pathology)
- problems are mild to moderately severe and pervasive

- caused primarily by person factors of a pathological nature
- problems are moderate to profoundly severe and moderate to broadly pervasive

*Using a transactional view, the continuum emphasizes the *primary source* of the problem and, in each case, is concerned with problems that are beyond the early stage of onset.

Adapted from the work of Adelman & Taylor and published in various resources.

As illustrated, when a learning, behavior, and/or emotional problem arises, a transactional paradigm considers whether the primary instigating factors leading to the problem stem from conditions in (a) the environment, (b) factors within a person, or (c) a specific set of transactions. For example, some neighborhood, home, and school environments seem to produce vulnerabilities to learning and behavior problems. In

contrast, subtle central nervous system disorders that produce learning *disabilities* and attention deficit/hyperactivity *disorders* are much less common.

To be more specific: In this scheme, diagnostic labels meant to identify *extremely* dysfunctional problems *caused by pathological conditions within a person* are reserved for individuals who fit the Type III category. Obviously, some problems caused by pathological conditions within a person are not manifested in severe, pervasive ways, and there are persons without such pathology whose problems do become severe and pervasive. The intent is not to ignore these individuals. As a first categorization step, however, it is essential they not be confused with those seen as having Type III problems.

At the other end of the continuumare individuals with problems arising from factors outside the person (i.e., Type I problems). Many people grow up in impoverished and hostile environments. Such conditions should be considered first in hypothesizing what *initially* caused the individual's learning, behavioral, and emotional problems. (After environmental causes are ruled out, hypotheses about internal pathology become more viable.)

To provide a reference point in the middle of the continuum, a Type II category is used. This group consists of persons who do not function well in situations where their individual differences and minor vulnerabilities are poorly accommodated or are responded to hostilely. The problems of an individual in this group are a relatively equal product of person characteristics and failure of the environment to accommodate that individual.

There are, of course, variations along the continuum that do not precisely fit a category. That is, at each point between the extreme ends, environment-person transactions are the cause, but the degree to which each contributes to the problem varies.

Clearly, a simple continuum cannot do justice to the complexities associated with labeling and differentiating among learning and behavior problems in general and at different periods in an individual's development. The reality is that problems vary in severity, pervasiveness, and chronicity; some problems are not easily or reliably assessed; many are not differentiated readily or validly because problems can have more than one cause and/or manifestation.

Given all this, the continuum outlined in Exhibit 1 illustrates the potential value of starting with a broad model of cause and can play a role in countering tendencies of classification schemes to reify prevailing diagnostic criteria (Hyman, 2010). In particular, it can counter the tendency to jump prematurely to the conclusion that a problem is caused by deficiencies or pathology within the individual and thus can help combat blaming the victim. It also helps highlight the notion that improving the way the environment accommodates individual differences often may be a sufficient strategy for correcting and preventing many learning, behavior, and emotional problems.

Schools Are Moving to Stem the Tide of Learning Problem Misdiagnoses

It is estimated that about 5% of school-aged children are diagnosed as having a learning disability, with core symptoms designated as underachievement of basic academic skills, especially reading, and deficits in processing abilities. By the early 2000s, learning disabilities had become the largest group in special education in the U.S. (about 50% of those with IEPs). It was widely recognized that many were inappropriately diagnosed in order to provide them with additional services. The growing numbers became an excessive drain on already overburdened special education budgets and contributed to the backlash to LD seen in the last reauthorization of the *Individuals with Disabilities Act*.

To stem the tide of false positive misdiagnoses of LD, the federal government adopted the idea of requiring a school procedure called *Response to Intervention* (RTI) before considering a formal diagnosis for special education eligibility (see Appendix). As the RTI initiative spreads, it is intended to be a counter measure to premature diagnoses of LD and ADHD.

It must be noted, however, that concerns have been raised about RTI. From a special education perspective, there is fear that the process will inappropriately delay identification of students with true LD and ADHD. As an intervention initiative, the concern is that the approach will be pursued simplistically. In many places, RTI is viewed primarily as a matter of providing more and better instruction. This is too limited in nature and scope to address the wide range of factors interfering with the learning of many students. Instructional strategies always need to be conceived as one part of a comprehensive system of classroom and school-wide learning supports. Viable school improvement requires that initiatives such as RTI help in differentiating Type I, II, and III problems not only by responding early after onset, but also by preventing many from occurring in the first place (Center for Mental Health in Schools, 2011a, b).

Schools Are Not Mobilizing to Stem the Tide of Behavior Problem Misdiagnoses

After the 1997 reauthorization of IDEA allowed special education services for ADHD, the rates of ADHD diagnosis increased an average of 3% a year. For IEP purposes, these students are grouped under the "other health impairments" category and are the largest group in that category. Students labeled as ADHD also may be diagnosed with other problems such as LD; thus, some are served under the LD designation.

Current estimates are that about 5% of school-aged children are diagnosed as ADHD, with core symptoms being (1) not paying attention when it is asked for, (2) being highly active, and (3) acting impulsively when it is deemed inappropriate. Approximately 75% of those diagnosed are male. In the past, it has been estimated that less than half of those diagnosed will continue to show such symptoms as adults (McCann & Roy-Byme, 2004); postsecondary institutions, however, are reporting a dramatic increase in students with recent ADHD diagnoses who are seeking special instructional and testing accommodations (Harrison & Rosenblum, 2010).
Singh (2008) cites studies indicating that a diagnosis of ADHD is 3-4 times more

likely when criteria specified in the DSM -IV (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition) are used, as contrasted with criteria delineated in the ICD-10 (International Classification of Diseases -10) for diagnosing Hyperkinetic Disorder. In part this is attributable to differences in the classification systems and in part to the differences in who does the diagnosis. In the U.S., many children and adults are diagnosed as ADHD by general practitioners, including primary-care physicians.

Reported prevalence differs among states (e.g., ranging from 5 to 15% of school aged children). These differences have raised concern that in some communities there is substantial overdiagnosis. As with LD, there is concern that youngsters who manifest "garden-variety" misbehavior or are simply immature may be misdiagnosed as ADHD. For example, a study by Elder (2010) suggests that nearly 1 million children in the U.S. may be misdiagnosed as ADHD because they are the youngest and most immature in their kindergarten class. Concerns about ADHD misdiagnosis are compounded because of the frequency with which the diagnosis leads to prescribing medication. Reports appear rather regularly suggesting that medication is being overprescribed (Volknow & Swanson, 2003; Zito, Safer, dosReis, et al., 2000). Reports in 2007 indicated that about two-thirds of the 4-17 year old diagnosed group were on medication.

Concerns have been raised about the possible role schools play in promoting ADHD diagnoses and recommending medication. This has led to some community forums and legislative hearings and proposals to stop teachers from suggesting to parents that a student has ADHD and to prohibit all school personnel from recommending that parents seek out a prescription for psychotropic medications.

Most schools, of course, are not seeking to increase the special education population; some already find it hard to meet IDEA mandates. And yet, unlike the response to concerns about LD, schools are not mobilizing to the same degree to counter the dilemmas arising from the growing numbers of students diagnosed as ADHD. Of particular concern is the need to play a role in

(1) identifying false positive diagnoses of ADHD,

(2) stressing that medication as an insufficient treatment (i.e., while medication is associated with short-term performance improvements, there is no evidence that it produces long-term improvements in academic achievement),

(3) clarifying for staff and parents the potentially serious side effects of ADHD medications (i.e., the U.S. Food and Drug Administration warns about possible cardiovascular effects, growth suppression, and development of other psychiatric conditions; other social concerns are hypothesized).

And for the future, because stimulants drugs are widely used (eg., by college students) to gain short-term positive effects on academic performance, schools should be aware that there is some advocacy for making these "cognitive enhancers" available to healthy children as another aid in enhancing their attention and focus on school tasks.

Ongoing Concerns about Diagnosing Student Problems

Because of the significant differences in reported prevalence of LD and ADHD across the U.S. and around the world, concern has been raised that in some places there is substantial overdiagnosis (LeFever, Arcona, & Antonuccia, 2003; Singh, 2008). The degree to which this is the case is compounded by parents and teachers seeking such diagnoses and older students and adults feigning these disorders.

It is noteworthy that early research on LD and ADHD relied on samples that had been previously diagnosed. A cursory look at recent studies indicates that researchers increasingly are doing additional assessment to eliminate inappropriately diagnosed individuals. The numbers turned away include common learning and behavior problems inaccurately labeled. Unfortunately, because of the limitations on validly assessing LD and ADHD, additional assessment to "validate" a previous diagnosis is no assurance of avoiding misdiagnoses (see the sidebar below).

The Difficulties Diagnosing Learning and Behavior Problems

The problems in making a valid diagnoses of ADHD and LD will continue as long as they are based on clinical assessment of behavioral *symptoms,* rather than on *signs* identified in laboratory tests. The symptom criteria relied on are common behaviors found among children in many cultures and vary significantly with development (e.g., Bauermeister, Canino, Polanczyk, & Rohde, 2010; Elder, 2010; Evans, Morrill, & Parente, 2010). The instability of symptom patterns and the many problems related to reliability and validity of current assessment procedures are well recognized. Also well discussed are the inequities and biases related to race, ethnicity, and primary language (e.g., Hosterman, DuPaul, & Jitendra, 2008).

Recommendations to do more assessment of cognitive impairments and "soft signs" and to emphasize multimethod assessment is not equivalent to assessing hard signs (e.g., Gupta & Kar, 2010; McConaughy, Harder, Antshel, et al., 2010; Singh, 2008). In the absence of hard signs, conclusions about causality (e.g., genetics, neurobiological factors) and subtle, internal central nervous system dysfunctioning remain speculative.

In discussing problems of diagnosing mental disorders in general, Hyman (2010) focuses in on ADHD and concludes:

> "The conceptualization of ADHD as a category discontinuous from normalcy is not only implausible, but also inhibits the kind of research that would improve the ... utility of the diagnosis and perhaps its validity. ... Arbitrary symptom counts do not provide effective tools for family doctors and other primary care practitioners, who evaluate the majority of children for ADHD, to make a diagnosis against the moving developmental target of brain maturation."

Differential diagnosis clearly is difficult and where LD and ADHD rates have increased markedly there usually is a backlash suggesting significant misdiagnosis. This happened with LD in the U.S. in the early 2000s; it is happening currently with ADHD and LD in the United Kingdom. Questions inevitably arise such as:

How often are diagnoses arrived at inappropriately because of personal-professional, social-cultural, and economic interests and biases?

What is the impact on research, practice, policy, and training of skewing differential diagnosis in ways that maximize false positive and minimize false negative diagnoses?

Can school interventions play a significant role in preventing and identifying misdiagnoses?

Concluding Comments

The thinking of those who study learning, behavioral, and emotional problems has long been dominated by models stressing person pathology. This is evident in discussions of cause, diagnosis, and intervention strategies. Because so much discussion focuses on person pathology, diagnostic systems have not been developed in ways that adequately account for psychosocial problems. As a result, comprehensive formal systems used to classify problems in human functioning convey the impression that all learning, behavioral, or emotional problems are instigated by internal pathology.

Most differential diagnoses of children's problems are made by focusing on identifying one or more disorders (e.g., learning disabilities, attention-deficit/hyperactivity disorder, oppositional defiant disorder, or adjustment disorders), rather than first asking: *Is there a disorder?*

Overemphasis on classifying problems in terms of personal pathology skews theory, research, practice, and public policy. One example is seen in the fact that comprehensive classification systems do not exist for environmentally-caused problems or for psychosocial problems (caused by the transaction of internal and environmental factors).

Bias toward labeling problems in terms of personal rather than social causation is bolstered by factors such as (a) attributional bias – a tendency for observers to perceive others' problems as rooted in stable personal dispositions and (b) economic and political influences – whereby society's current priorities and other extrinsic forces shape professional practice.

There is considerable irony in all this because so many school practitioners who use prevailing diagnostic labels understand that most problems in human functioning result from the interplay of person and environment. To counter nature versus nurture biases in thinking about problems, it's helps to approach all diagnostic procedures guided by a broad transactional perspective of what determines human behavior.

Given all this, is it any wonder that diagnoses of LD and ADHD are controversial?

References

Adelman, H.S. (1995). Clinical psychology: Beyond psychopathology and clinical interventions, *Clinical Psychology: Science and Practice, 2,* 28-44.

Adelman, H.S., & Taylor, L. (2010). *Mental health in schools: Engaging learners, preventing problems, and improving schools.* Thousand Oaks, CA: Corwin Press.

Bandura, A. (1978). The self system in reciprocal determinism. *American Psychologist, 33*, 344-358.

Bauermeister, J.J, Canino,G., Polanczyk, G. & Rohde, L.A. (2010). ADHD across cultures: Is there evidence for bidimensional organization of symptoms? *Journal of Clinical Child & Adolescent Psychology, 39*, 362-372.

Center for Mental Health in Schools (2011a). *Implementing Response to Intervention in context.* Los Angeles: Author. http://smhp.psych.ucla.edu/pdfdocs/implementingrti.pdf

Center for Mental Health in Schools (2011b). *Viable school improvement requires a developmental strategy that moves beyond the skewed wish list and reworks operational infrastructure*. Los Angeles: Author. http://smhp.psych.ucla.edu/pdfdocs/viable.pdf

Elder, T. (2010). The importance of relative standards in adhd diagnoses: evidence based on a child's date of birth, *Journal of Health Economics*, *29*, 641-656.

Evans, W.N., Morrill, M.S., & Parente, S.T. (2010). Measuring inappropriate medical diagnosis and treatment in survey data: The case of ADHD among school-age children. *Journal of Health Economics, 29*, 657-679.

Gupta, R. & Kar, B.R. (2010). Specific cognitive defects in ADHD: A diagnostic concern in diferential diagnosis. *Journal of Family Studies, 19*, 778-786.

Harrison, A.G., Edwards, M.J., & Parker, K.C. (2007). Identifying students faking ADHD: Preliminary findings and strategies for detection. *Archives of Clinical Neuropsychology, 22,* 577-588.

Harrison, A.G., Edwards, M.J., & Parker, K.C. (2008). Identifying students feigning dyslexia: Preliminary findings and strategies for detection. *Dyslexia, 14*, 228-246.

Harrison, A.G. & Rosenblum, Y. (2010). ADHD documentation for students requesting accommodations at the postsecondary level. *Canadian Family Physician, 56,* 761-765.

Hosterman, S.J., DuPaul, G.J., & Jitendra, A.K. (2008). Teacher ratings of ADHD symptoms in ethnic minority students: Bias or behavioral difference? *School Psychology Quarterly, 23,* 418-435.

Hyman, S.E. (2010). The diagnosis of mental disorders; The problem of reification. *Annual Review of Clinical Psychology, 6,* 155-179.

LeFever, G.B., Arcona, A.P.& Antonuccia, D.O. (2003). ADHD among American school children: Evidence of overdiagnosis and overuse of medication. The Scientific Reeview of Mental Health Practice, 2, 1-21. Http://www.srmhp.org/0201/adhd.html

McCann, B.S. & Roy-Byrne, P. (2004). Screening and diagnostic utility of self-report attention deficit hyperactivity disorder scales in adults. *Comparative Psychiatry, 45*, 175-83.

McConaughy, S.H., Harder, V.S., Antshel, K.M., Gordon, M., Eiraldi, R., & Dumenci, L. (2010). Incremental validity of test sesion and classroom observation in a multimethod assessment of attentionz deficit/hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology, 39*, 650-666.

Rutter, M., T. E. Moffitt, and A. Caspi (2006), Gene-environment interplay and psychopathology: multiple varieties but real effects, J Child Psychol Psychiatry, 47(3-4), 226-261.

Singh, I. (2008). Beyond polemics: Science and ethics of ADHD. *Nature Reviews, 9,* 957-965.

Sullivan, B.K., May, K., & Galbally, L. (2007). Symptom exaggeration by college adults in ADHD and learning disorderr assessments, *Applied Neuropsychology, 14*, 189-207.

Volknow, N.D. & Swanson, J.M. (2003). Variables that affect theclinical use and abuse of methylphenidate in the treatment of ADHD. *American Journal of Psychiatry, 160*, 1-10.

Zito, J.M., Safer, D.J., dosReis, S., Gardner, J., Boles, M., & Lynch, F. (2000). Trends in the prescribing of psychotropic medications to preschoolers. *Journal of the American Medical Association, 283*, 1025-1030.

Appendix

Response to Intervention (RTI): An Aid in Countering Misdiagnoses

Concern about supporting the RTI movement led the U.S. Department of Education to fund a technical assistance center, the National Center on Response to Intervention, involving the American Institutes for Research and researchers from Vanderbilt University and the University of Kansas (http://www.rti4success.org/). Clearly the RTI center increasingly will shape how response to intervention is implemented. So we need to begin by noting the ways in which that center defines and frames response to intervention, and we highlight some concerns about the lack of emphasis on context.

The RTI center stresses that "the purpose of RTI is to provide all students with the best opportunities to succeed in school, identify students with learning or behavioral problems, and ensure that they receive appropriate instruction and related supports." This purpose is translated into a definition that states "response to intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities or other disabilities."

A RTI center guidebook describes four essential components of response to intervention as (1) a school-wide, multi-level instructional and behavioral system for preventing school failure, (2) screening, (3) progress monitoring, and (4) data-based decision making for instruction, movement within the multi-level system, and disability identification (in accordance with state law). The guidebook also states response to intervention is "a framework for providing comprehensive support to students and is not an instructional practice" and that "RTI is a prevention oriented approach to linking assessment and instruction that can inform educators' decisions about how best to teach their students."

The approach formulated by the RTI center ismeant to be broad-based and preventative, *but it is too limited* in how it frames what needs to go on in a classroomand schoolwide to enable learning, engage students, and keep them engaged. For RTI to be highly effective, significant changes are needed with respect to how administrators, teachers, student support staff, and other key stakeholders transform those schools where a significant proportion of students lack enthusiasm about attendance and about engaging in the day's lesson plans. This is especially the case in schools where many students have become disengaged from classroom instruction, are behaving in disruptive ways, and are dropping out. To facilitate the success of such students, staff must enable them to (1) get around interfering barriers and (2) (re)engage in classroom instruction. Properly designed, RTI strategies can help with all this if they are embedded into the larger agenda for transforming classroom and schoolwide approaches in ways that ensure equity of opportunity for all students to succeed at a given school. Applied in a sequential and hierarchical manner RTI can aid in differentiating Type I, II, and III problems and, thus, can help counter misdiagnoses.

Our center at UCLA stresses that major breakthroughs in countering students' learning, behavior, and emotional problems can be achieved only when school improvement policy, planning, implementation, and accountability *comprehensively* address barriers to learning and teaching and re-engage disconnected students. One major facet of this involves redesigning and transforming a wide range of regular classroom strategies to enable learning. Specifically, we place RTI in the context of the classroom and delineate it as a sequential and hierarchical approach for all students. At the same time, we emphasize that classroom efforts to enhance equity of opportunity must be embedded within a comprehensive schoolwide system of student and learning supports (e.g., Center for Mental Health in Schools, 2011a).

I. D. Identification

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Identification of Specific Learning Disabilities Topic

Briefs -- Identification of Specific Learning Disabilities

http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CTopicalBrief%2C23%2C

Training Materials

Identification of Children with Specific Learning Disabilities Curriculum Module
http://nichcy.org/laws/idea/legacy/module11/

Dialogue Guide

acilitator Handboo http://idea.ed.gov/download/facilitator.pdf

More on Identification of Specific Learning Disabilities

http://www.ideapartnership.org/index.php?option=com_content&view=article&id=844&oseppage=1

Presentations

RTI/EIS (Leadership 2006)
http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CPresentation%2C16%2C

RTI-EIS (RIM 2007)
http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CPresentation%2C28%2C

Q&A Documents

Questions and Answers On Response to Intervention (RTI) and Early Intervening Services (EIS)
http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CQaCorner%2C8%2C

I. E. Barriers (Risk Factors), Protective Barriers, & Promoting Full Development

As terms such as resilience and protective factors are popularized, confusion and some controversies have arisen. In particular, an ongoing discussion centers on how to reconcile differences among advocates of addressing risks and those who stress asset building and youth development. Perhaps the following distinctions will help.

Risk factors. One way to think about risk factors is in terms of potential external and internal barriers to development and learning. Research indicates that the primary causes for most youngsters' learning, behavior, and emotional problems are external factors (related to neighborhood, family, school, and/or peers). For a few, problems stem from individual disorders and differences. One facet of any emphasis on addressing barriers is guided by the research on risk factors.

Protective factors. Protective factors are conditions that *buffer* against the impact of barriers (risk factors). Such conditions may prevent or counter risk producing conditions by promoting development of neighborhood, family, school, peer, and individual strengths, assets, corrective interventions, coping mechanisms, and special assistance and accommodations. The term *resilience* usually refers to an individual's ability to cope in ways that buffer. Research on protective buffers also guides efforts to address barriers.

Promoting full development. As often is stressed, being problem-free is not the same as being well-developed. Efforts to reduce risks and enhance protection can help minimize problems but are insufficient for promoting full development, well-being, and a value-based life. Those concerned with establishing systems for promoting healthy development recognize the need for direct efforts to promote development and empowerment, including the mobilization of individuals for self-pursuit. In many cases, interventions to create buffers and promote full development are identical, and the pay-off is the cultivation of developmental strengths and assets. However, promoting healthy development is not limited to countering risks and engendering protective factors. Efforts to promote full development represent ends which are valued in and of themselves and to which most of us aspire.

Considerable bodies of research and theory have identified major correlates that are useful guideposts in designing relevant interventions. And, as the examples in the box on the next page illustrate, there is a significant overlap in conceptualizing the various factors. Some barriers to development and learning (risk factors) and protective buffers are mirror images; others are distinct. Many protective buffers are outcomes of efforts to engender full development. From the perspective of interventions designed to address barriers to learning and development, promoting healthy development is the other side of the coin, and when these are done well, resilient behavior, individual assets, and healthy behavior in children and adolescents are engendered. Thus, protective buffers are a natural by-product of comprehensive, multifaceted efforts to reduce risk factors and foster positive development, but the aims of such efforts go well beyond what research has established so far as protective factors

It is a mistake, of course, to jump too quickly from research that identifies compelling correlates to making assumptions about cause and effect. This is especially so when one understands that behavior is reciprocally determined (i.e., is a function of person and environment transactions). Many concepts labeled as risk and protective factors are so general and abstract (e.g., community disorganization, quality of school) that they will require many more years of research to identify specific causal variables. At the same time, it is evident that these general areas are of wide contemporary concern and must be addressed in ways that represent the best evidence and wisdom that can be derived from the current knowledge base. The same is true of efforts to promote development.

Another mistake is to take lists of risk factors, symptoms, or assets and directly translate them into specific intervention objectives. The temptation to do so is great – especially since such objectives often can be readily measured. Unfortunately, this type of approach is one of the reasons there is so much inappropriate and costly program and service fragmentation. It is also a reason why so many empirically supported interventions seem to account for only a small amount of the variance in the multifaceted problems schools must address in enabling student learning. And, with respect to promoting development, such a piecemeal approach is unlikely to produce holistic results.

Any school where large numbers of students manifest learning, behavior, and emotional problems needs to implement a comprehensive, multifaceted, and cohesive continuum of interventions. This continuum must address barriers (reducing risks, enhancing buffers) and promote full development. Policy makers and researchers must move beyond the narrow set of empirically supported programs to a research and development agenda that pieces together systematic, comprehensive, multifaceted approaches so that schools are effective in re-engaging the many students who have become disengaged from classroom learning and who are leaving school in droves.

Examples of Barriers to Learning/Development, Protective Buffers, & Promoting Full Development*

ENVIRONMENTAL CONDITIONS** **PERSON FACTORS****

I. Barriers to Development and Learning (Risk producing conditions)

Neighborhood	*Family*	*School and Peers*	*Individual*
>extreme economic deprivation >community disorganization, including high levels of mobility >violence, drugs, etc. >minority and/or immigrant status	>chronic poverty >conflict/disruptions/violence >substance abuse >models problem behavior >abusive caretaking >inadequate provision for quality child care	>poor quality school >negative encounters with teachers >negative encounters with peers &/or inappropriate peer models	>medical problems >low birth weight/ neurodevelopmental delay >psychophysiological problems >difficult temperament & adjustment problems

II. Protective Buffers (Conditions that prevent or counter risk producing conditions – strengths, assets, corrective interventions, coping mechanisms, special assistance and accommodations)

Neighborhood	*Family*	*School and Peers*	*Individual*
>strong economic conditions/ emerging economic opportunities >safe and stable communities >available & accessible services >strong bond with positive other(s) >appropriate expectations and standards >opportunities to successfully participate, contribute, and be recognized	>adequate financial resources >nurturing supportive family members who are positive models >safe and stable (organized and predictable) home environment >family literacy >provision of high quality child care >secure attachments – early and ongoing	>success at school >positive relationships with one or more teachers >positive relationships with peers and appropriate peer models >strong bond with positive other(s)	>higher cognitive functioning >psychophysiological health >easy temperament, outgoing personality, and positive behavior >strong abilities for involvement and problem solving >sense of purpose and future >gender (girls less apt to develop certain problems)

III. Promoting Full Development (Conditions, over and beyond those that create protective buffers, that enhance healthy development, well-being, and a value-based life)

Neighborhood	*Family*	*School and Peers*	*Individual*
>nurturing & supportive conditions >policy and practice promotes healthy development & sense of community	>conditions that foster positive physical & mental health among all family members	>nurturing & supportive climate school-wide and in classrooms >conditions that foster feelings of competence, self-determination, and connectedness	>pursues opportunities for personal development and empowerment >intrinsically motivated to pursue full development, well-being, and a value-based life

***For more on these matters, see:**

Huffman, L.,Mehlinger, S., Kerivan, A. (2000). *Research on the Risk Factors for Early School Problems and Selected Federal Policies Affecting Children's Social and Emotional Development and Their Readiness for School*. The Child and Mental Health Foundation and Agencies Network. http://www.nimh.nih.gov/childp/goodstart.cfm

Hawkins, J.D. & Catalano, R.F. (1992). *Communities That Care*. San Francisco: Jossey-Bass.

Deci, E. & Ryan, R. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior.* New York: Plenum.

Strader, T.N., Collins, D.A., & Noe, T.D. (2000). *Building Healthy Individuals, Families, and Communities: Creating Lasting Connections.* New York: Kluwer Academic/Plenum Publishers

Adelman, H.S. & Taylor, L. (1994). *On Understanding Intervention in Psychology and Education*. Westport, CT: Praeger.

****A reciprocal determinist view of behavior recognizes the interplay of environment and person variables. See the work of Piaget, Vygotsky, Bruner, Bandura, etc.**

II. Learning Problems and Classroom Instruction

A. Opening the Door to Enhance Assistance, Partnerships, and Teacher Learning

B. Learning Supports: Enabling Learning in the Classroom

C. Self-Study Survey to Enhance Classrooms

D. Continuing Education Resources to Enhance Classrooms

II. A. Opening the Door to Enhance Assistance, Partnerships, and Teacher Learning

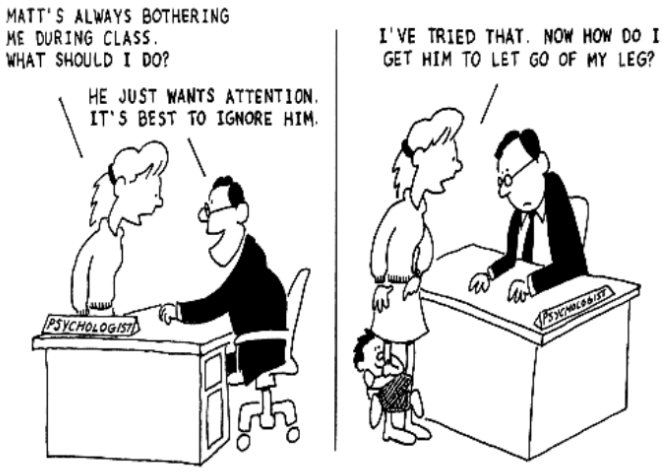
New teachers need as much assistance and on-the-job training as can be provided.

All teachers need to learn more about enhancing classrooms to enable learning.

In opening the classroom door to enhance teacher effectiveness, the crux of the matter is to ensure that effective mentoring and collegial practices are used. Learning effectively from and partnering with colleagues is not just a talking game. It involves opportunities for mentors and colleagues to model and guide change (e.g., demonstrate and discuss new approaches, guide initial practice and eventual implementation, and follow-up to improve and refine). Preferably, the modeling would take place in a teacher's own classroom. However, if the school can arrange it, the process also can be carried out in colleagues' classrooms. Also, videotapes of good practices in colleagues classrooms can be used in a variety of ways to enrich collegial sharing.

One type of arrangement that can facilitate shared learning and enhanced efficacy is team teaching with a mentor or a colleague. (For a discussion of team teaching, see Unit C in the Center's continuing education document entitled: *Enhancing Classroom Approaches for Addressing Barriers to Learning: Classroom-Focused Enabling*; this can be downloaded from the Center's website.)

Another arrangement is for the school to use its specialist personnel (e.g., school psychologists, counselors, special education resource teachers) in providing mentoring and demonstrations rather than as "consultants." That is, rather than telling teachers what they might do to address student learning, behavior, and emotional problems, specialists should be trained to go into classrooms to model and then guide teachers as they begin to practice and implement what they are learning.



> As Hargreaves cogently notes, the way to relieve the uncertainty and open-endedness that characterizes classroom teaching is to create communities of colleagues who work collaboratively [in cultures of shared learning and positive risk-taking] to set their own professional limits and standards, while still remaining committed to continuous improvement. Such communities can also bring together the professional and personal lives of teachers in a way that supports growth and allows problems to be discussed without fear of disapproval or punishment.

Besides enhancing teacher learning, opening the classroom door allows for the addition of a variety of forms of assistance and useful partnerships.

Increasingly, it is becoming evident that teachers need to work closely with other teachers and school personnel, as well as with parents, professionals-in-training, volunteers, and so forth. Collaboration and teaming are key facets of addressing barriers to learning. They allow teachers to broaden the resources and strategies available in and out of the classroom to enhance learning and performance.

Student learning is neither limited to what is formally taught nor to time spent in classrooms. It occurs whenever and wherever the learner interacts with the surrounding environment. All facets of the community (not just the school) provide learning opportunities. Anyone in the community who wants to facilitate learning might be a contributing teacher. This includes aides, volunteers, parents, siblings, peers, mentors in the community, librarians, recreation staff, etc. They all constitute what can be called the teaching community. When a classroom successfully joins with its surrounding community, everyone has the opportunity to learn and to teach. Indeed, most schools do their job better when they are an integral and positive part of the community. The array of people who might be of assistance are:

- Aides and a variety of volunteers
- Other regular classroom teachers
- Family members
- Students
- Specialist teachers and support service personnel
- School administrators
- Classified staff
- Teachers-in-training and other professionals-in-training

A few examples are highlighted in the Exhibit on the next page; others will be stressed in the remaining units of this module.

Exhibit

Examples of Opening the Door to Assistance and Partnerships

Using Aides and Volunteers in Targeted Ways

Chronically, teachers find classroom instruction disrupted by some student who is less interested in the lesson than in interacting with a classmate. The first tendency usually is to use some simple form of social control to stop the disruptive behavior (e.g., using proximity and/or a mild verbal intervention). Because so many students today are not easily intimidated, teachers find such strategies do not solve the problem. So, the next steps escalate the event into a form of Greek tragedy. The teacher reprimands, warns, and finally sends the student to "time-out" or to the front office for discipline. In the process, the other students start to titter about what is happening and the lesson usually is disrupted.

In contrast to this scenario, you can train your aide (if you have one) or a volunteer who has the ability to interact with students to work in ways that target such youngsters. The training of such individuals focuses on what you want them to do when a problem arises and what they should be doing to prevent such problems. In reaction to a problem, the aide or volunteer should expect you to give a sign to go and sit next to the designated youngster. The focus is on re-engaging the student in the lesson. If this proves undoable, the next step involves taking the student for a walk outside the classroom. It is true that this means the student won't get the benefit of instruction during that period, but s/he wouldn't anyway.

Using this approach and not having to shift into a discipline mode has multiple benefits. For one, you are able to carry out your lesson plan. For another, the other students do not have the experience of seeing you having a control contest with a student. (Even if you win such contests, it may have a negative effect on how students perceive you; and if you somehow "lose it," that definitely conveys a wrong message. Either outcome can be counterproductive with respect to a caring climate and a sense of community.) Finally, you have not had a negative encounter with the targeted student. Such encounters build up negative attitudes on both sides which can be counterproductive with respect to future teaching, learning, and behavior. Because there has been no negative encounter, you can reach out to the student after the lesson is over and start to think about how you can use your aide or volunteers to work with the student to prevent future problems.

Team Teaching

The obvious point here is that partnering with a compatible colleague enables the two of you to complement each others' areas of competence, provide each other with nurturance and personal support, and allow for relief in addressing problems. (See Unit C)

Collaborating with Special Educators and other Specialists

Almost every school has some personnel who have special training relevant to redesigning the classroom to work for a wider range of students. These specialists range from those who teach music or art to those who work with students designated as in need of special education. They can bring to the classroom not only their special expertise, but ideas for how the classroom design can incorporate practices that will engage students who have not been doing well and can accommodate those with special needs.

II. B. Learning Supports: Enabling Learning in the Classroom

The focus here is on what teachers can do to better address students' learning, behavior, and/or emotional problems. The emphasis is on six fundamental steps for enabling learning in the classroom and schoolwide. These steps are intended to enhance student and learning supports by

(1) rethinking assistance and support in the classroom

(2) heightening the emphasis on positive classroom and schoolwide climate

(3) emphasizing personalized intervention

(4) ensuring a continuum of interventions and using a sequential approach in assessing responses to intervention

(5) extending ways to accommodate differences and disabilities

(6) expanding school improvement plans to include development of a comprehensive system of student and learning supports

Step 1: Rethinking Assistance and Support in the Classroom

Bringing others into the classroom is essential to effectively (1) address barriers to learning and teaching and (2) promote engagement, learning, performance, and healthy development.

Successful schools are collaborative enterprises. All stakeholders need each other's support to enhance desired outcomes, especially for students who are not doing well at school.

Teachers need as much in-classroom support as can be mobilized to enable student learning. This is not a matter of additional hiring but of rethinking ways to bring more hands into the classroom. Support can be mobilized not only by school staff teaming to work more closely with each other, but also by recruiting and directing parents, adult and student volunteers, professionals-in-training, and others to help in the classroom.

With respect to a school's student and learning support staff, a major need is to regularly bring such personnel into classrooms as team members rather than as "consultants." This means teaching some support staff much more about classroom life and learning.

Guide 1 offers one example of a role that others can play in the classroom to

Guide 1

An Example of a Role that Others Can Play in the Classroom Related to Potentially Disruptive Students

Every teacher has had the experience of planning a wonderful lesson and having the class disrupted by one or two unengaged students (who often are more interested in interacting with a classmate than pursuing the lesson). The first tendency usually is to use some simple form of social control to stop the disruptive behavior (e.g., using proximity and/or a mild verbal intervention). Because so many students today are not easily intimidated, teachers often find such strategies don't work. So, efforts to control are escalated. The teacher reprimands, warns, and finally sends the student to "time-out" or to the front office for discipline. In the process, the other students start to titter about what is happening and learning is disrupted.

In contrast to this scenario, teachers can involve others (e.g., support staff, volunteers) to work with specific students in ways that help minimize disruptions, re-engage an errant student, and provide response to intervention data. For example, a volunteer can be trained to watch for and move quickly at the first indication that a student needs special guidance and support. The volunteer is taught to go and sit next to the student and quietly try to re-engage the youngster in the lesson. If this proves undoable, the volunteer takes the student to a quiet area in the classroom and initiates another type of activity or, if necessary and feasible, goes out for a brief walk. It is true that this means the student won't get the benefit of instruction during that period, but s/he wouldn't anyway.

None of this is a matter of rewarding student bad behavior. Rather, it is a strategy for avoiding the tragedy of disrupting the whole class while the teacher reprimands the culprit and in the process increases a student's negative attitudes toward teaching and school. This use of others allows teaching to continue, and as soon as time permits, it makes it possible for staff to explore with the student ways to make the classroom a mutually satisfying place in which to learn. Moreover, by handling the matter in this way, the teacher is likely to find the student more receptive to discussing things than if the usual "logical consequences" have been administered (e.g., loss of privileges, sending the student to time-out or to the assistant principal).

Using this approach and not having to shift into a discipline mode has multiple benefits. For one, the teacher is able to carry out the day's lesson plan. For another, the other students do not have the experience of seeing the teacher having a control contest with a student. (Even if the teacher wins such contests, it may have a negative effect on how students perceive them, and if the teacher somehow "loses it," that definitely conveys a wrong message. Either outcome can be counterproductive with respect to a caring climate and a sense of community.) Finally, the teacher has not had a negative encounter with the targeted student. Such encounters build up negative attitudes on both sides which can be counterproductive with respect to future teaching, learning, and behavior. Because there has been no negative encounter, the teacher can reach out to the student after the lesson is over and start to think about other ways to use an aide or volunteers to work with the student to prevent future problems.

(Note: Appended to this document are relevant references and resources.)

Step 2: Heightening the Emphasis on Positive Classroom and Schoolwide Climate

Every teacher wants what goes on in the classroom (and schoolwide) to be stimulating, caring, and supportive.

The ideal is to have an environment where students and teachers feel positively engaged in pursuing the learning objectives of the day. Student engagement is especially important in preventing problems. Thus, minimally, classroom practices must enhance motivation to learn and facilitate active learning and do so in ways that promote a climate and culture of mutual caring and respect. With these ends in mind, everyone who works in the classroom needs to move from an overemphasis on behavior modification to an understanding of the role of intrinsic motivation in engaging and re-engaging students in instruction (see Appendix).

Simply stated, active learning is *learning by doing, listening, looking, and asking;* but it is not just being active that counts. It is the mobilization of the student to seek out and learn. Specific activities are designed to capitalize on student interests and curiosity, involve them in problem solving and guided inquiry, and elicit their thinking through reflective discussions and appropriate products. Moreover, the activities can be designed to do all this in ways that enhance engagement and intrinsic motivation by minimizing threats to and enhancing feelings of competence, self-determination, and relatedness to others.

There are many examples of ways to facilitate active learning at all grade levels. It can take the form of class discussions, problem-based and discovery learning, a project approach, involvement in "learning centers" at school, experiences outside the classroom, and independent learning in or out of school. Obviously, computers and the internet can be valuable tools in all this.

Stimulating, caring, and supportive classrooms do much more than motivate learning of subject matter and academic skills. They provide conditions for social and emotional learning. Students learn to cooperate, share responsibility, develop understanding and skills related to conflict resolution and mediation, and much more. For staff, such classrooms provide a context for collaborating with colleagues and with a variety of volunteers to ensure mutual support and counter staff burn out. The mental health implications of all this are clear.

Guide 2 highlights what's involved in promoting a welcoming, caring, and hopeful atmosphere in the classroom and schoolwide.

Guide 2

What's Involved in Promoting a Welcoming, Caring, and Hopeful Atmosphere in the Classroom and Schoolwide

In a fundamental sense, a welcoming induction and ongoing support are critical elements both in creating a positive sense of community and in facilitating a student's (and staff) school adjustment and performance. As such, they are prime conditions for learning and thus to interpreting a student's response to any intervention at school.

Schoolwide strategies for welcoming and supporting staff, students, and families at school *every day* are part of creating a mentally healthy school – one where staff, students, and families interact positively with each other and identify with the school and its goals. Analyses of practice and research suggest that a proactive approach to developing positive school and classroom climates requires careful attention to (1) enhancing the quality of life at school and especially in the classroom for students and staff, (2) pursuing a curriculum and enrichment opportunities that promote not only academic, but also social, and emotional learning, (3) fostering intrinsic motivation for learning and teaching, and (4) providing a comprehensive system of student and learning supports that enables teachers and other staff to be effective in addressing barriers to learning and teaching and re-engaging disconnected students.

Examples of the focus for practice advocated in the literature include

1. ensuring safety and providing social support mechanisms for students and staff
2. offering an array of options for pursuing goals along with meaningful participation by students and staff in decision making
3. transforming the classroom infrastructure from a big classroom into a set of smaller units organized to maximize intrinsic motivation for learning and not based on ability or problem-oriented grouping
4. providing instruction and responding to problems in a personalized way
5. using a variety of strategies for preventing and addressing problems as soon as they arise
6. creating a healthy and attractive physical environment that is conducive to learning and teaching.

Step 3: Emphasizing Personalized Intervention

Personalization goes beyond individualization.

Clearly, how classrooms are arranged and how instruction is organized helps or hinders learning and teaching and affects behavior. In essence, an optimal design promotes personalized and holistic learning and minimizes learning, behavior, and emotional problems. When a problem does arise, it is addressed immediately with response to intervention strategies (including a range of what in the past have been called "prereferral" interventions).

The old adage: *Meet learners where they are!* captures the commonsense view of good classroom practices and is the core principle for good instruction This sometimes is referred to as the concept of the "match" or the problem of "fit."

Unfortunately, this core principle often is interpreted only as a call for *individualized* instruction which emphasizes *matching* a student's current *capabilities* (e.g., knowledge and skills). The irony in this is reflected in the all too frequent teacher lament: "They could do it, if only they *wanted* to!"

Students who don't *want* to are the bane of teachers and of efforts to assess a student's responses to intervention (e.g., such students always appear to have more significant skills deficits than they actually have). For students with learning, behavior, and emotional problems, motivation for classroom learning often is the primary concern.

Most school staff are well aware that *motivational* factors (e.g., attitudes) play a fundamental role in determining instructional outcomes. A variety of instructional approaches are effective when a student is motivated to learn what is being taught. And good abilities are more likely to emerge when students are motivated not only to pursue assignments, but also are interested in using what they learn.

> **Thus, in contrast to individualized instruction, we use the term *personalization* to designate matching individual differences in *both capability* and *motivation*.**
>
> **And, from a psychological perspective, we stress that it is the student's perception, not the teachers', that determines whether the fit is good or bad.**

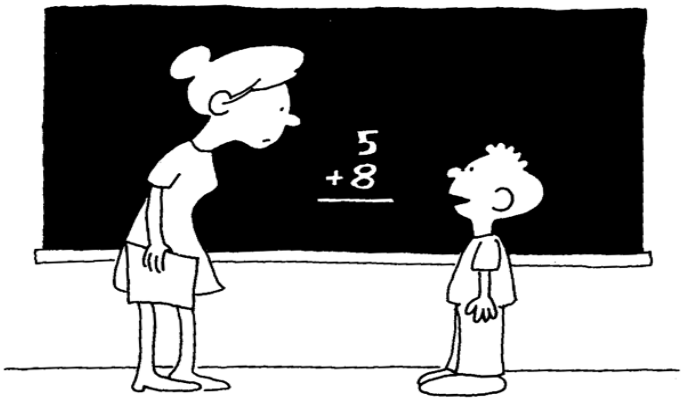
Good practice, then, includes ensuring a good *motivational match* (especially an *intrinsic* motivational match), and this often involves overcoming *avoidance* motivation. Schools strive to design instruction that fits, but the reality is that they can only approximate an optimal fit. They are likely to come closest by *personalizing* instruction and other interventions.

Personalized intervention planning recognizes that:

- Optimal performance and learning require motivational readiness
- Motivation represents both a process and an outcome concern
- School staff not only need to try to increase motivation – especially intrinsic motivation – but also to avoid practices that decrease it.

All this calls for en suring that classrooms offer a broad range of content, outcom e, and procedural *options,* including a personalized structure to facilitate learning. With real options, learners can be *involved in meaningful decision making*, and thus gain a greater sense of competence and self-determination and learn to be effective decision makers. Personalized practices also call for development of nonthreatening ways to provide information about learning and performance.

Personalized interventions can enhance stable, positive, intrinsic attitudes that mobilize ongoing pursuit of desired ends at and away from school. Developing intrinsic attitudes is basic to increasing the type of motivated practice (reading for pleasure for example) that is essential for mastering and assimilating what has just been learned (again see the Appendix).



GOSH, MRS. THOMPSON, I WAS READY TO LEARN MATH YESTERDAY. TODAY I'M READY TO LEARN TO READ.

Because the *learner's perception* is a critical factor in defining whether the environment is a good fit, a basic concern is that of eliciting learners' perceptions of how well what is offered matches both their interests and abilities.

Properly designed and carried out, personalizing instruction can be sufficient in facilitating classroom learning for most students, and this reduces the need for specialized assistance.

Personalizing regular classroom programs also can improve the effectiveness of prevention, inclusion, and assessment of responses to intervention.

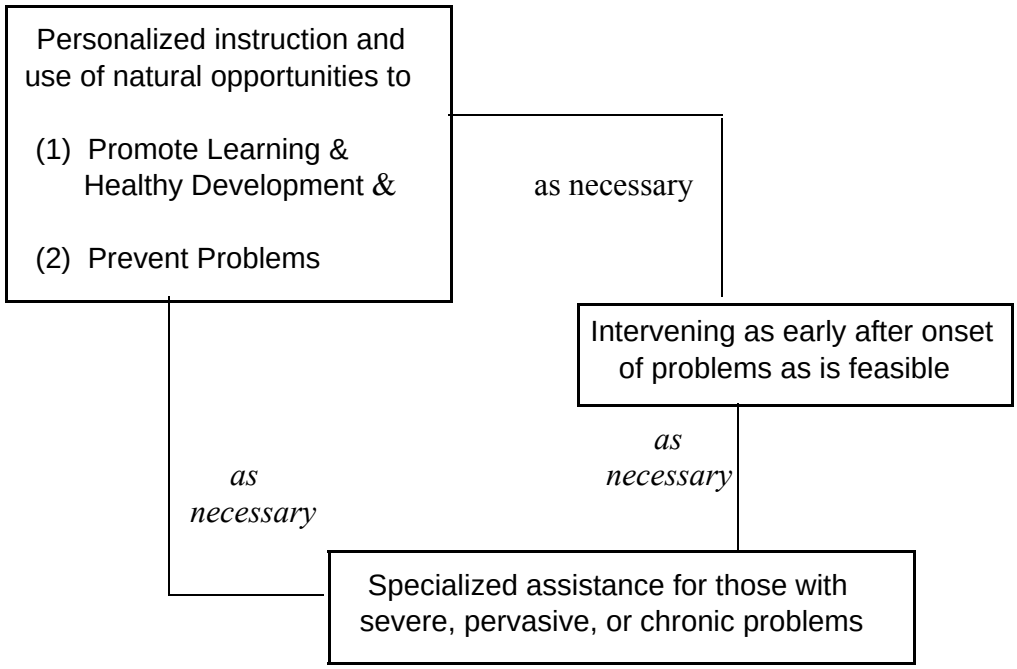
Step 4: Ensuring a Continuum of Interventions and Using a Sequential Approach in Assessing Responses to Intervention

Classroom redesign must enhance teacher capability to prevent and handle problems and reduce the need for out of class referrals.

A school that pursues equity of opportunity for all students strives to develop a full continuum of interventions and implements them sequentially and effectively. The continuum begins with promoting assets and preventing problems; then, as necessary, responds to problems as early as feasible after they appear and offers narrowly focused treatments and specialized help for severe/chronic problems (*see Guide 3*).

Guide 3

A Continuum and Sequence of Interventions at a School



Guide 4 outlines a sequential frameworkto guide pursuing the most appropriate and least disruptive intervention need ed for individuals with learning and behavior problems and for assessing responses to interventions (RTI).

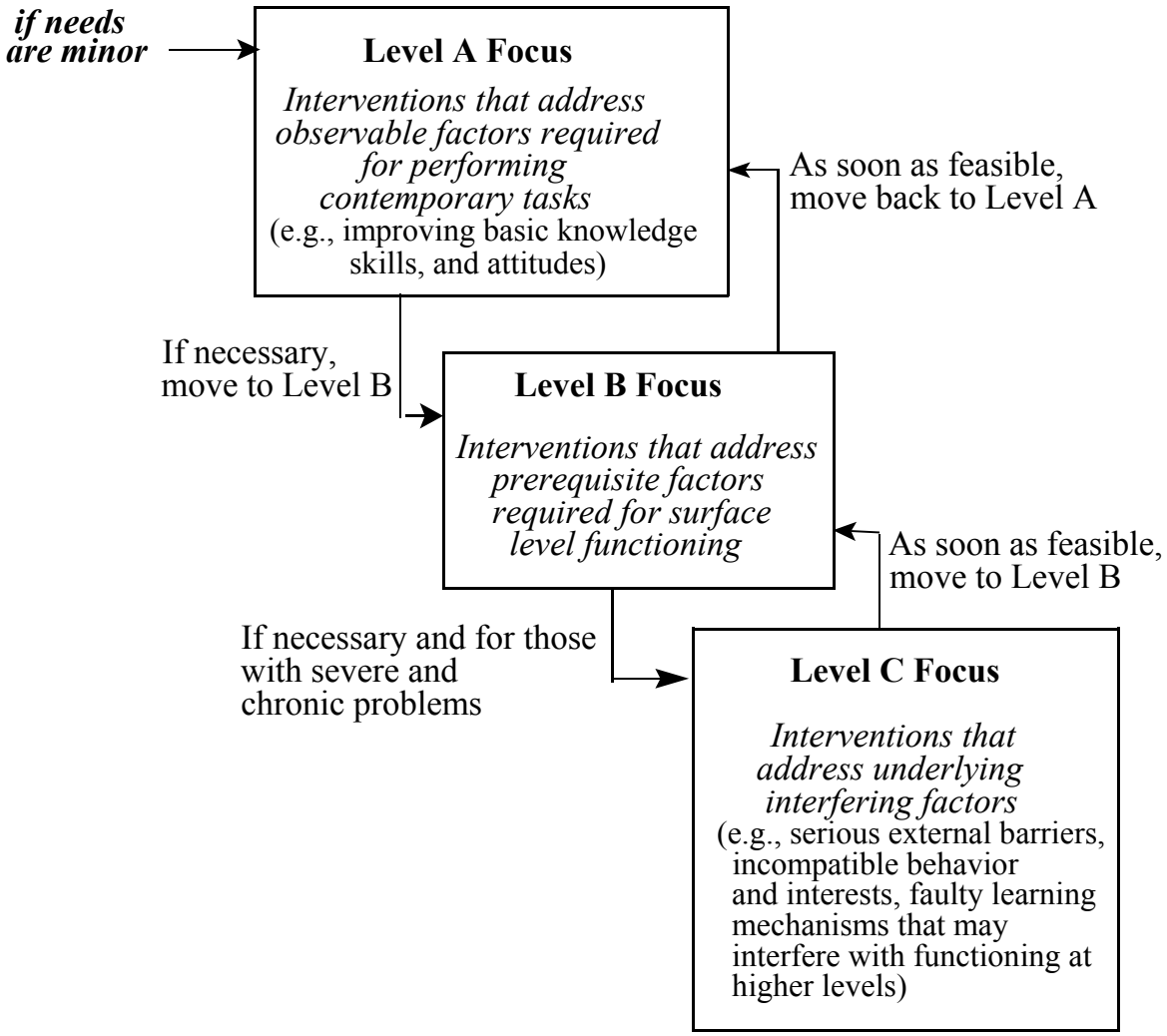
Guide 4 **Instruction Sequence and Levels**

Step I. ***Personalizing Instruction***

Add Step II as necessary

Step 2. ***Special assistance****
>for students who continue to have problems;
>maintained only as long as needed

Step II. As necessary: *Best special practices* (special assistance, such as remediation, rehabilitation, treatment) are used differentially for minor and severe problems



With increasing numbers of students identified as troubled or in trouble, schools must design systems for intervening prior to referral for special education assessment. Otherwise, the system will grind to a halt. As illustrated in Guide 4, the first step is to personalize instruction. The intent is to be highly responsive to learner differences in both motivation and developed capabilities and, in the process, enhance a caring learning environment. With personalized instruction in place, the next step involves providing special assistance as needed. Note that this second step involves three levels of focus and is introduced only if learners continue to have problems. This sequence helps to minimize false positive diagnoses (e.g., of LD, ADHD) and identifies those who should be referred for special education assessment.

##########

To be a bit more specific:

Step I personalizing instruction. The intent is to ensure a student *perceives* instructional processes, content, and outcomes as a good match with his or her interests and capabilities.

A first emphasis is on *motivation*. Practices focus on (re)engaging the student in classroom instruction, with special attention paid to increasing intrinsic motivation and minimizing psychological reactance.

Matching *developed capabilities* is a parallel concern in Step 1. Practices focus on accounting for current knowledge and skills.

Then, based on a student's responses,
it is determined if *special assistance* (step 2) also is needed.

Step II special assistance. Students for whom personalized instruction is found to be insufficient are provided supportive assistance. In keeping with the principle of using the least intervention necessary (e.g., doing what is needed in ways that are least intrusive, restrictive, disruptive), step 2 stresses use of different *levels* of special intervention.

***Level A*.** Students with minor problems begin with special interventions that directly focuses on readily observable problems interfering with classroom learning and performance. The initial focus is on directly facilitating learning related to immediate tasks and interests and on expanding the range of interests. Practices involve (1) continued adaptation of methods to match and enhance levels of motivation and development and (2) reteaching specific skills and knowledge when students have difficulty.

Level B. Students who continue to have problems may also require a focus on necessary prerequisites (e.g., readiness attitudes, knowledge, and skills) they haven't acquired and need for functioning at the higher level. Again, procedures are adapted to improve the match, and reteaching is used when the learner has difficulty. If missing prerequisites are successfully developed, the focus returns to observable factors (Level A).

Level C. If Levels A and B interventions don't ameliorate the problem, the focus shifts to possible underlying factors. Students with severe and chronic problems require attention at all three levels. Only at this level is the emphasis on factors that may interfere with functioning (e.g., incompatible behaviors and interests, dysfunctional learning mechanisms). In pursuing underlying interfering factors (Level C), there is increased and intensified use of a wide range of instructional techniques. As soon as feasible, the focus shifts back to prerequisites (Level B) and then on to current tasks and interests (Level A). The special strategies are used whenever and as long as necessary.

While the framework looks linear, we all know that learning is an ongoing, dynamic, and transactional process.

The intent in proceeding in a sequential and hierarchical way is to use the simplest and most direct approaches first whenever problems appear minor. However, if available data indicate the presence of severe and pervasive problems, instruction for missing prerequisites (Level B) is begun immediately with a view to determining the need to address underlying interfering factors.

Notes:

(1) Any student who is not learning as well as *most* others in the classroom is a candidate for special assistance. Special assistance is an essential aspect of revamping classroom systems to address the needs of *all* learners. Using effective special assistance is fundamental to reducing misbehavior, suspensions, expulsions, grade retention, referrals to special education, and dropouts.

(2) As with personalization, special assistance must systematically and fully focus on motivation. This involves (a) assessing how motivated the student is for the assistance, (b) overcoming negative attitudes, (c) enhancing motivational readiness, (d) maintaining motivation throughout the learning process, and (e) nurturing intrinsic motivation for ongoing engagement. Attending to these matters is key to maximizing maintenance, generalization, and expansion of learning. Ignoring such matters means intervening with passive (and often hostile) learners. When motivation considerations are given short shrift, assessments and diagnoses are confounded, and intervention may just as readily exacerbate as correct students problems.

(3) Special assistance often is just an extension of general strategies (e.g., expanding options, reducing levels of abstraction, intensifying the way stimuli are presented and acted upon, increasing the amount and consistency of guidance and support); sometimes, however, major accommodations and more specialized interventions are needed (e.g., use of multisensory techniques). In either case, the process objectives are the same – to improve the match between the intervention and a learner's motivation and capabilities. To accomplish these objectives, all who are available to work with the youngster in the classroom (e.g., teachers, aides, volunteers, resource teachers, student support staff) must take the time to develop an understanding of students who are not learning well. This encompasses an appreciation of strengths as well as weaknesses (including missing prerequisites and interfering behaviors and attitudes, vulnerabilities, limitations, likes, dislikes).

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Step 5. Extending Ways to Accommodate Differences and Disabilities

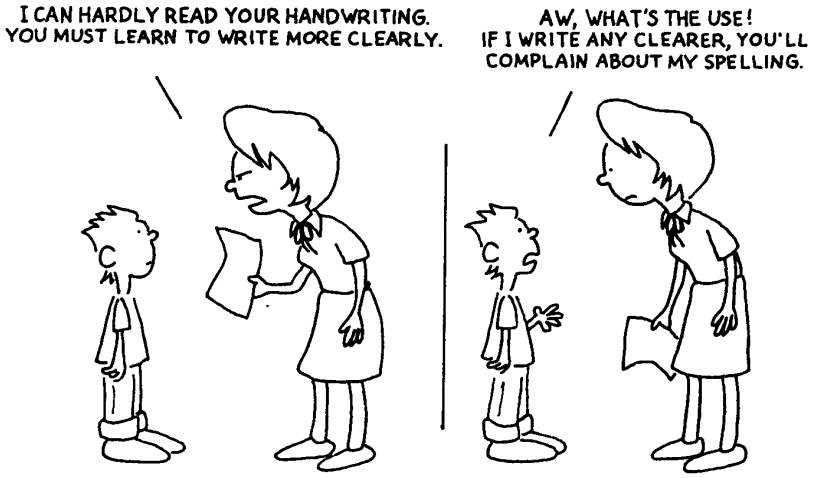
Accommodative strategies are intended to affect students' motivation by involving them in activities they value and believe are attainable with appropriate effort.

Part of enhancing conditions for learning is to accommodate a wider range of differences related to levels of motivation and current functioning. For example, environments can be changed to better account for youngsters who are very active and/or distractable.

Some behavioral expectations and standards initially must be relaxed for some students,. This usually involves widening limits for a time so that certain behaviors of a given student will not be designated as infringing the rules.

For students with low motivation or negative attitudes, the need is to identify a range of learning options they perceive as of considerable personal value and as attainable with an appropriate amount of effort.

Guide 5 offers a range of examples for accommodating differences and disabilities.



Guide **5**

Accommodations

If students seem easily distracted, the following might be used:

- identify any specific environmental factors that distract students and make appropriate environmental changes
- have students work with a group that is highly task-focused
- let students work in a study carrel or in a space that is “private” and uncluttered
- designate a volunteer to help whenever students becomes distracted and/or start to misbehave, and if necessary, to help them make transitions
- allow for frequent "breaks"
- interact with students in ways that will minimize confusion and distractions (e.g., keep conversations relatively short; talk quietly and slowly; use concrete terms; express warmth and nurturance)

If students need more support and guidance, the following might be used:

- develop and provide sets of specific prompts, multisensory cues, steps, etc. using oral,written, and perhaps pictorial and color-coded guides as organizational aids related to specific learning activities, materials, and daily schedules
- ensure someone checks with students frequently throughout an activity to provide additional support and guidance in concrete ways (e.g., model, demonstrate, coach)
- support student efforts related to self-monitoring and self-evaluation and provide nurturing feedback keyed to student progress and next steps

If students have difficulty finishing tasks as scheduled, try the following:

- modify the length and time demands of assignments and tests
- modify the nature of the process and products (e.g., allow use of technological tools and allow for oral, audio-visual, arts and crafts, graphic, and computer generated products)

(Cont.)

Accommodations (Guide 5 cont.)

504 Accommodation Checklist

Various organizations concerned with special populations circulate lists of 504 accommodations. The following is one that was downloaded from website of a group concerned with Fetal Alcohol Syndrome (see http://www.come-over.to/FAS/IDEA504.htm).

Physical Arrangement of Room

- seating student near the teacher
- seating student near a positive role model
- standing near student when giving directions/presenting lessons
- avoiding distracting stimuli (air conditioner, high traffic area)
- increasing distance between desks

Lesson Presentation

- pairing students to check work
- writing key points on the board
- providing peer tutoring
- providing visual aids, large print, films
- providing peer notetaker
- making sure directions are understood
- including a variety of activities during each lesson
- repeating directions to student after they are given to the class: then have him/her repeat and explain directions to teacher
- providing written outline
- allowing student to tape record lessons
- having child review key points orally
- teaching through multi-sensory modes, visual, auditory, kinestetics, olfactory
- using computer-assisted instruction
- accompany oral directions with written directions for child to refer to blackboard or paper
- provide model to help students, post the model, refer to it often
- provide cross age peer tutoring
- to assist the student in finding the main idea underlying, highlighting, cue cards, etc.
- breaking longer presentations into shorter segments

Assignments/worksheets

- giving extra time to complete tasks
- simplifying complex directions
- handing worksheets out one at a time
- reducing the reading level of the assignments
- requiring fewer correct responses to achieve grade (quality vs. quantity)
- allowing student to tape record assignments/homework
- providing a structured routine in written form
- providing study skills training/learning strategies
- giving frequent short quizzes and avoiding long tests
- shortening assignments; breaking work into smaller segments
- allowing typewritten or computer printed assignments prepared by the student or dictated by the student and recorded by someone else if needed.
- using self-monitoring devices
- reducing homework assignments
- not grading handwriting
- student not be allowed to use cursive or manuscript writing
- reversals and transpositions of letters and numbers should not be marked wrong, reversals or transpositions should be pointed out for corrections
- do not require lengthy outside reading assignments
- teacher monitor students self-paced assignments (daily, weekly, bi-weekly)
- arrangements for homework assignments to reach home with clear, concise directions
- recognize and give credit for student's oral participation in class

Test Taking

- allowing open book exams
- giving exam orally
- giving take home tests
- using more objective items (fewer essay responses)
- allowing student to give test answers on tape recorder
- giving frequent short quizzes, not long exams
- allowing extra time for exam
- reading test item to student
- avoid placing student under pressure of time or competition

Organization

- providing peer assistance with organizational skills
- assigning volunteer homework buddy
- allowing student to have an extra set of books at home
- sending daily/weekly progress reports home
- developing a reward system for in-schoolwork and homework completion
- providing student with a homework assignment notebook

Behaviors

- use of timers to facilitate task completion
- structure transitional and unstructured times (recess, hallways, lunchroom, locker room, library, assembly, field trips, etc.)
- praising specific behaviors
- using self-monitoring strategies
- giving extra privileges and rewards
- keeping classroom rules simple and clear
- making "prudent use" of negative consequences
- allowing for short breaks between assignments
- cueing student to stay on task (nonverbal signal)
- marking student's correct answers, not his mistakes
- implementing a classroom behavior management system
- allowing student time out of seat to run errands, etc.
- ignoring inappropriate behaviors not drastically outside classroom limits
- allowing legitimate movement
- contracting with the student
- increasing the immediacy of rewards
- implementing time-out procedures

Step 6: Expanding School Improvement Plans to Include Development of a Comprehensive System of Student and Learning Supports

Instruction must be supported by a broad-range of student and learning supports focusing on factors interfering with good instruction and productive learning.

Clearly, a wide range of external and internal barriers to learning and teaching pose pervasive and entrenched challenges to educators across the country, particularly in chronically low performing schools. Failure to directly address such barriers ensures that (a) too many students will continue to struggle in school, and (b) teachers will continue to divert precious instructional time to dealing with behavior and other problems that can interfere with classroom engagement for all students.

The five steps outlined so far emphasize enhancing conditions for learning in the classroom. Such strategies are fundamental and essential, but the work can't stop there if all students are to have an equal opportunity to succeed at school. Classroom improvements need to be part of a unified and comprehensive schoolwide system for addressing barriers to learning and teaching and re-engaging disconnected students.

As illustrated in Guide 6, such a system is conceptualized as an enabling or learning supports component.

As indicated in Guide 6, an enabling component involves first addressing interfering factors and then (re)engaging students in classroom instruction. The reality is that interventions that do not stress engaging students fully in classroom learning generally are insufficient in sustaining, over time, student involvement, good behavior, and effective learning at school. Such a component is especially critical where large numbers of students are not doing well and at any school that is not yet paying adequate attention to equity and diversity concerns.

Work related to pioneering initiatives around the country is providing realistic and cost-effective guidance for fully integrating such a component into school improvement policy and practice. See *Where's it happening?* – http://smhp.psych.ucla.edu/summit2002/nind7.htm

Guide 6

An Enabling or Learning Supports Component to Address Barriers and Re-engage Students in Classroom Instruction

Range of Learners
(based on their response to academic instruction at any given point in time)

On Track
Motivationally ready & able

Moderate Needs
Not very motivated;

Lacking prerequisite knowledge & skills;

Different learning rates, & styles;

Minor vulnerabilities.

High Needs
Avoidant;

Very deficient in current capabilities;

Has a disability;

Major health problems

No barriers

Barriers** to learning, development, and teaching

Enabling Component*

(1) Addressing interfering factors

(2) Re-engaging students in classroom instruction

Enhancing the Focus on the Whole Child

Instructional Component

Classroom Teaching + Enrichment Activity

High Standards

Desired Outcomes for All Students

(1) Academic achievement

(2) Social-emotional well-being

(3) Successful postsecondary transition

High Expectations and Accountability

*In some places, an Enabling Component is called a Learning Supports Component. Whatever it is called, the component is to be developed as a comprehensive system of learning supports at the school site.

****Examples of Risk-Producing Conditions that Can be Barriers to Learning**

Environmental Conditions			Person Factors
Neighborhood	***Family***	***School and Peers***	***Individual***
>extreme economic deprivation	>chronic poverty	>poor quality school	>medical problems
>community disorganization, including high levels of mobility & unemployment	>domestic conflict/ disruptions/violence	>negative encounters with teachers	>low birth weight/ neurodevelopmental delay
>violence, drugs, crime, etc.	>parent/sibling substance abuse or mental illness	>negative encounters with peers &/or inappropriate peer models	>psychophysiological problems
>minority and/or immigrant isolation	>modeling problem behavior	>many disengaged students	>difficult temperament & adjustment problems
>Lack of positive youth development opportunities	>abusive caretaking		>inadequate nutrition and health care
	>inadequate provision for quality child care		

Note: A reciprocal determinist view of behavior recognizes the interplay of environment and person variables with negative environmental conditions exacerbating person factors.

A comprehensive system of student and learning supports encompasses both a continuum of interventions and organized content. The prototype for organizing the content emphasizes six arenas encompassing interventions to:

- Enhance regular classroom strategies to enable learning (e.g., improving instruction for students who with mild-moderate learning and behavior problems and those have become disengaged from learning at school; includes a focus on prevention, early intervening, and use of strategies such as response to intervention)
- Support transitions (i.e., assisting students and families as they negotiate school and grade changes and many other transitions)
- Increase home & school connections & engagement
- Respond to, and where feasible, prevent crises
- Increase community involvement and support (outreach to develop greater community involvement and support, including enhanced use of volunteers)
- Facilitate student and family access to effective services and special assistance as needed.

As Guide 7 illustrated, the continuum andsix content arenas can be formed into an intervention framework for a comprehensive system of learning supports.

The matrix provides a unifying framework for mapping what is in place and analyzing gaps. Such a framework can guide school improvement planning for developing a comprehensive system.

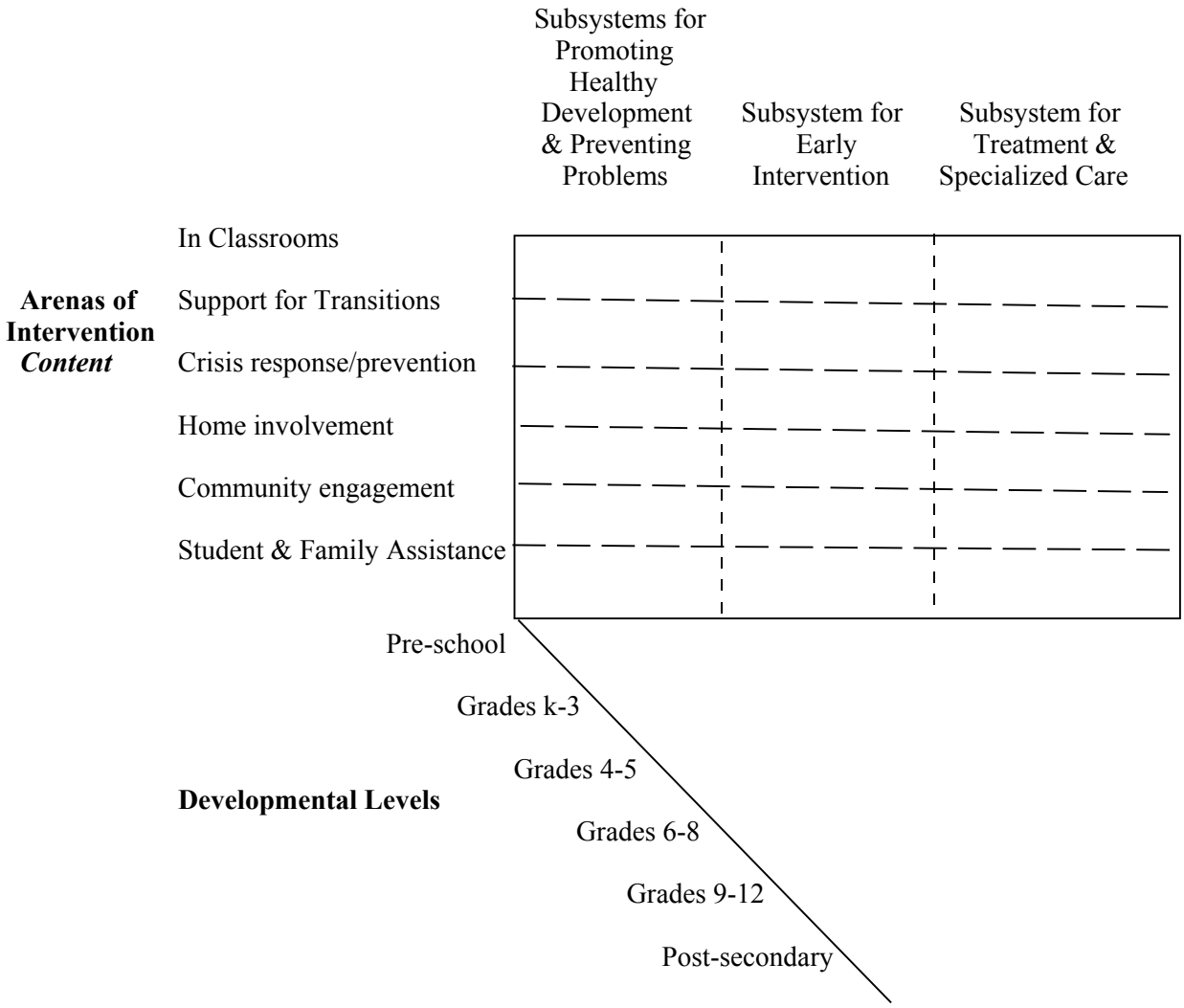
It is evident that teachers deserve to have their efforts enabled by a unified and comprehensive system of student and learning supports. For such a system emerge, however, teachers must mobilize all their colleagues to advocate for expanding school improvement plans to include such development as a priority.

As aids to this end, our Center has developed a range of resources (see for example *Establishing a comprehensive system of learning supports at a school: Seven steps for principals and their staff* – http://smhp.psych.ucla.edu/pdfdocs/7steps.pdf

Guide 7

A Unifying Intervention Framework to Aid Schools, Families, and Neighborhoods in Providing a Comprehensive and Cohesive System of Supports

Integrated Intervention *Subsystems*



A Few References and Resource Aids

Adelman, H.S., & Taylor, L. (2006). *The implementation guide to student learning supports in the classroom and schoolwide: New directions for addressing barriers to learning.* Thousand Oaks, CA: Corwin Press.

Adelman, H.S., & Taylor, L. (2006). *The school leader's guide to student learning supports: New directions for addressing barriers to learning.* Thousand Oaks, CA: Corwin Press.

Center for Mental Health in School (2011). *Implementing response to intervention in context*. Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/pdfdocs/implementingrti.pdf

Center for Mental Health in School (2011). *Moving beyond the three tier intervention pyramid toward a comprehensive framework for student and learning supports*. Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/pdfdocs/briefs/threetier.pdf

Center for Mental Health in School (2011). *Where's it happening?* Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/summit2002/nind7.htm

Other Resources

One easy way to access a wide range of resources for enhancing classroom and schoolwide interventions is to use our Center's Online Clearinghouse *Quick Finds*. The menu of over 130 topics covers matters related to each of the steps highlighted in this set of practice notes; see http://smhp.psych.ucla.edu/quicksearch.htm

For resources directly related to matters discussed in this set of Practice Notes, see:

>Center for Mental Health in School (2011). *RTI and classroom & schoolwide learning supports: A guide for teachers and learning supports staff*. Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/pdfdocs/rtiguide.pdf

Also see the U.S. Department of Education's *What Works Clearinghouse* – see Topics at http://ies.ed.gov/ncee/wwc/topics.aspx

To support efforts to guide expansion of school improvement planning to include development of a comprehensive system of student and learning supports, see:

>One Hour Introductory Webinar. *Strengthening school improvement: Developing a comprehensive system of learning supports to address barriers to learning and teaching*. Developed by our Center in collaboration with the American Association of School Administrators and Scholastic. – https://scholastic.webex.com/scholastic/lsr.php?AT=pb&SP=TC&rID=48915112&rKey=09f14db0881f5159&act=pb

>Examples of what others already are doing – *Where's it happening?* – http://smhp.psych.ucla.edu/summit2002/nind7.htm

>Toolkit for *Rebuilding Student Supports into a Comprehensive System for Addressing Barriers to Learning and Teaching* – http://smhp.psych.ucla.edu/summit2002/resourceaids.htm

Appendix

Intrinsic Motivation and the Classroom*

Intrinsic motivation is a fundamental concern in every classroom. Understanding intrinsic motivation clarifies how essential it is to avoid processes that limit options, make students feel controlled and coerced, and that focus mainly on "remedying" problems. Overreliance on extrinsic motivation risks producing avoidance reactions in the classroom and to school and, thus, can reduce opportunities for positive learning and for development of positive attitudes. Over time, the result is that too many students disengage from classroom learning.

Practices for preventing disengagement and efforts to re-engage disconnected students (families, staff) require minimizing conditions that negatively affect intrinsic motivation and maximizing those that enhance it.

Appreciating Intrinsic Motivation

Psychological scholarship over the last fifty years has brought renewed attention to motivation as a central concept in understanding learning and attention problems. This work is just beginning to find its way into personnel preparation programs and schools. One line of work emphasizes the relationship of learning and behavior problems to deficiencies in intrinsic motivation and clarifies the importance of focusing on

- feelings of self-determination
- feelings of competence and expectations of success
- feelings of interpersonal relatedness
- the range of interests and satisfactions related to learning.

Activities to correct deficiencies in intrinsic motivation are directed at improving awareness of personal motives and true capabilities, learning to set valued and appropriate goals, learning to value and to make appropriate and satisfying choices, and learning to value and accept responsibility for choice.

The point for emphasis here is that engaging and re-engaging students in learning involves matching motivation. Matching motivation requires an appreciation of the importance of a student's perceptions in determining the right mix of intrinsic and extrinsic reasons. It also requires understanding the key role played by expectations related to outcome. Without a good match, social control strategies can suppress negative attitudes and behaviors, but are unlikely to re-engage disconnected students in classroom learning.

Strong intrinsic motivation can be viewed as a fundamental *protective factor* and as a key to developing *resiliency*. Students who are intrinsically motivated to learn at school seek out opportunities and challenges and go beyond requirements. In doing so, they learn more and learn more deeply than do classmates who are extrinsically motivated. Facilitating the learning of such students is fairly straightforward and meshes well with school improvements that primarily emphasize enhancing instructional practices. The focus is on helping establish ways for students who already are motivationally ready and able to achieve and maintaining and enhancing their motivation. The process involves knowing when, how, and what to teach and also knowing when and how to structure the situation so students can learn on their own.

***Note:** While our focus here is on students, any discussion of motivation has applications to family members and school personnel. Think about the challenge of home involvement in schooling, and think about teacher burnout and dropout; think about systemic change.

In contrast, students who manifest learning, behavior, and/or emotional problems usually are not motivationally ready and able to pursue nonpersonalized instructional practices. They often have extremely negative perceptions of teachers, programs, and school and generally are not open to people and activities that they perceive as "the same old thing." Any effort to re-engage disengaged students must begin by addressing negative perceptions. Teachers and school support staff must work together to reverse conditions that led to such perceptions. Minimally, exceptional efforts must be made to enhance such a student's perceptions that (1) the teacher and other interveners are supportive (rather than controlling and indifferent) and (2) content, outcomes, and activity options are personally valuable and obtainable.

Examples of practices for *maximizing intrinsic motivation* are:

- Personalized (as opposed to individualized) instruction
- Building relationships and planning instruction with an understanding of student perceptions and including a range of real life needs, as well as personal and cooperative experiences
- Providing real, valued, and attainable options and choices ensuring shared decision making
- Enhancing feelings of competence, self-determination, and relatedness to valued others

Examples of *minimizing threats to intrinsic motivation* are:

- Ensuring a welcoming, caring, safe, and just environment
- Countering perceptions of social control and indifference
- Designing motivated applications as opposed to rote practice and deadening homework
- Ensuring extra-curricular and enrichment opportunities
- Providing regular feedback in ways that minimize use of evaluative processes that threaten feelings of competence, self-determination, and relatedness to valued others

Motivation and School Improvement: Beyond Reinforcement Theory

Two common reasons people give for not bothering to learn something are "It's not worth it" and "I know I won't be able to do it." In general, the amount of time and energy spent on an activity seems dependent on how much it is valued by the person and on the person's expectation that what is valued will be attained without too great a cost.

About Valuing

What makes something worth doing? Prizes? Money? Merit awards? Praise? Certainly! We all do a great many things, some of which we don't even like, because the activity leads to a desired reward. Similarly, we often do things to escape punishment or other negative consequences that we prefer to avoid.

Rewards and punishments may be material or social. For those with learning, behavior, and emotional problems, there is widespread use of such "incentives" (e.g., systematically giving points or tokens that can be exchanged for candy, prizes, praise, free time, or social interactions). Punishments have included loss of free time and other privileges, added work, fines, isolation, censure, and suspension. Grades have been used both as rewards and punishments. Because people will do things to obtain rewards or avoid punishment, rewards and punishment often are called *reinforcers*. Because they generally come from sources outside the person, they often are called *extrinsics*.

Extrinsic reinforcers are easy to use and can immediately affect behavior. Therefore, they are widely used. Unfortunately, the immediate effects are usually limited to very specific behaviors and often are short-term. Moreover, extensive use of extrinsics can have some undesired effects. And, sometimes the available extrinsics simply aren't powerful enough to get the desired results.

It is important to remember that what makes an extrinsic rewarding is that it is *experienced by the recipient* as a reward. What makes it a highly valued reward is that the recipient highly values it. If someone doesn't like candy, there is not much point in offering it as a reward. Furthermore, because the use of extrinsics has limits, it's fortunate that people often do things even without apparent extrinsic reason. In fact, a lot of what people learn and spend time doing is done for intrinsic reasons. *Curiosity*, for example, seems to be an innate quality that leads us to seek stimulation, avoid boredom, and learn a great deal.

People also pursue some things because of an innate *striving for competence*. Most of us value feeling competent. We try to conquer some challenges, and if none are around, we usually seek one out. Of course, if challenges seem unconquerable or make us too uncomfortable (e.g., too anxious or exhausted), we try to put them aside and move on to something more promising.

Another important intrinsic motivator is an internal push toward *self-determination*. People seem to value feeling and thinking that they have some degree of choice and freedom in deciding what to do. And, human beings also seem intrinsically moved toward establishing and maintaining relationships. That is, we value the feeling of *interpersonal connection.*

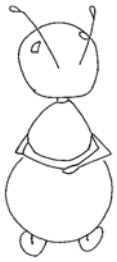
About Expectations

We may value something a great deal; but if we believe we can't do it or can't obtain it without paying too great a personal price, we are likely to look for other valued activities and outcomes to pursue. Expectations about these matters are influenced by past experiences that influence our perceptions of how easy or hard it will be to obtain a desired outcome. Sometimes we know we can easily do something, but it may not be something we value pursuing. At other times, we may value something a great deal but not believe we can do it or can only obtain it by paying too great a personal price. Under such circumstances, we are likely to look for other valued activities and outcomes to pursue.

Previously unsuccessful arenas usually are seen as unlikely paths to valued extrinsic rewards or intrinsic satisfactions. We may perceive past failure as the result of our lack of ability; or we may believe that more effort was required than we were willing to give. We may also feel that the help we needed to succeed was not available. If our perception is that very little has changed with regard to these factors, our expectation of succeeding now will be rather low. *In general, then, what we value interacts with our expectations, and motivation is one product of this interaction.* (See next page; also see the reference list for key citations on motivation.)

How many students does it take to change a light bulb?

Only one, but the student has to want to change the bulb!



Valuing and Expectations in the Classroom

Engaging and re-engaging students depends on how the classroom and school address concerns about valuing and expectations. Schools and classrooms that offer a broad range of learning and enrichment opportunities (e.g., content, outcomes, procedural options) and involve students in decision making are best equipped to meet the challenge. At the risk of over-simplifying things, the following discussion underscores a few facets of motivation theory.

E x V

Can you decipher this? (Don't go on until you've tried.)
Hint: the "x" is a multiplication sign.

In case the equation stumped you, it is probably because the main introduction to motivational thinking still tends to overemphasize reinforcement theory (which essentially stresses extrinsic motivation). Despite this, you probably intuitively understand the following points.

"E" represents an individual's *expectations* about outcome (in school this often means expectations of success or failure). "V" represents *valuing*, with valuing influenced by both what is valued intrinsically and extrinsically. Thus, in a general sense, motivation can be thought of in terms of expectancy times valuing and that intrinsic factors can be powerful motivators.

Within some limits (which we need not discuss here), high expectations and high valuing produce high motivation, while low expectations (E) and high valuing (V) produce relatively weak motivation. *Appropriate appreciation of all this is necessary in designing a match for optimal learning and performance.*

Youngsters may greatly value the idea of improving their reading. They usually are not happy with limited skills and know they would feel a lot better about if they could read. But, often they experience everything the teacher asks them to do is a waste of time. They have done it all before, and they *still* have a reading problem. Sometimes they will do the exercises, but just to earn points to go on a field trip and to avoid the consequences of not cooperating. Often, however, they try to get out of doing the work by distracting the teacher. After all, why should they do things they are certain won't help them read any better.

(Expectancy x Valuing = Motivation 0 x 1.0 = 0)

High expectations paired with low valuing also yield low approach motivation. Thus, the oft-cited remedial strategy of guaranteeing success by designing tasks to be very easy is not as simple a recipe as it sounds. Indeed, the approach is likely to fail if the outcome (e.g., improved reading, learning math fundamentals, applying social skills) is not valued or if the tasks are experienced as too boring or if doing them is seen as too embarrassing. In such cases, a strong negative value is attached to the activities, and this contributes to avoidance motivation.

(Expectancy x Valuing = Motivation 1.0 x 0 = 0)

Caution about Over-relying on Extrinsics

The discussion of valuing and expectations underscores that motivation is not something that can be determined solely by forces outside the individual. Others can plan activities and outcomes to influence motivation and learning; however, how the activities and outcomes are experienced determines whether they are pursued (or avoided) with a little or a lot of effort and ability. Understanding that an individual's perceptions can affect motivation has clarified some undesired effects of over-relying on extrinsics.

Because of the prominent role they play in school programs, grading, testing, and other performance evaluations are a special concern in any discussion of overreliance on extrinsics as a way to reinforce positive learning. Although grades often are discussed as simply providing information about how well a student is doing, many, if not most, students perceive each grade as a reward or a punishment. Certainly, many teachers use grades to try to control behavior – to reward those who do assignments well and to punish those who don't. Sometimes parents add to a student's perception of grades as extrinsic reinforcers by giving a reward for good report cards.

We all have our own horror stories about the negative impact of grades on ourselves and others. In general, grades have a way of reshaping what students do with their learning opportunities. In choosing what to study, students strongly consider what grades they are likely to receive. As deadlines for assignments and tests get closer, interest in the topic gives way to interest in maximizing one's grade. Discussion of interesting issues and problems related to the area of study gives way to questions about how long a paper should be and what will be on the test. None of this is surprising given that poor grades can result in having to repeat a course or being denied certain immediate and long-range opportunities. It is simply a good example of how systems that overemphasize extrinsics may have a serious negative impact on intrinsic motivation for learning. *And if the impact of current practices is harmful to those who are able learners, imagine the impact on students with learning and behavior problems!*

The point is that extrinsic rewards can undermine intrinsic reasons for doing things. Although this is not always the case and may not always be a bad thing, it is an important consideration in deciding to rely on extrinsic reinforcers in addressing learning, behavior, and emotional problems.

Many individuals with learning problems also are described as hyperactive, distractable, impulsive, behavior disordered, and so forth. Their behavior patterns are seen as interfering with efforts to remedy their learning problems. Although motivation has always been a concern to those who work with learning and behavior problems, the emphasis in handling these interfering behaviors usually is on using extrinsics as part of efforts to directly control and/or in conjunction with direct skill instruction. For example, interventions are designed to improve impulse control, perseverence, selective attention, frustration, tolerance, sustained attention and follow-through, and social awareness and skills. In all cases, the emphasis is on reducing or eliminating interfering behaviors, usually with the presumption that then the student will re-engage in learning. However, there is little evidence that these strategies enhance a student's motivation toward classroom learning.

About Psychological Reactance and Re-engagement

When students are not engaged in the lessons at hand, it is commonplace to find them pursuing courses of action teachers find troublesome. The greatest concern usually arises when a student's behavior is disruptive. Schools react to such behavior with an array of *social control* strategies. At one time, a heavy dose of punishment was the dominant approach. Currently, the emphasis is on more positive practices designed to provide "behavior support" in and out-of-the-classroom.

An often stated assumption is that stopping students' misbehavior makes them amenable to teaching and enhances classroom learning. In a few cases, this may be so. However, the assumption ignores all the work on understanding *psychological reactance* and the need for individuals to restore their sense of self-determination (Deci & Flaste, 1995). Moreover, it belies two painful realities: the number of students who continue to manifest poor academic achievement and the staggering dropout rate in too many schools.

Psychological reactance is a motivational force that seems to arise when an individuals perceive threats to their self-determination. When this happens, they are motivated to react in ways that protect or restore their sense of personal control.

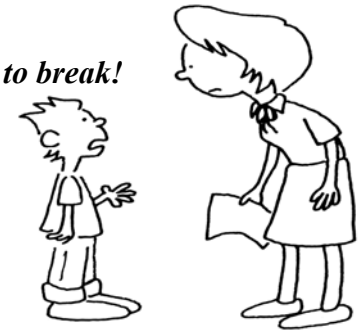
The argument sometimes is made that the reason students continue to misbehave and not do well at school is because the wrong socialization practices (e.g., punishment, illogical consequences) are

used or that good social control practices are implemented incorrectly. Thus, the ongoing emphasis is on convincing schools to (1) continue to minimize punishment and (2) do better in executing programs for social skills training, asset development, character education, and positive behavior support. The move from punishment to positive approaches is a welcome one. However, most of the new initiatives have not focused enough on a basic system failure that must be addressed if improved behavior is to be maintained. That is, strategies that focus on positive behavior have paid too little attention to helping teachers understand psychological reactance and the implications for engagement and disengagement related to classroom learning. Teachers tell us that they are taught a bit about engaging students, but neither pre- nor inservice focus much on how to prevent students from disengaging and how to re-engage a student who has become disconnected.

So: the irony is that overreliance on extrinsics to control behavior may exacerbate student problems. Motivational research suggests that when people perceive their freedom of choice is threatened, they have a psychological reaction that motivates them to restore their sense of freedom (For instance, when those in control say: You can't do that ... you must do this ..., the covert and sometimes overt psychological reaction of students often is: *Oh, you think so!*) This line of research also suggests that with prolonged denial of freedom, people's reactivity diminishes, they become amotivated and usually feel helpless and ineffective.

All this argues for 1) minimizing student disengagement and maximizing re-engagement by moving school culture toward a greater focus on intrinsic motivation and 2) minimizing psychological reactance and resistance and enhancing perceptions that lead to re-engagement in learning at school by rethinking social control practices.

If you didn't make so many rules,
there wouldn't be so many for me to break!



A Few References

Deci, E.L. & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Brophy, J. (2004). *Motivating students to learn* (2nd ed.). By. Mahwah, NJ: Erlbaum.

Dweck, C.S. (2007). *The Perils and Promises of Praise*. *Educational Leadership, 65,* 34–39.

National Research Council and the Institute of Medicine (2003). *Engaging schools: Fostering high school students' motivation to learn.* Washington, DC: National Academies Press.

Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement: Motivation, learning, and well-being. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook on motivation at school* (pp. 171-196). New York: Routledge.

Stipek, D.J.(2001). *Motivation to learn: Integrating theory and practice* (4th ed.). Boston: Allyn & Bacon

.

For popularized presentations, see:

Deci, E.L., with Flaste, R. (1995). *Why we do what we do.* New York: Penguin Books.

Pink, D. (2009). *Drive: The surprising truth about what motivates us.* NY: Riverhead Books.

For more about motivation, go to our Center's Online Clearinghouse *Quick Find* on the topic – http://smhp.psych.ucla.edu/qf/motiv.htm

Classroom-based Learning Supports

This arena provides a fundamental example not only of how learning supports overlap regular instructional efforts, but how they add value to prevailing efforts to improve instruction. Classroom-based learning supports enhance strategies in regular classrooms to enable learning. Such supports can (a) prevent problems, (b) facilitate intervening as soon as problems are noted, (c) enhance intrinsic motivation for learning, and (d) re-engage students who have become disengaged from classroom learning. These ends are accomplished by accounting for a wider range of individual differences, preventing and handling a wider range of problems when they arise, and fostering a caring context for learning.

Of course, teachers can't be expected to do all this alone. Enhancing classroom learning supports involves opening the classroom door to invite in a range of colleagues* and volunteers to collaboratively work on addressing barriers to learning and teaching.

A first focus is on ensuring instruction is personalized. This includes an emphasis on enhancing intrinsic motivation for all students and especially those manifesting mild-moderate learning and behavior problems; re-engaging those who have become disengaged from learning at school; providing learning accommodations when necessary; using response to intervention; addressing external barriers with a focus on prevention and early intervening. Then, as necessary, adding special assistance in the classroom. Referrals for special assistance outside the classroom are made only after in-classroom learning supports are proven insufficient.

Work in this arena requires personalizing in-service professional development of teachers, student and learning support staff, and all others helping in the classroom. The focus is on increasing the effectiveness of regular classroom instruction and reducing the need for specialized services. Special attention is needed to increase the array of strategies for teaching students to compensate for differences, vulnerabilities, and disabilities and for enhancing accommodations and special assistance in the classroom as necessary. Additional knowledge and skills also are needed for developing a classroom infrastructure that transforms a big class into a set of smaller ones.

*As appropriate, support *in the classroom* is provided by student and learning support staff. This involves restructuring and redesigning the roles, functions, and staff development of these professionals so they are able to work closely with teachers and students in the classroom.

Classroom-based Learning Supports

Use the following ratings in responding to items 1-5.

DK = don't know; 1 = not yet; 2 = planned; 3 = just recently initiated; 4 = has been functional for a while; 5 = well institutionalized (well established with a commitment to maintenance

1. Is there a stated policy for enhancing Classroom-based Learning Supports?	DK 1 2 3 4 5
2. Is there a designated leader or leaders for enhancing Classroom-based Learning Supports?	DK 1 2 3 4 5
3. Do personnel involved in enhancing Classroom-based Learning Supports meet regularly as a workgroup to evaluate current status and plan next steps?	DK 1 2 3 4 5
4. Is there a written plan for capacity building related to enhancing Classroom-based Learning Supports?	DK 1 2 3 4 5
5. Are there written descriptions available to give all stakeholders regarding current Classroom-based Learning Supports?	DK 1 2 3 4 5

Use the following ratings in responding to the next items.

DK = don't know
1 = hardly ever effective
2 = effective about 25 % of the time
3 = effective about half the time
4 = effective about 75% of the time
5 = almost always effective

With respect to enhancing Classroom-based Learning Supports, how effective are each of the following:

>current policy	DK 1 2 3 4 5
>designated leadership	DK 1 2 3 4 5
>workgroup monitoring and planning of next steps	DK 1 2 3 4 5
>capacity building efforts	DK 1 2 3 4 5

Classroom-based Learning Supports (cont.)

Indicate all items that apply.

	Yes	Yes but more of this is needed	No	If no, is this something you want?
I. Reframing the approach to classroom instruction to enhance teacher capability to prevent and intervene as soon after problems arise and reduce need for out of class referrals				
A. Is instruction personalized (i.e., designed to match each student's motivation and capabilities)?	___	___	___	___
B. Is in-classroom special assistance available when needed?	___	___	___	___
C. Are there small group and independent learning options?	___	___	___	___
D. Are behavior problems handled in ways that minimize negative impact on student attitudes toward classroom learning (e.g, reduced reliance on social control strategies?)	___	___	___	___
E. Is there a range of curricula/instructional options & choices?	___	___	___	___
F. Is there systematic use of response to intervention and related "prereferral" interventions?	___	___	___	___
G. Are materials and activities upgraded to ensure				
1. basic supplies are available in the classroom?	___	___	___	___
2. an increased range of high-motivation activities (with some specifically keyed to the interests of students in need of special attention)?	___	___	___	___
3. appropriate use of advanced technology?	___	___	___	___
4. other? (specify) _____	___	___	___	___
H. Is there a focus on fostering social and emotional development (e.g., using natural opportunities as teachable moments)?	___	___	___	___
I. Which of the following can teachers request as special interventions?				
1. a "time out" situation?	___	___	___	___
2. designated remediation specialists?	___	___	___	___
3. family problem solving conferences?	___	___	___	___
4. exchange of a student to improve student-teacher match and for a fresh start?	___	___	___	___
5. referral for special out-of classroom assistance?	___	___	___	___
6. oher (specify) _____	___	___	___	___
J. What is done to assist a teacher who needs help in teaching limited English speaking students?				
1. Is the student reassigned?	___	___	___	___
2. Does the teacher receive professional development for working with these students?	___	___	___	___
3. Are computer programs used to address ESL needs?	___	___	___	___
4. Does a bilingual coordinator offer consultation?	___	___	___	___
5. Is a bilingual aide assigned to the class?	___	___	___	___
6. Are volunteers brought in to help (e.g., parents, peers)?	___	___	___	___
7. Other? (specify) _____	___	___	___	___

Classroom-based Learning Supports (cont.)

II. Opening the Classroom Door to Enhance Collaboration, Support, and Personalized Professional Development	**Yes**	**Yes but more of this is needed**	**No**	**If no, is this something you want?**
A. Are others invited into the classroom to collaborate in enhancing Classroom-based Learning Supports?				
>other teachers to team/co-teach?	___	___	___	___
>student support staff?	___	___	___	___
>resource teacher?	___	___	___	___
>specialists?	___	___	___	___
>volunteers?	___	___	___	___
>aides (e.g., paraeducators; other paid assistants)?	___	___	___	___
>older students?	___	___	___	___
>parents or other family members?	___	___	___	___
>other? (specify)_____	___	___	___	___
B. Personnel Preparation Related to Classroom-based Learning Supports				
1. Does in-service focus on enhancing the capacity for pursuing learning supports in regular classrooms of the following staff				
>regular teachers?	___	___	___	___
>student support staff?	___	___	___	___
>resource teacher?	___	___	___	___
>specialists?	___	___	___	___
>other? (specify)_____	___	___	___	___
2. Does the training for nonprofessionals (e.g., volunteers, aides, and other assistants) include a focus on learning supports?	___	___	___	___
3. Is team teaching or co-teaching used for teachers to learn about Classroom-based Learning Supports?	___	___	___	___
4. Are there mentors/coaches who work with teachers and other staff in the classroom to personalize personnel preparation?	___	___	___	___
5. Are demonstrations provided?	___	___	___	___
6. Are workshops and readings offered regularly?	___	___	___	___
7. Is there a focus on learning how to integrate intrinsic motivation into teaching and classroom management?	___	___	___	___
8. Is there a focus on strategies for re-engaging students who have disengaged from classroom learning?	___	___	___	___
9. Is there a focus on learning to use technology to enhance Classroom-based Learning Supports?	___	___	___	___
10. Is consultation available from persons with special expertise such as				
>student support staff (e.g., psychologist, counselor, social worker, nurse)?	___	___	___	___
>resource specialists and/or special education teachers?	___	___	___	___
>bilingual and/or other coordinators?	___	___	___	___
>other? (specify) _____	___	___	___	___
11. Are subgroups of staff clustered to facilitate personalized development to enhance Classroom-based Learning Supports?	___	___	___	___
12. Is there a learning community at the school that focuses on Classroom-based Learning Supports?	___	___	___	___
13. Other (specify) _____	___	___	___	___

Classroom-based Learning Supports (cont.)

	Yes	Yes but more of this is needed	No	If no, is this something you want?
III. Enhancing the capability of student and learning supports staff and others to team with teachers in the classroom				
A. Is there a focus on increasing student support staff (and others') understanding of processes, strategies, and techniques involved in personalizing instruction?	___	___	___	___
B. Are support staff (and others) taught how to work as colleagues in the classroom with teachers and others?	___	___	___	___
IV. Providing a broad range of curricular and enrichment opportunities				
A. Are the current curricula and instructional processes varied enough to support personalizing instruction?	___	___	___	___
B. Is social and emotional learning a specific curriculum item?	___	___	___	___
C. Is health education a regular part of the curriculum?	___	___	___	___
D. Is computer literacy taught?	___	___	___	___
E. What enrichment and adjunct programs are used regularly?				
>library activities?	___	___	___	___
>music/art?	___	___	___	___
>student performances?	___	___	___	___
>Are there several field trips a year?	___	___	___	___
>Are there student council & other leadership opportunities?	___	___	___	___
>Are there school environment projects such as				
-mural painting?	___	___	___	___
-horticulture/gardening?	___	___	___	___
-school clean-up and beautification?	___	___	___	___
-other? (specify)_____	___	___	___	___
>Are there special school-wide events such as				
-sports?	___	___	___	___
-clubs and similar organized activities?	___	___	___	___
-student newspaper?	___	___	___	___
-sales events?	___	___	___	___
-poster contests?	___	___	___	___
-essay contests?	___	___	___	___
-book fair?	___	___	___	___
-health fair?	___	___	___	___
-pep rallies/contests?	___	___	___	___
-attendance competitions?	___	___	___	___
-attendance awards/assemblies?	___	___	___	___
>other? (specify) _____	___	___	___	___
>Are guest contributors used (e.g., outside speakers/ performers)?	___	___	___	___
>Other (specify)?_____	___	___	___	___
F. What types of technology are available to the classroom?				
>computers in the classroom? (Internet? Skype? etc.)	___	___	___	___
>computer lab?	___	___	___	___
>computer assisted instruction?	___	___	___	___
>video recording capability?	___	___	___	___
>instructional TV?	___	___	___	___
>multimedia lab?	___	___	___	___
>other? (specify)_____	___	___	___	___

Classroom-based Learning Supports (cont.)

V. **Contributing to a positive climate in the classroom and school-wide**	Yes	Yes but more of this is needed	No	If no, is this something you want?
A. Are teachers fully included in ensuring the school is developing a unified, comprehensive, equitable, and systemic approach to addressing barriers to learning and teaching?	___	___	___	___
B. Are classroom and school-wide approaches effective for				
>creating and maintaining a caring and supportive climate?	___	___	___	___
>supporting high standards for positive behavior?	___	___	___	___
C. With respect to professional and personal support,				
1. Is there effective communication to and among staff?	___	___	___	___
2. Are teachers and other staff involved in governance?	___	___	___	___
3. Is there formal conflict mediation/resolution?	___	___	___	___
4. Is there effective social support?	___	___	___	___
D. Are there efforts to enhance broad stakeholder involvement and engagement in				
>classrooms?	___	___	___	___
>school-wide events?	___	___	___	___
>decision-making?	___	___	___	___
E. Are the stakeholders who participate at the school well-oriented and provided with enough training so that they can function in the classroom and school-wide in ways that are	___	___	___	___
>knowledgeable and collegial?				
>helpful for creating and maintaining a caring and supportive climate?	___	___	___	___

Indicate below other things you want the school to do to assist teachers' efforts to address barriers to learning and teaching and to re-engaging disconnected students.

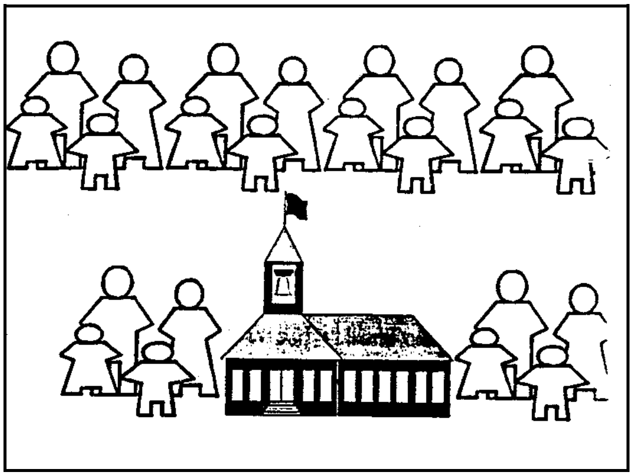
Are there other ways the school currently is assisting teachers' efforts to address barriers to students' learning and teaching and to re-engaging disconnected students? (List below)

Note: Other matters relevant to *Classroom-based Learning Supports* are included in the other self-study surveys.

II. D. Continuing Education Resources to Enhance Classrooms

CE Modules: ENHANCING CLASSROOM APPROACHES FOR ADDRESSING BARRIERS TO LEARNING: CLASSROOM-FOCUSED ENABLING

f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f f



The material in this continuing education document is designed as an evolving set of modules and units. The material can be read and taught in a straight forward sequence, or one or more parts can be combined into a personalized course. The set of modules delineates a preservice/inservice preparation curriculum covering how regular classrooms and schools should be designed to ensure *all* students have appropriate opportunities to learn effectively. This set of modules was developed with the intent of placing them in the hands of school administrators, teacher educators, teachers, school support staff, those who train pupil service personnel, community members, and others. In addition, this content is directly available to everyone as a form of independent continuing education. It is available on the Center's website or can be ordered in hard copy.

- Module I provides a big picture context for understanding the problems schools face and why every school must develop a component to address barriers to learning. This component encompasses six programmatic areas. One of these areas is designated as *Classroom-Focused Enabling* – which is designed to enhance classroom teachers' capacity to address problems and foster social, emotional, intellectual, and behavioral development.

- Module II focuses on the nuts and bolts of Classroom-Focused Enabling – covering how teachers can transform the larger class by developing small learning groups and independent learning options in order to enhance student engagement, facilitate positive learning, prevent problems, and provide special assistance.

- Module III explores the role teachers can take in ensuring their schools provide a context that supports and enhances classroom learning.

- ***See outline on next page.***

The center operates under the auspices of the School Mental Health Project, Dept. of Psychology, UCLA, Los Angeles, CA 90095-1563 Phone: (310) 825-3634. Support comes in part from the Office of Adolescent Health, Maternal and Child Health Bureau (Title V, Social Security Act), Health Resources and Services Administration (Project #U93 MC 00175) with co-funding from the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration. Both are agencies of the U.S. Department of Health and Human Services.

Enhancing Classroom Approaches for Addressing Barriers to Learning: Classroom-Focused Enabling

Module I: ***Why isn't instructional reform leading to success for all students?***

A. Current School Reforms and Addressing Barriers to Student Learning
B. Needed: A Comprehensive, Multifaceted, and Integrated Approach to Addressing Barriers to Learning and Promoting Healthy Development
C. Moving to a 3 Component Model for School Reform
D. A Framework for an Enabling Component at a School Site
E. Enhancing Regular Classroom Strategies to Enable Learning for All
F. Keeping Mutual Support, Caring, and a Sense of Community in Mind

Module II: ***Enabling All Students to Succeed: What's a Teacher to Do?***

Unit A: What is Good Teaching?

1) Principles, Guidelines, and Characteristics of Good Schools and Good Teaching
2) Underlying Assumptions and Major Program Elements of a Personalized Program
3) A Collaborative and Caring Classroom: Opening the Classroom Door

Unit B: Engaging Students (and their Families) in Learning: Real and Valued Options and Decision Making

1) About Motivation
2) Options
3) Learner Decision Making
4) Research on Preferences, Choice, Control, and Student Engagement

Unit C: General Strategies for Facilitating Motivated Performance and Practice

1) Creating a Stimulating and Manageable Learning Environment
2) Providing Personalized Structure for Learning
3) Instructional Techniques
4) Turning Homework into Motivated Practice
5) Assessing Student Learning to Plan Instruction and Providing Nurturing Feedback
6) Conferencing as a Key Process
7) Volunteers as an Invaluable Resource

Unit D: Special Classroom Assistance to Engage, Guide, and Support Those Students Who Need More

1) Levels of Special Assistance
2) Level A – Special Assistance in the Classroom to *Engage and Accommodate*
3) Level B – Special Assistance in the Classroom to *Develop Prerequisites*
4) Level C – Special Assistance in the Classroom to *Address Factors Interfering with Learning*
5) Sequencing Special Assistance
6) Referral When Necessary

Unit E: Capitalizing on Technology

1) Technology in the Classroom – A Big Picture Overview
2) Applications and Benefits of Technology in the Classroom
3) Supporting Special Assistance
4) Access to and By the Home
5) Some Websites for Classroom Resources

Module III: ***Beyond the Classroom: Roles Teachers Must Play in Enhancing a Comprehensive Approach for Addressing Barriers to Learning***

A. Needed: A School-Wide Enabling Component
B. Needed: School-Community Partnerships
C. Needed: Better Attention from the Board of Education on Addressing Barriers to Learning
D. Concluding Comments

***An accompanying document contains brief, related readings and a set of "tools" that expand on the topics discussed – providing in-depth ideas and practices.

Enhancing Classroom Teachers' Capacity to Successfully Engage All Students in Learning: It's the Foundation of Learning Supports

The following are a few Center resources to share directly with teachers and to use in personnel development:

>*Challenges and Opportunities in the Classroom* –
http://smhp.psych.ucla.edu/pdfdocs/Newsletter/winter08.pdf

>*Welcoming and Involving New Students and Families* –
http://smhp.psych.ucla.edu/pdfdocs/welcome/welcome.pdf

>*Addressing School Adjustment Problems* –
http://smhp.psych.ucla.edu/pdfdocs/adjustmentproblems.pdf

>*Engaging and Re-engaging Students in Learning at School* --
http://www.smhp.psych.ucla.edu/pdfdocs/engagingandre-engagingstudents.pdf

>*Natural Opportunities to Promote Social-Emotional Learning* –
http://smhp.psych.ucla.edu/pdfdocs/practicenotes/naturalopportunities.pdf

>*Turning Big Classes into Smaller Units* –
http://smhp.psych.ucla.edu/pdfdocs/practicenotes/small classes.pdf

>*Volunteers as an Invaluable Resource* –
http://smhp.psych.ucla.edu/pdfdocs/practicenotes/voluntresource.pdf

>*Working with Disengaged Students* –
http://smhp.psych.ucla.edu/pdfdocs/practicenotes/disengagedstudents.pdf

>*School Engagement, Disengagement, Learning Supports, & School Climate* –
http://smhp.psych.ucla.edu/pdfdocs/schooleng.pdf

>*What Might a Fully Functioning Enabling or Learning Supports Component Look Like at a School?*– http://smhp.psych.ucla.edu/summit2002/whatmightafully.pdf

>*Enhancing Classroom Approaches for Addressing Barriers to Learning: Classroom-Focused Enabling* – http://smhp.psych.ucla.edu/pdfdocs/contedu/cfe.pdf
Module I provides a big picture framework for understanding barriers to learning and how school reforms need to expand in order to effectively address such barriers. Module II focuses on classroom practices to engage and re-engage students in classroom learning. Module III explores the roles teachers need to play in ensuring their school develops a comprehensive approach to addressing barriers to learning.

Note: For more information on the Center at UCLA and its many resources, go to the website at http://smhp.psych.ucla.edu

Turning Big Classes into Smaller Units

Just as it is evident that we need to turn schools with large enrollments into sets of small schools, we must do the same in the classroom everyday. As a report in 2000 from the American Youth Policy Forum states:

> "The structure and organization of a High School of the Millennium is very different than that of the conventional high school. First and foremost, [the school] is designed to provide small, personalized, and caring learning communities for students . . . . The smaller groups allow a number of adults . . . to work together with the students . . . as a way to develop more meaningful relationships and as a way for the teachers to better understand the learning needs of each student."

The Key is Grouping

Aside from times when a learning objective is best accomplished with the whole class, the general trend should be to create small classes out of the whole. This involves grouping students in various ways, as well as providing opportunities for individual activity. At a fundamental level, grouping is an essential strategy in turning classrooms with large enrollments into a set of simultaneously operating small classes.

Clearly, students should never be grouped in ways that harm them (e.g., putting them in low ability tracks, segregating those with problems). But grouping is essential for effective teaching. *Appropriate grouping* facilitates student engagement, learning, and performance. Besides enhancing academic learning, it can increase intrinsic motivation by promoting feelings of personal and interpersonal competence, self-determination, and positive connection with others. Moreover, it can foster autonomous learning skills, personal responsibility for learning, and healthy social-emotional attitudes and skills.

A well-designed classroom enables teachers to spend most of their time rotating among small self-monitored groups (e.g., two to six members) and individual learners. With team teaching and staff collaboration, such grouping can be done across classrooms.

Effective grouping is facilitated by ensuring teachers have adequate resources (including space, materials, and help). The key to effective grouping, however, is to take the time needed for youngsters to learn to work well with each other, with other resource personnel, and at times independently. Students are grouped and regrouped flexibly and regularly based on individual interests, needs, and for the benefits to be derived from diversity. Small learning groups are established for cooperative inquiry and learning, concept and skill development, problem solving, motivated practice, peer- and cross-age tutoring, and other forms of activity that can be facilitated by peers, aides, and/or volunteers. In a small group, students have more opportunities to participate. In heterogeneous, cooperative learning groups, each student has an interdependent role in pursuing a common learning goal and can contribute on a par with their capabilities.

Three types of groupings that are common are:

- *Needs-Based Grouping:* Short-term groupings are established for students with similar learning needs (e.g., to teach or reteach them particular skills and to do so in keeping with their current interests and capabilities).
- *Interest-Based Grouping*: Students who already are motivated to pursue an activity usually can be taught to work together well on active learning tasks.
- *Designed-Diversity Grouping*: For some objectives, it is desirable to combine sets of students who come from different backgrounds and have different abilities and interests (e.g., to discuss certain topics, foster certain social capabilities, engender mutual support for learning).

All three types provide opportunities to enhance interpersonal functioning and an understanding of working relationships and of factors effecting group functioning. And, in all forms of grouping, approaches such as cooperative learning and computer-assisted instruction are relevant.

(cont.)

Recognize and Accommodate Diversity

Every classroom is diverse to some degree. Diversity arises from many factors: gender, ethnicity, race, socio-economic status, religion, capability, disability, interests, and so forth. In grouping students, it is important to draw on the strengths of diversity. For example, a multi-ethnic classroom enables teachers to group students across ethnic lines to bring different perspectives to the learning activity. This allows students not only to learn about other perspectives, it can enhance critical thinking and other higher order conceptual abilities. It also can foster the type of intergroup understanding and relationships essential to establishing a school climate of caring and mutual respect. And, of course, the entire curriculum and all instructional activities must incorporate an appreciation of diversity, and teachers must plan ways to appropriately accommodate individual and group differences.

Collaborative or Team Teaching

As Hargreaves notes:

> "The way to relieve the uncertainty and open-endedness that characterizes classroom teaching is to create communities of colleagues who work collaboratively [in cultures of shared learning and positive risk-taking] to set their own professional limits and standards, while still remaining committed to continuous improvement. Such communities can also bring together the professional and personal lives of teachers in a way that supports growth and allows problems to be discussed without fear of disapproval or punishment."

Obviously, it helps to have multiple collaborators in the classroom. An aide and/or volunteers, for example, can assist with establishing and maintaining well-functioning groups, as well as providing special support and guidance for designated individuals. As teachers increasingly open their doors to others, assistance can be solicited from paid tutors, resource and special education teachers, pupil services personnel, and an ever widening range of volunteers (e.g., tutors, peer buddies, parents, mentors, and any others who can bring special abilities into the classroom and offer additional options for learning). And, of course, team teaching offers a potent way to expand the range of options for personalizing instruction. Not only can teaming benefit students, it can be a great boon to teachers. A good collaboration is one where colleagues mesh professionally and personally. It doesn't mean that there is agreement about everything, but there must be agreement about what constitutes good classroom practices.

Collaborations can take various forms. For example, teaming may take the form of:

- *Parallel Work* – team members combine their classes or other work and teach to their strengths. This may involve specific facets of the curriculum (e.g., one person covers math, another reading; they both cover different aspects of science) or different students (e.g., for specific activities, they divide the students and work with those to whom each relates to best or can support in the best way).
- *Complementary Work* – one team member takes the lead and another facilitates follow-up activity.
- *Special Assistance* – while one team member provides basic instruction, another focuses on those students who need special assistance.

Usually, the tendency is to think in terms of two or more teachers teaming to share the instructional load. We stress, however, the value of expanding the team to include support staff, aides, volunteers, and designated students to help in creating small groupings. Teachers and support staff can work together to recruit and train others to join in the collaborative effort. And, with access to the Internet and distance learning, the nature and scope of collaboration has the potential to expand in dramatic fashion.

A Note About Students as Collaborative Helpers

Besides the mutual benefits students get from cooperative learning groups and other informal ways they help each other, formal peer programs can be invaluable assets. Students can be taught to be peer tutors, group discussion leaders, role models, and mentors. Other useful roles include: peer buddies (to welcome, orient, and provide social support as a new student transitions into the class and school), peer conflict mediators, and much more. Student helpers benefit their peers, themselves, and the school staff, and enhance the school's efforts to create a caring climate and a sense of community.

See: *Enhancing Classroom Approaches for Addressing Barriers to Learning: Classroom-Focused Enabling* http://smhp.psych.ucla.edu/pdfdocs/contedu/cfe.pdf

Continuing Education Modules

Engaging and Re-engaging Students and Families:
Four Modules for Continuing Education*

UNIT I: MOTIVATION: TIME TO MOVE BEYOND BEHAVIOR MODIFICATION

(May, 2012)

***Unit I: Motivation: Time to Move Beyond Behavior Modification**
Access at: http://smhp.psych.ucla.edu/pdfdocs/engagei.pdf

***Unit II: Strategic Approaches to Enhancing Student Engagement and Re-engagement**
Access at: http://smhp.psych.ucla.edu/pdfdocs/engageii.pdf

***Unit III: Enhancing Family Engagement and Re-engagement**
Access at: http://smhp.psych.ucla.edu/pdfdocs/engageiii.pdf

***Unit IV: Embedding Engagement and Re-engagement into a Unified and Comprehensive System of Student and Learning Supports**
Access at: http://smhp.psych.ucla.edu/pdfdocs/engageiv.pdf

Response to Intervention

(http://smhp.psych.ucla.edu/pdfdocs/practicenotes/responsetointervention.pdf)

The concept:

Response to Intervention is finding its way into schools with a significant push from the federal government. Properly conceived and implemented, the strategy is expected to improve the learning opportunities for many students and reduce the number who are *inappropriately* diagnosed with learning disabilities and behavioral disorders.

The approach overlaps ideas about pre-referral interventions but is intended to be more systematically implemented with special attention to enhancing teacher capability to carry out "well-designed and well-implemented early intervention." The aim also is to improve assessment for determining whether more intensive and perhaps specialized assistance and diagnosis are required. (It is important to emphasize that the tactic involves specific and well-monitored plans for "identified" students and is not to be used as a delaying tactic related to getting students the interventions they need.)

Response to Intervention has the potential to build teacher capacity so that similar problems are prevented in the future. Implied in all this is that someone is working to ensure (1) classroom teachers have or are learning how to implement "well-designed early intervention" in the classroom, and (2) support staff are learning how to play a role, sometimes directly in the classroom, to expand the intervention strategies if needed.

##########

The process:

Response to Intervention calls for making changes in the classroom designed to improve the student's learning and behavior as soon as problems are noted and using the student's response to such modifications as info for making further changes if needed. The process continues until it is evident that it cannot be resolved through classroom changes alone.

Through this sequential approach, students who have not responded sufficiently to the regular classroom interventions would next receive supportive assistance designed to help them remain in the regular program, and only when all this is found not to be sufficiently effective would there be a referral for special education assessment. (If the problem proves to be severe and disruptive, an alternative setting may be necessary on a temporary basis to provide more intensive and specialized assessments and assistance.)

A core difficulty here is that of mobilizing unmotivated students (and particularly those who have become actively disengaged from classroom instruction). If motivational considerations are not effectively addressed, there is no way to validly assess whether or not a student has a true disability or disorder.

##########

The intervention context:

If Response to Intervention is treated simply as a matter of providing more and better instruction, it is unlikely to be effective for a great many students. However, if the strategies are understood broadly and as part and parcel of a comprehensive system of classroom and school-wide learning supports, schools will be in a position not only to address problems effectively early after their onset, but will prevent many from occurring. Such a broad-based system is needed to reduce learning, behavior, and emotional problems, promote social/emotional development, and effectively reengage students in classroom learning. This will not only reduce the numbers who are inappropriately referred for special education or specialized services, it also will enhance attendance, reduce misbehavior, close the achievement gap, and enhance graduation rates.

##########

Devising practices:

Response to Intervention is currently being operationalized across the country. While there will be variability in practice, the tendency is to proceed as if all that is needed is more and better instruction. Clearly, this is necessary. And, the emphasis needs to go beyond direct instruction. The key is truly personalized instruction (see below). And, because the context for this is a school,

instruction must be supported by school-wide interventions focusing on enhancing supports for transitions and crisis events and home and community involvement.

But, there will be students for whom all this is insufficient. In such cases, some other forms of supportive assistance must be added to the mix – inside and, as necessary, outside the classroom. Referral for special education assessment only comes after all this is found inadequate.

To spell out the classroom-based approach a bit:

Step 1 involves *personalizing instruction*. The intent is to ensure a student *perceives* instructional processes, content, and outcomes as a good match with his or her interests and capabilities.

The first emphasis is on *motivation*. Thus:

Step 1a stresses use of motivation-oriented strategies to (re)engage the student in classroom instruction. This step draws on the broad science-base related to human motivation, with special attention paid to research on intrinsic motivation and psychological reactance. The aim is to enhance student perceptions of significant options and involvement in decision making.

The next concern is *developmental capabilities*. Thus:

Step 1b stresses use of teaching strategies that account for current knowledge and skills. In this respect, the emphasis on tutoring (designated as "Supplemental Services" in Title I) can be useful if the student perceives the tutoring as a good fit for learning.

Then, if necessary, the focus expands to encompass *special assistance*. Thus:

Step 2 stresses use of special assistance strategies to address any major barriers to learning and teaching, with an emphasis on the principle of using the least intervention needed (i.e., doing what is needed, but no more than that). In this respect, the range of strategies referred to as "Prereferral Interventions" and the programs and services that constitute student/learning supports are of considerable importance. (Again, the impact depends on the student's perception of how well an intervention fits his or her needs.)

> Note: Prereferral interventions identify regular classroom problems, identify the source of the problems (student, teacher, curriculum, environment, etc.), and take steps to resolve the problems within the regular classroom. See the Center's Practice Notes on
>
> ***Prereferral Intervention*** –
>
> smhp.psych.ucla.edu/pdfdocs/practicenotes/prereferral.pdf

For a range of resources from our center and links to other resources, begin with the our online clearinghouse Quick Find on:

Response to Intervention –
http://smhp.psych.ucla.edu/qf/responsetointervention.htm

Also, take a look at the Quick Finds on ***Classroom Focused Enabling and **Motivation.**
http://smhp.psych.ucla.edu/websrch.htm

***And, if you would like to try a training tutorial, go to:

Classroom Changes to Enhance and Re-engage Students in Learning
http://smhp.psych.ucla.edu/qf/classchange_tt/index.htm

***And, for even more, go to our continuing education modules on:

Enhancing Classroom Approaches for Addressing Barriers to Learning: Classroom-Focused Enabling
http://smhp.psych.ucla.edu/pdfdocs/contedu/cfe.pdf

***Finally, note that several other of the Center's **Practice Notes** are relevant to this matter and refer to additional resources.

Continuing Education Modules

RTI *and* Classroom & Schoolwide Learning Supports:
Four Modules for Continuing Education

UNIT I: RESPONSE TO INTERVENTION: IMPROVING CONDITIONS FOR LEARNING IN THE CLASSROOM

(April, 2012)

Unit I: Response to Intervention: Improving Conditions for Learning in the Classroom
Access at: http://smhp.psych.ucla.edu/pdfdocs/rtii.pdf

Unit II: Implementing Response to Intervention Sequentially & Effectively
Access at: http://smhp.psych.ucla.edu/pdfdocs/rtiii.pdf

Unit III. Response to Intervention: Beyond Personalization
Access at: http://smhp.psych.ucla.edu/pdfdocs/rtiiii.pdf

Unit IV: Pursuing Response to Intervention as One Strategy in a Comprehensive System of Student and Learning Supports
Access at: http://smhp.psych.ucla.edu/pdfdocs/rtiiv.pdf

III. A School-Wide Component toAddress Barriers to Learning

A. The Concept of a Learning Supports Component

B. Operational Infrastructure for Addressing Barriers to Learning

III. A School-Wide Component for Addressing Barriers to Learning

In many schools, when students are not doing well, the trend is to refer them directly for assessment in hopes of referral for special assistance – perhaps even assignment to special education. In some schools and classrooms, the number of referrals is dramatic. Where special teams exist to review students for whom teachers request help, the list grows as the year proceeds. The longer the list, the longer the lag time for review – often to the point that, by the end of the school year, the team has reviewed just a small percentage of those referred. And, no matter how many are reviewed, there are always more referrals than can be served.

One solution might be to convince policy makers to fund more remediation and related services at schools. However, even if the policy climate favored more special programs, such interventions alone are not a comprehensive approach for addressing barriers to learning. More services to treat problems certainly are needed. But so are prevention and early-after-onset programs that can reduce the number of students teachers send to review teams.

Schools committed to the success of all children must be redesigned to *enable learning* by addressing barriers to learning. Enabling is defined as "providing with the means or opportunity; making possible, practical, or easy; giving power, capacity, or sanction to." The concept of an *enabling component* is formulated around the proposition that *a comprehensive, multifaceted, integrated continuum of enabling activity* is *essential* in addressing the needs of youngsters who encounter barriers that interfere with their benefitting satisfactorily from instruction.

A key element of an enabling component involves building the capacity of classrooms to enhance instructional effectiveness. Such “classroom-focused enabling” involves personalized instruction that accounts for motivational and developmental differences and special assistance in the classroom as needed. This has been emphasized in the preceding sections of this packet and clearly is an important facet in clarifying who has a true learning disability and who is experiencing commonplace learning problems. .

In this section, we move from the classroom to a school-wide orientation to addressing barriers to learning and promoting healthy development. A great deal of our Center’s recent work focuses on clarifying the reality that school reform initiatives are unlikely to produce desired student results as long as they are limited to prevailing approaches. Specifically, we stress that reformers primarily focus on teaching and generally ignore functions that are essential to enable teaching and learning. Thus, the concept of an enabling component is meant to underscore that school restructuring has to encompass more than instructional reform. Beyond the classroom, the concept calls for weaving together school and community resources to address problems experienced by teachers, students, and families. It encompasses efforts to promote healthy development and foster positive functioning as the best way to prevent many learning, behavior, emotional, and health problems and as a necessary adjunct to correcting problems. In addition to enhancing classroom-based efforts to enable learning, we operationalize the concept to cover five other program areas. These include a wide array of school-wide interventions to provide prescribed student and family assistance, respond to and prevent crises, support transitions, increase home involvement, and outreach to develop greater community involvement and support. By defining the concept in terms of these six areas, a broad unifying framework is created around which education support programs can be restructured.

III. A. The Concept of a Learning Supports Component

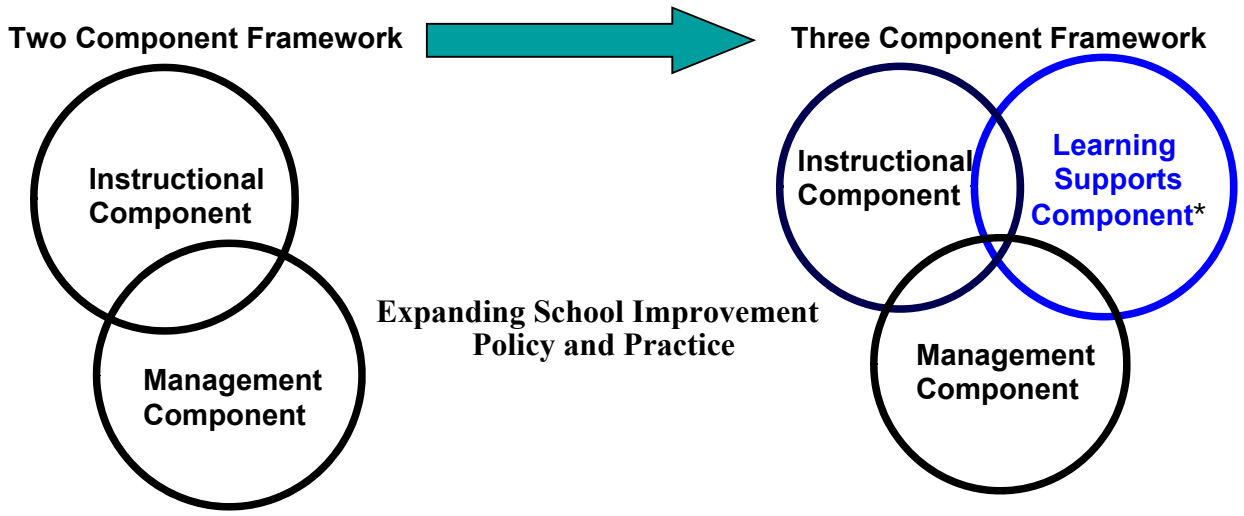
By continuing to marginalize student and learning supports, policy makers continue to marginalize all students who are not doing well at school.

Efforts to *transform* rather than just tinker with student and learning supports require an expansion of current school improvement policy. In most places, school improvement policy and practice is guided primarily by a two component framework (i.e., an instructional component and a management component). The result: all interventions for addressing barriers to learning and teaching and re-engaging disconnected students are given secondary consideration at best. As already noted, this marginalization is an underlying and fundamental cause of the widely observed fragmentation and disorganization of student and learning supports.

EXPANDING SCHOOL IMPROVEMENT POLICY

Ending the disorganization and effectively weaving together whatever a school has with whatever a community is doing to confront barriers to equity of opportunity calls for establishing a three component school improvement framework. As illustrated below, an expanded policy framework is intended to make addressing barriers to *enable* learning a *primary* commitment of school policy.

Expanded Policy Prototype



*States and districts are trending toward using the umbrella term *Learning Supports*. Learning supports are defined as the resources, strategies, and practices that provide physical, social, emotional, and intellectual supports to enable all students to have an equal opportunity for success at school by directly addressing barriers to learning and teaching. In the classroom and school-wide, such supports encompass efforts to reduce the overemphasis on using extrinsic reinforcers and enhance an emphasis on *intrinsic motivation* to promote engagement and re-engagement.

Learning supports are designed to directly address interfering factors *and* to do so in a way that (re-)engages students in classroom instruction. Attention to both these matters is essential because, in general, interventions that do not ensure a student's meaningful engagement in classroom learning are insufficient in sustaining student involvement, good behavior, and effective learning at school.

The type of policy expansion illustrated above isunderway in trailblazing states and districts (e.g., see *Where's it Happening?* – online at http://smhp.psych.ucla.edu/summit2002/trailblazing.htm). Of special note is the initiative in Alabama where the state education agency has adopted the three component policy framework with plans for statewide implementation. Forty districts in the state already are moving forward.

RETHINKING ACCOUNTABILITY AND ADOPTING LEARNING SUPPORTS STANDARDS

Because school improvement policy across the country is "standards-based" and accountability driven, expanding the prevailing accountability framework and establishing standards for learning supports are key facets in driving effective implementation of a three component policy.

School Accountability

School accountability is a policy tool with extraordinary power to reshape schools – for good and for bad. As everyone involved in school im provement knows, currently the only accountability indicators that really count are achievement test scores. Achievement tests drive school accountability, and what such tests measure has become the be-all and end-all of what is attended to by many decision makers. This produces a growing disconnect between the realities of what it takes to improve academic performance and the direction in which many policy makers and school reformers are leading the public. The disconnect is especially evident in schools serving what often are referred to as "low wealth" families.

The move to a three component policy framework is intended to expand the framework for school accountability. See the Center's prototype focuses not only on achievement, but on personal and social development and on improvementsthat directly address barriers to learning and teaching.

Standards for a Learning Supports Component

Current discussions about standards for school improvement have become locked into debates over the initiative for Common Core State Standards. This limited focus is another indicator of the type of disconnect from reality resulting from the prevailing two component policy framework.

The move to a three component framework provides a focus on the need to complement curriculum and teaching standards with standards and related quality indicators for student/learning supports. See the Center's prototype outline of standards and indicators for a learning supports component.

> While not easy, m oving to a three com ponent policy fram ework is essential to student success at school and beyond. Establishing equity of opportunity for students in over 15,000 school districts and over 90,000 schools in the USA is a n unlikely goal until school improvement policy expands to a fully integrated three-component policy framework.
>
> An expanded policy framework will be a major driving force for transforming how schools address the many overlapping problems they must deal with each day. It also is crucial in advancing the agenda for whole child development and enhancing school climate.
>
> Those currently leading the way in transforming student and learning supports are doing so because they understand the wide range of factors that interfere with students connecting with good instruction. They recognize that too many teachers are confronted with a large proportion of students who are not motivated and ready to learn what is on the teaching agenda for the day. They are committed to designing the type of unified, comprehensive, and equitable system of learning supports we have outlined.

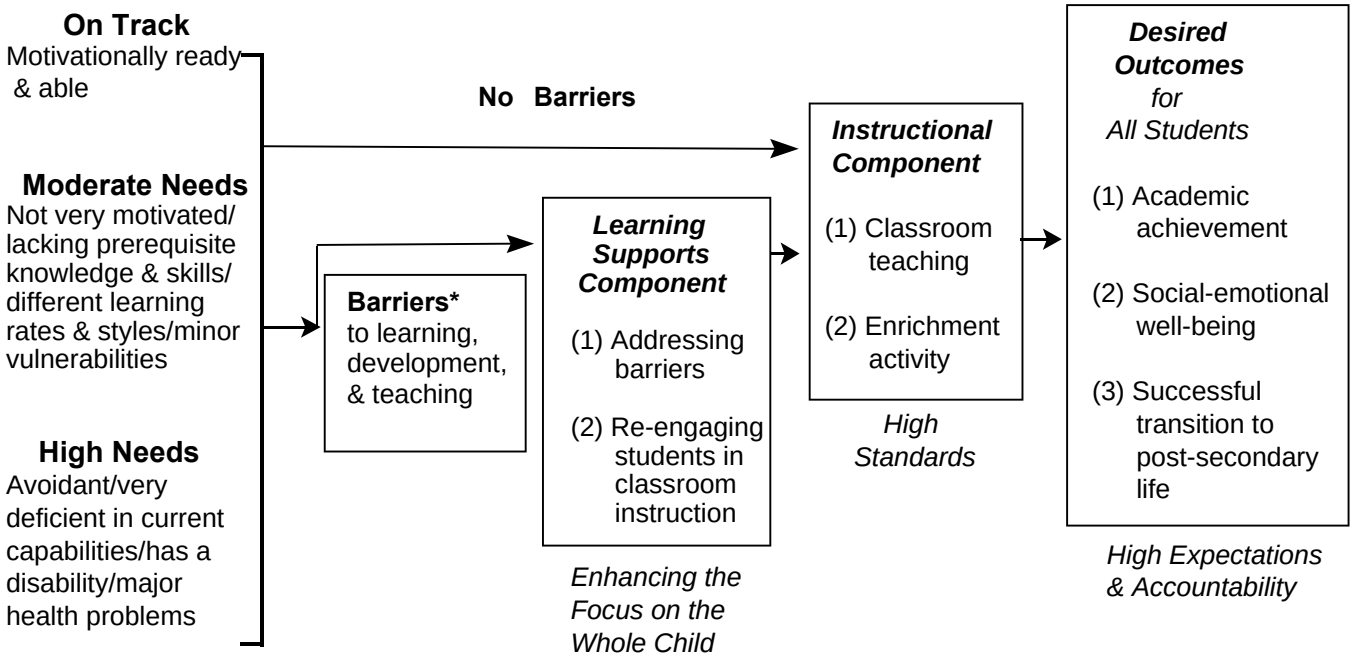
Reframing Intervention for Student and Learning Support

Changing the individual while leaving the world alone is a dubious proposition.
Ulric Neisser (1976)

A learning supports component is established by coalescing existing student and learning supports into a cohesive unit and, over a period of several years, developing the component into a comprehensive intervention system that is fully integrated with instructional efforts.

A unified and comprehensive system of learning supports is key to enabling *all* students to have an equal opportunity to learn at school and *all* teachers to teach effectively. Such a system is especially important where large numbers of students are not succeeding. As illustrated below, a learning supports component encompasses classroom and school-wide approaches and is designed to enable students to get around the barriers *and* re-engage in classroom instruction.

A Learning Supports Component to Address Barriers and Re-engage Students in Classroom Instruction*



*A learning supports component is operationalized as a unified, comprehensive, equitable, and systemic approach for addressing barriers to learning and teaching and re-engaging disconnected students. In keeping with public education and public health perspectives, interventions are designed to provide physical, social, emotional, and intellectual supports to enable learning and engagement for *all* students and especially those experiencing behavior, learning, emotional, and physical problems. The interventions are meant to play out in the classroom and school-wide at every school and in everycommunity. In promoting engagement and re-engagement, the interventions stress a reduced emphasis on using extrinsic reinforcers and an enhanced focus on intrinsic motivation as a process and outcome consideration.

INTERVENTION PROTOTYPE

While interventions are commonly framed in terms of tiers or levels, such a framework is an insufficient organizer. To escape the trend to generate laundry lists of programs and services at each level, it is necessary also to group them into a circumscribed set of arenas reflecting the *content purpose* of the activity. So, our intervention prototype has two facets:

- one organizes programs and services into a circumscribed set of *content arenas of activity*;
- the second conceptualizes levels of intervention as a full *continuum of integrated intervention subsystems* that interweave school-community-home resources.

Content Arenas of Activity

As the following exhibit illustrates, the facet of the prototype that focuses on content categorizes student/learning supports into six content arenas. These encompass efforts to

- *enhance strategies in regular classroom to enable learning* (e.g., working collaboratively with other teachers and student support staff to ensure instruction is personalized with an emphasis on enhancing intrinsic motivation for all students and especially those manifesting mild-moderate learning and behavior problems; re-engaging those who have become disengaged from learning at school; providing learning accommodations and supports as necessary; using response to intervention in applying special assistance; addressing external barriers with a focus on prevention and early intervening)
- *support transitions* (e.g., assisting students and families as they negotiate the many hurdles encountered during school and grade changes, daily transitions, program transitions, accessing supports, and so forth)
- *increase home and school connections and engagement* (e.g., addressing barriers to home involvement, helping those in the home enhance supports for their children, strengthening home and school communication, increasing home support of the school)
- *increase community involvement and collaborative engagement* (e.g., outreach to develop greater community connection and support from a wide range of entities, including enhanced use of volunteers and other community resources, establishing a school-community collaborative)
- *respond to, and where feasible, prevent school and personal crises* (e.g., preparing for emergencies, implementing plans when an event occurs, countering the impact of traumatic events, implementing prevention strategies; creating a caring and safe learning environment)
- *facilitate student and family access to special assistance* (including specialized services on- and off-campus) as needed

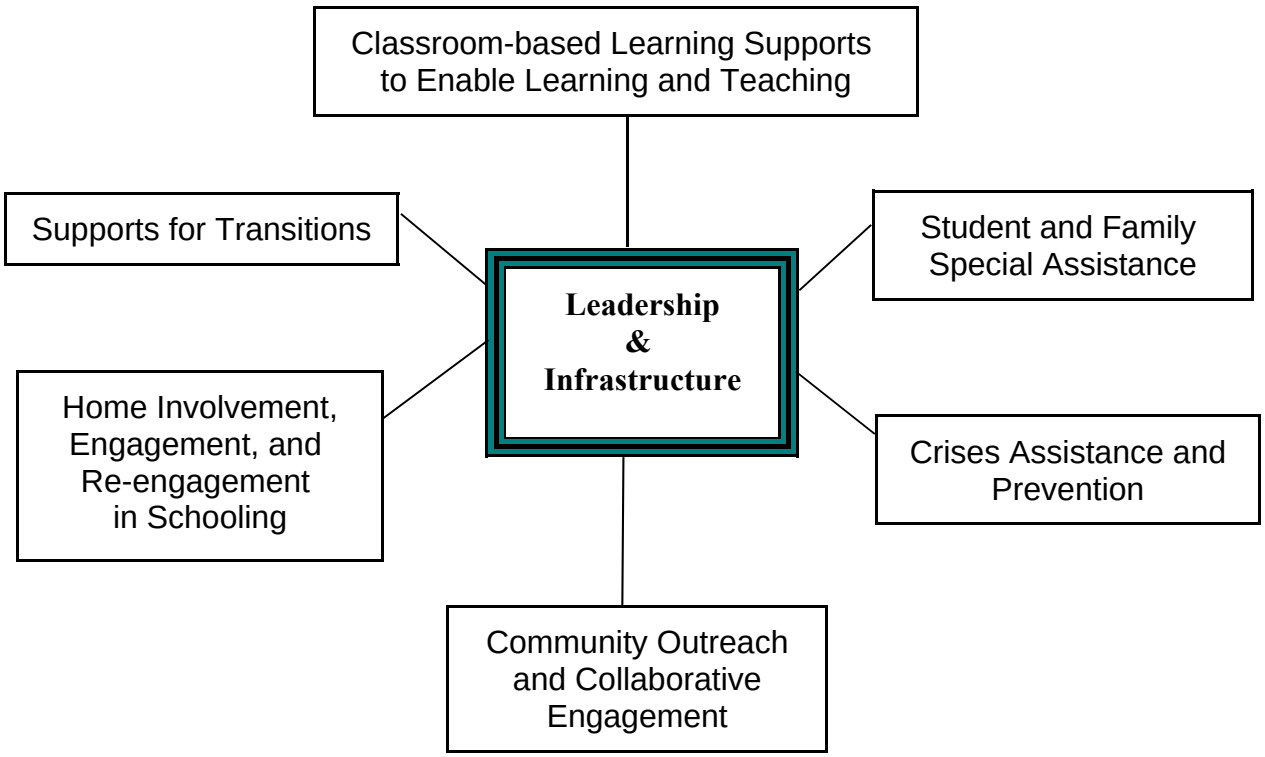
A brief discussion of and examples related to each of these arenas is provided in Chapters 4-9.

Over the last decade, versions of the six basic arenas have been incorporated in a variety of venues across the country (see examples highlighted and lessons learned in *Where's it Happening?* – http://smhp.psych.ucla.edu/summit2002/nind7.htm).

Prototype for Six Content Arenas

School improvement must include plans to develop a more effective system for directly dealing with factors that keep too many students from succeeding at school and beyond The first concern is providing a range of supports in the classroom and as necessary outside the classroom so that teachers can enable the learning of students who are not doing well.

Our work over many years stresses that the supports needed cluster into the six content arenas illustrated below. (We think of them as the curriculum of learning supports.)



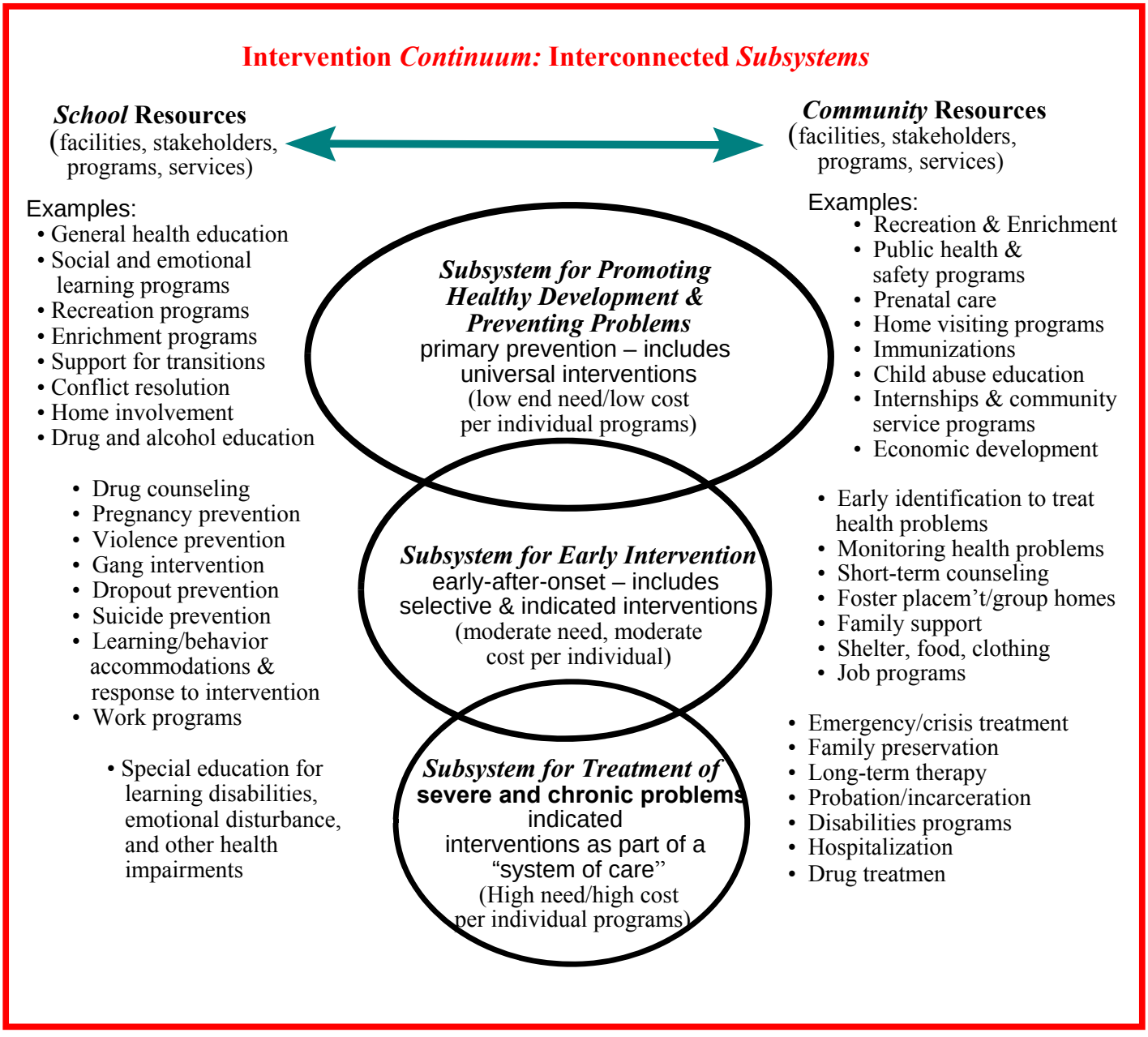
Note: *All categorical programs can be integrated into these six content arenas.* Examples of initiatives, programs, and services that can be unified into a comprehensive system of learning supports include positive behavioral supports, programs for safe and drug free schools, programs for social and emotional development and learning, full service community schools and family resource and school based health centers, CDC's Coordinated School Health Program, bi-lingual, cultural, and other diversity programs, compensatory education programs, special education programs, mandates stemming from education legislation, and many more.

Continuum of Integrated Subsystems: Expanding the 3-tier Model

Beyond intervention content, a fundamental second facet of a unified and comprehensive system or learning supports is an integrated continuum of interventions that strives to

- promote healthy development and prevent problems
- intervene early to address problems as soon after onset as is feasible
- assist with chronic and severe problems.

As graphically portrayed below, (a) each level represents a subsystem, (b) the three subsystems overlap, and (c) all three require integration into an overall system that encompasses school and community resources. Note that this framework expands thinking beyond the three tier pyramid that schools currently use.

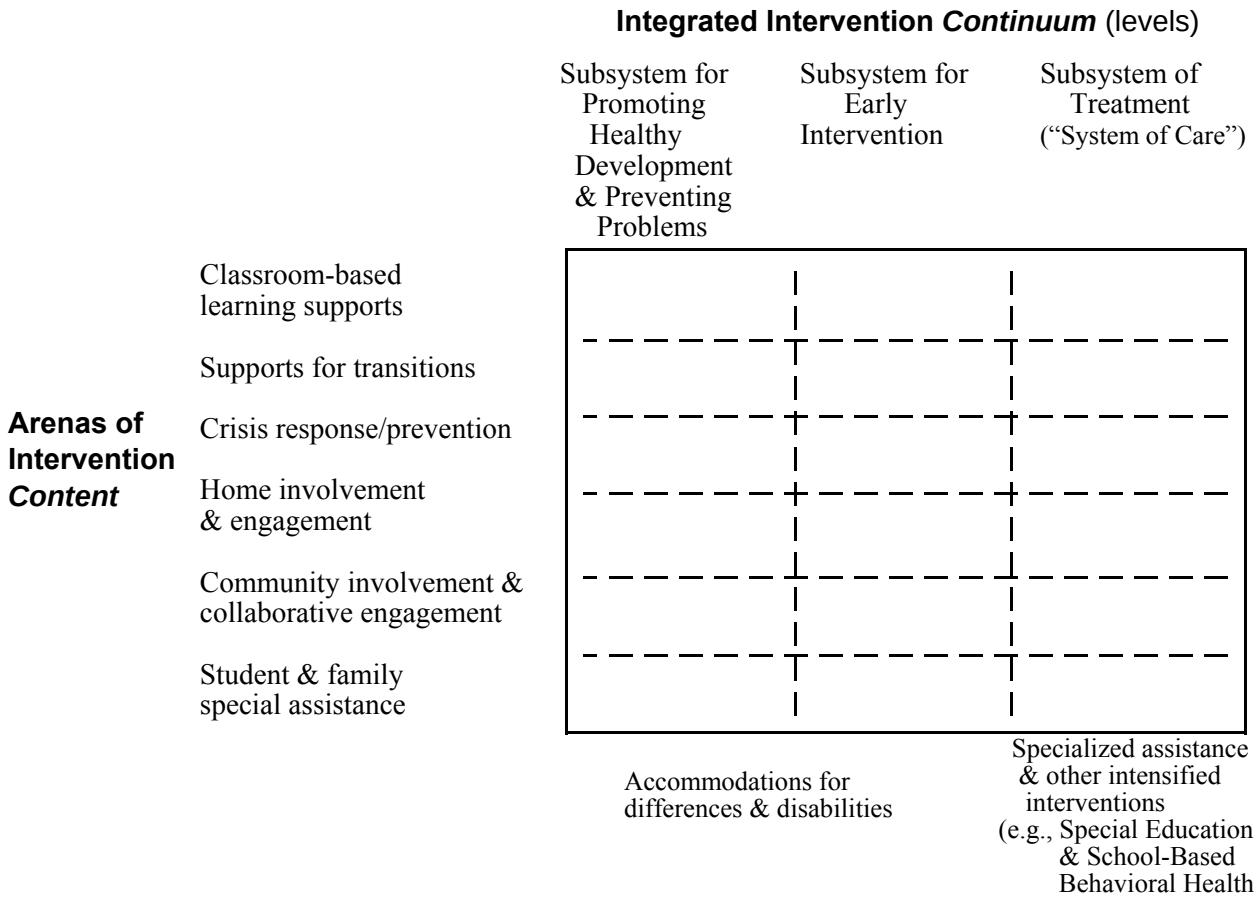


As noted, the prevailing formulation of the intervention continuum in education mainly stresses a 3-tiered, level model, especially in the context of turning Response to Intervention (RtI) and positive behavioral supports (e.,g., PBIS) into school-wide practices.

The simplicity of the tiered presentation as widely adopted is appealing and helps underscore differences in levels of intervention. However, focusing simply on levels of intervention, while essential, is insufficient. Three basic concerns about such a formulation are that it mainly stresses levels of intensity, does not address the problem of systematically connecting interventions that fall into and across each level, and does not address the need to connect school and community interventions. As a result, it has done little to promote the type of intervention framework that policy and practice analyses indicate is needed to guide schools in developing a unified and comprehensive system of student and learning supports. In contrast, the above exhibit illustrates that intervention tiers/levels are better conceived as a set of integrated, overlapping subsystems that embrace both school and community resources.

As illustrated below, the six *arenas* and the *continuum* constitute the prototype intervention framework for a comprehensive system of learning supports. Such a framework is meant to guide and unify school improvement planning related to developing a learning supports component. The matrix provides a framework for mapping what is in place and analyzing gaps.

Intervention Prototype Framework for a Unified and Comprehensive, snd Equitable System of Learning Supports



Effectively designed and developed at a school, a learning supports component increases supports for all students. The emphasis is on

- unifying student and learning supports by grouping the many fragmented approaches experienced at school in ways that reduce responding to overlapping problems with separate and sometimes redundant interventions
- addressing barriers to learning and teaching through improving personalized instruction and increasing accommodations and special assistance when necessary
- enhancing the focus on motivational considerations with a special emphasis on intrinsic motivation as it relates to individual readiness and ongoing involvement and with the intent of fostering intrinsic motivation as a basic outcome
- re-engaging disconnected students
- adding specialized remediation, treatment, and rehabilitation as necessary, but only as necessary

In doing all this, a learning supports component enhances equity of opportunity, plays a major role in improving student and school performance, fosters positive school-community relationships, and promotes a positive school climate.

CONCLUDING COMMENTS

As Dennie Wolf stressed over a decade ago as director of the Opportunity and Accountability Initiative at the Annenberg Institute for School Reform:

> "Clearly, we know how to raise standards. However, we are less clear on how to support students in rising to meet those standards" Then, she asked: "Having invested heavily in 'raising' both the standards and the stakes, what investment are we willing to make to support students in 'rising' to meet those standards?"

Ultimately, the answer to that question will affect not only individuals with learning, behavior, emotional, and physical problems but the entire society.

It is time for school improvement to encompass policy and planning that enables every school to replace its outdated patchwork of programs and services used in addressing barriers to learning and teaching. Part II discusses how to organize the six content arenas. Part III explores ways to move forward.

Do not follow where the path may lead.
Go, instead, where there is not path and leave a trail. (Anonymous)

Center References and Resources Re. a Learning Supports Component

See:

Resource Catalogue -- http://smhp.psych.ucla.edu/materials/resources.htm

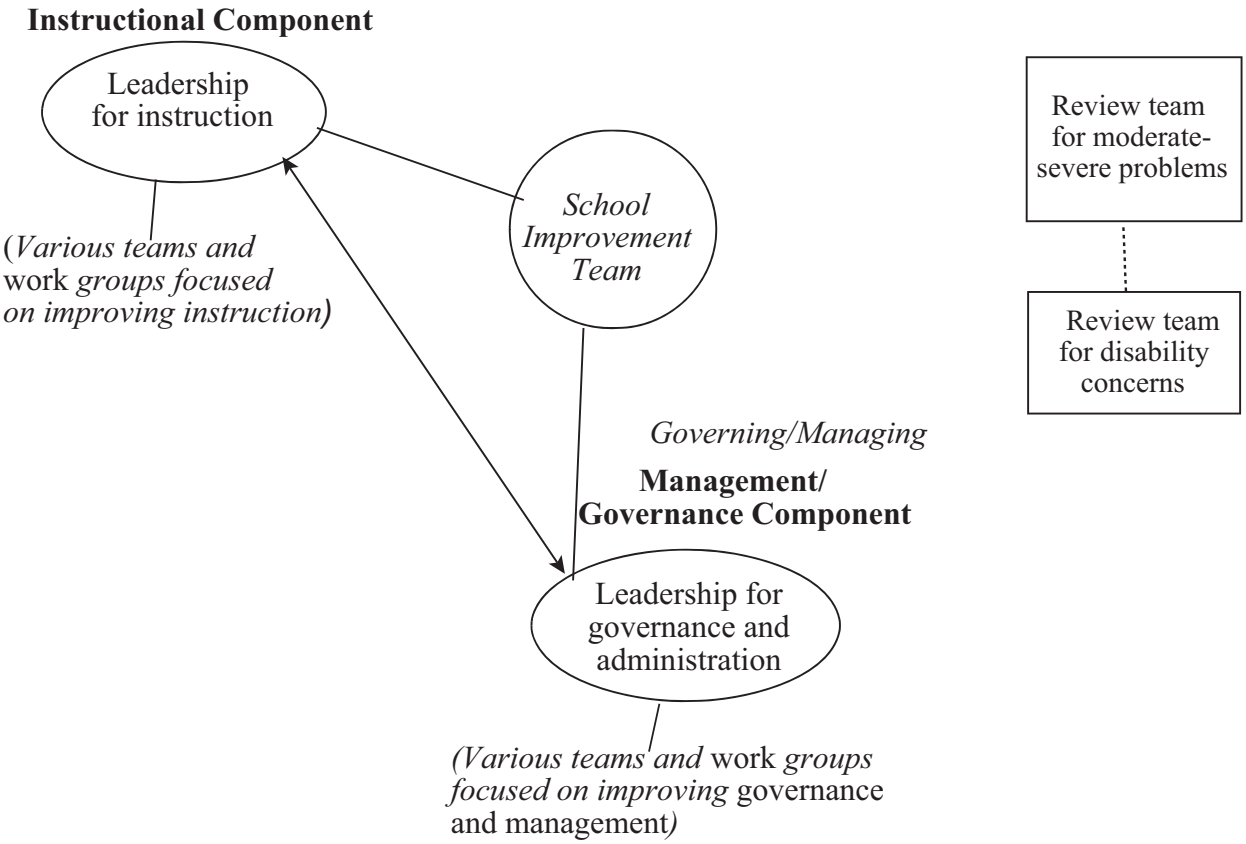
Systems Change Toolkit -- http://smhp.psych.ucla.edu/summit2002/resourceaids.htm

Transforming Student and Learning Supports: Developing a Unified Comprehensive, and Equitable System --
http://smhp.psych.ucla.edu/pdfdocs/book/book.pdf

III. B. Operational Infrastructure for Addressing Barriers to Learning

Changes to enhance equity of opportunity made at the district central office mean little if they do not play out at the school level

Because student and learning supports are so-marginalized, it is not surprising that the current operational infrastructure at schools reflects this state of affairs. It tends to look like this:



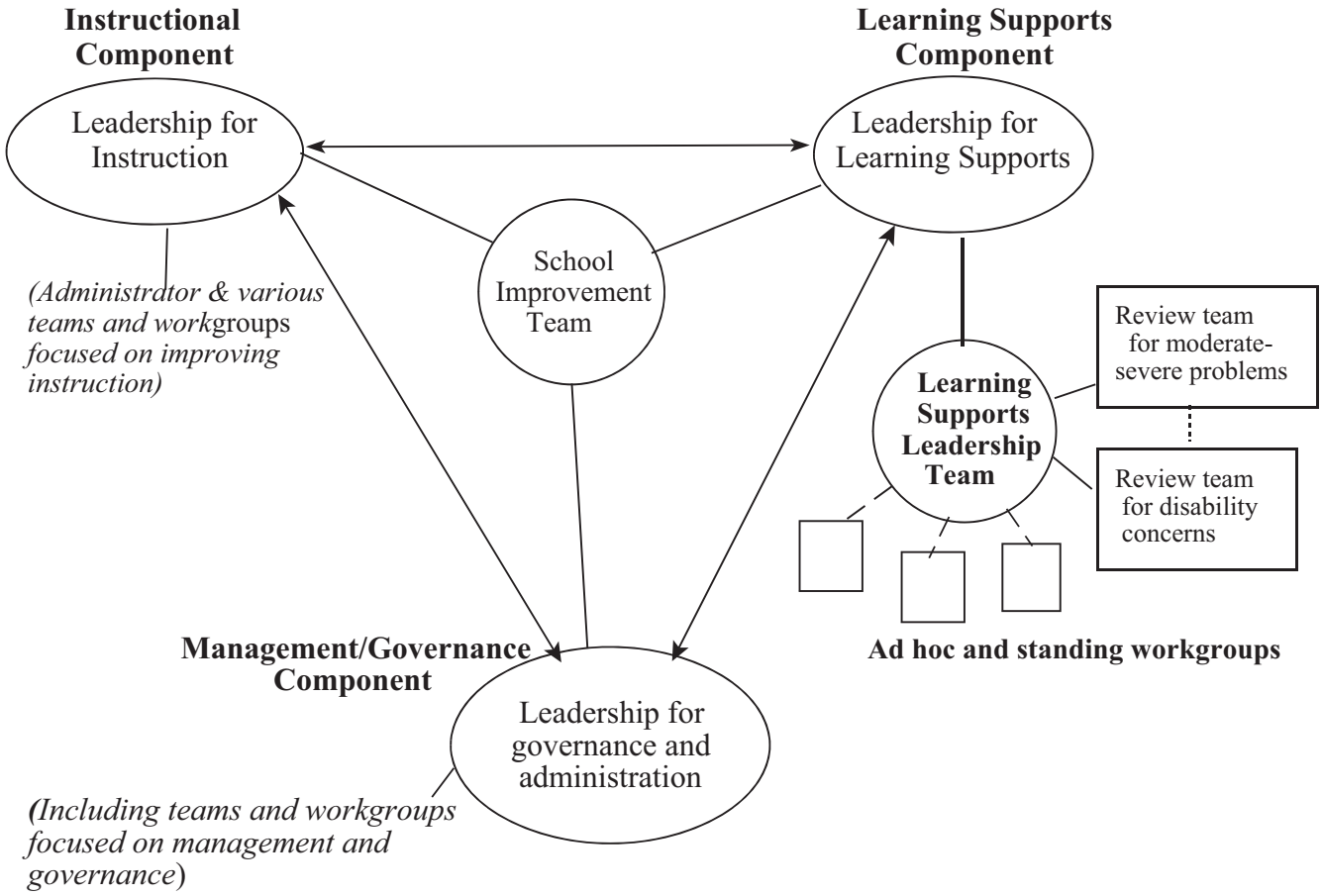
Note that there is no designated leadership for student and learning supports. Note also the situation related to the teams focused on individual students experiencing learning, behavior, and emotional problems. These teams mainly meet to review and make decisions about special assistance needs and referrals. In the process, they usually develop a perspective on the type of systemic improvements that could prevent problems and stem the tide of referrals. However, addressing these concerns is not one of their formal functions. And, in general, these teams have little or no connection to discussions and decisions about school improvement needs.

RETHINKING THE SCHOOL'S OPERATIONAL INFRASTRUCTURE

The following ehibit illustrates the basic features of an operational infrastructure prototype that fully integrates an emphasis on student/learning supports. The prototype was designed with a view to the type of interconnected leadership and workgroups necessary for developing a unified, comprehensive, and equitable system for addressing barriers to learning and teaching and re-engaging disconnected students.

Prototype for an Integrated Operational Infrastructure at the School Level

(This operational infrastructure should be paralleled at the district level -- see Appendix D.*)*



Note: Each of the three primary and essential components for school improvement requires

1. administrative leadership and other advocates/champions with responsibility and accountability for ensuring the vision for the component is not lost,
2. a leadership team to work with the administrative lead on system development,
3. standing workgroups with designated ongoing functions and occasional ad hoc workgroups to accomplish specific short-term tasks.

To ensure coordination and integration, the leaders for the instructional and learning supports components are fully integrated members of the management/governance component, and if a special team is assigned to work on school improvement, the leaders for all three components are on that team.

This reworking of the operational infrastructure is a necessity for ending the marginalization of student and learning supports. Working with a system development leadership team (e.g., a *Learning Supports Leadership Team*), a learning supports' administrative lead can facilitate continuous development of a unified, comprehensive, equitable, and systemic approach to addressing barriers to learning and teaching. As conceived, each component's administrative lead is responsible and accountable not only for improving his or her component's performance but for fully integrating it with the other two.

At the school level, the administrative lead and the leadership team meet weekly to guide and monitor daily implementation and ongoing component development. The initial focus is on mapping and analyzing all resources and related budget allocations for student and learning supports. As highlighted earlier in this book, such resources include student support personnel (e.g., school psychologists, counselors, social workers, nurses; compensatory and special education staff); specialized services; special initiatives; grants; programs for afterschool, wellness, dropout prevention, attendance, drug abuse prevention, violence prevention, pregnancy prevention; parent/family/health centers; volunteer assistance; community resources linked to schools, and more. Allocated funds come from the general budget, compensatory and special education, and special projects (including those supported by extra-mural sources).

Using the framework for a unified and comprehensive system of learning supports (review earlier exhibit), resource analyses identify critical gaps, redundancies, and which funds can be redeployed to develop the system. Then, priorities are set for moving forward in a cohesive and integrated way.

At the district level, the need is for administrative leadership and capacity building support that helps maximize component development at each school. Note: it is crucial to establish the district's leadership for this work at a high enough level to ensure the administrator is always an active participant at key planning and decision-making tables (e.g., a cabinet level administrative leader, such as an associate superintendent).

How Can Small Schools Staff a Reworked Operational Infrastructure?

All schools are confronted with (1) improving instruction, (2) providing learning supports to address barriers to learning and teaching, and (3) enhancing management and governance. The challenge in any school is to pursue all three functions in a cohesive, equitable, and effective manner. The added challenge in a small school is how to do it with so few personnel.

In small schools, the key is to modestly convert existing personnel roles and functions to establish the type of operational infrastructure illustrated in above exhibit. Usually, the principal and whoever else is part of a school leadership team will lead the way in improving instruction and management/governance. As constituted, however, such a team may not be prepared to advance development of the Learning Supports Componet. Thus, someone already on the leadership team must assume this role and be provided training to carry it out effectively.

Alternatively, someone in the school who is involved with student supports (e.g. a pupil services professional, a Title I Coordinator, a special education resource specialist) can be invited to join the leadership team, assigned responsibility and accountability for ensuring the vision for the component is not lost, and provided Component leadership training. The leader, however chosen, will benefit from eliciting the help of other advocates/champions at the school and from the community.

HOW DOES A *CASE-FOCUSED* TEAM DIFFER FROM A *SYSTEM DEVELOPMENT* LEADERSHIP TEAM?

Every school that wants to improve student and learning supports needs a mechanism to enhance how schools address barriers to learning and teaching and re-engage disconnected students. As noted, most schools have teams that focus on individual student and related family problems (e.g., a student assistance team, an IEP team). These teams pursue functions such as referral, triage, and care

monitoring or management. They are not, however, empowered or positioned to focus on systemic improvements that could prevent problems and stem the tide of referrals. The follwoing exhibit contrasts their case-by-case focus, with the functions required for system development leadership.

Contrasting Team Functions

A Case-oriented Team

Focuses on specific individuals and discrete services to address barriers to learning

Sometimes called:

Child Study Team
Student Study Team
Student Success Team
Student Assistance Team
Teacher Assistance Team
IEP Team

EXAMPLES OF FUNCTIONS:

>triage
>referral
>case monitoring/management
>case progress review
>case reassessment

A System Development Leadership Team

Focuses on all students and the resources, programs, and systems to address barriers to learning & promote healthy development

Possibly called:

Learning Supports Leadership Team
Learning Supports Resource Team
Resource Coordinating Team
Resource Coordinating Council
School Support Team

EXAMPLES OF FUNCTIONS:

>aggregating data across students and from teachers to analyze school needs
>mapping resources at school & in the community
>analyzing resources & formulating priorities for system development (in keeping with the most pressing needs at the school)
>recommending how resources should be deployed and redeployed
>coordinating and integrating school resources & connecting with community resources
>planning and facilitating ways to strengthen and develop new programs and subsystems
>developing strategies for enhancing resources
>establishing workgroups as needed
>social "marketing"

Two metaphors help differentiate the two types of teams and the importance of both sets of functions. A case-orientation fits what is usually referred to as the starfish metaphor.

> The day after a great storm had washed up all sorts of sea life far up onto the beach, a youngster set out to throw back as many of the still-living starfish as he could. After watching him toss one after the other into the ocean, an old man approached him and said: *It's no use your doing that, there are too many, You're not going to make any difference*.
>
> The boy looked at him in surprise, then bent over, picked up another starfish, threw it in, and then replied: *It made a difference to that one!*

This metaphor, of course, reflects all the important clinical efforts undertaken by staff alone and when they meet together to work on specific cases.

The development leadership focus is captured by what can be called the bridge metaphor.

> In a small town, one weekend a group of school staff went fishing together down at the river. Not long after they got there, a child came floating down the rapids calling for help. One of the group on the shore quickly dived in and pulled the child out. Minutes later another, then another, and then many more children were coming down the river. Soon every one in the group was diving in and dragging children to the shore, resuscitating them, and then jumping back.
>
> But, there were too many. All of a sudden, in the midst of all this frenzy, one of the group stopped jumping in and was seen walking away. Her colleagues were amazed and irate. How could she leave when there were so many children to save? About an hour later, to everyone's relief, the flow of children stopped, and the group could finally catch their breath.
>
> At that moment, their colleague came back. They turned on her and angrily shouted:
>
> *How could you walk off when we needed everyone here to save the children?*
>
> She replied:
>
> *It occurred to me that someone ought to go upstream and find out why so many kids were falling into the river. What I found is that the old wooden bridge had several planks missing, and when some children tried to jump over the gap, they couldn't make it and fell through into the river. So I got a team together, and we fixed the bridge.*

Fixing and building better bridges is a good way to think about prevention, and it helps underscore the importance of taking time to improve and enhance resources, programs, and systems.

Who's on a Learning Supports Leadership Team?

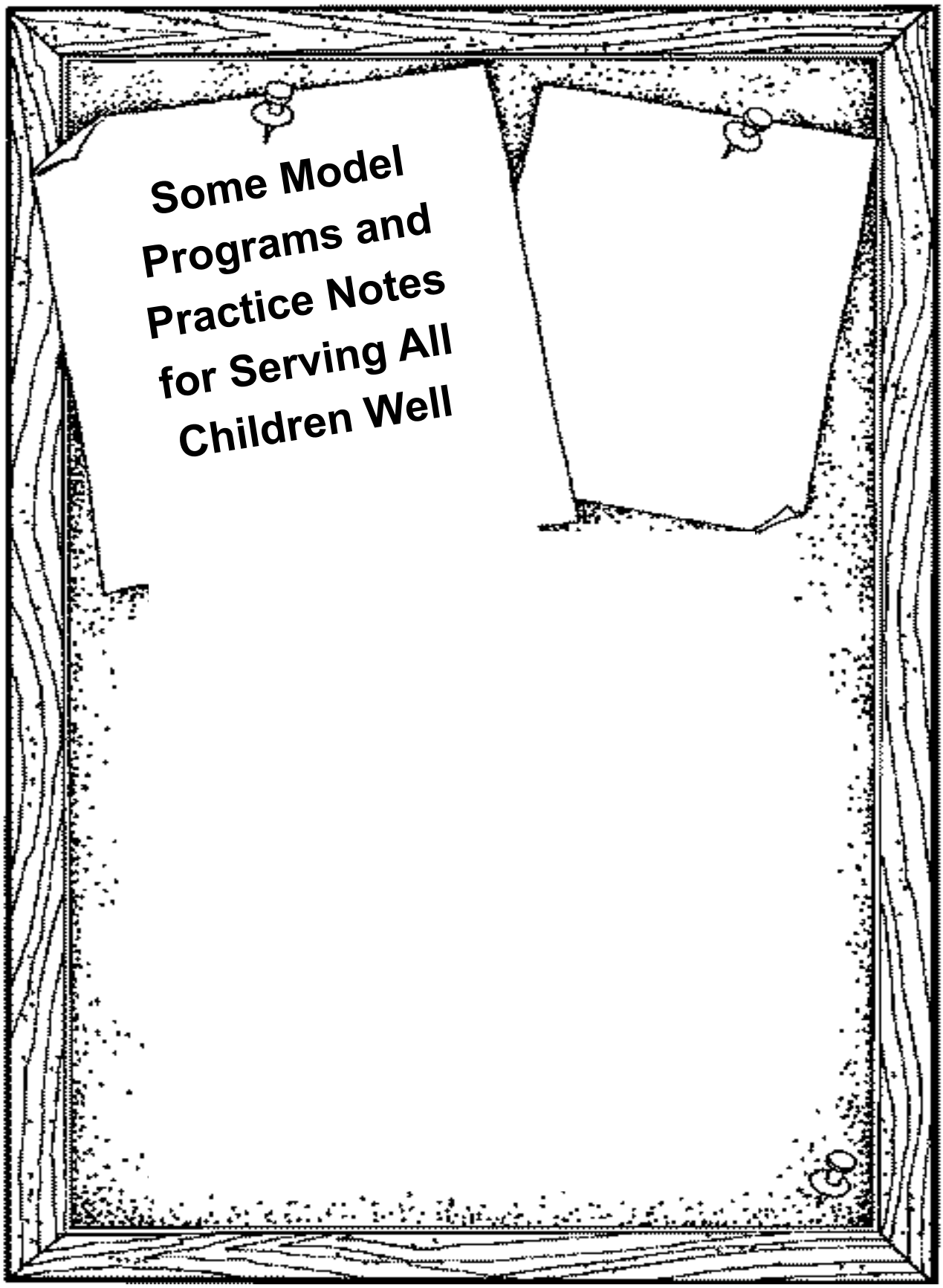
Where feasible, a Learning Supports Leadership Team is formed as an inclusive group of informed, willing, and able stakeholders. This might include the following:

- administrative lead for the component
- school psychologist
- counselor
- school nurse
- school social worker
- behavioral specialist
- special education teacher
- representatives of community agencies involved regularly with the school
- student representation (when appropriate and feasible)
- others who have a particular interest and ability to help with the functions

Schools with few student and learning support staff will begin with only a few people.

Because schools have case-oriented teams that team may be able to expand its focus to cover the functions of a system development leadership team. This can work if the team is trained and facilitated to split its time and agenda effectively.

Once a Learning Supports Leadership Team is operational at a school, the organizational focus can turn to connecting it with other local schools, the district, and the community.


Some Model Programs and Practice Notes for Serving All Children Well

Classroom-based Learning Supports to Enable Learning and Teaching

Good instruction is necessary but not sufficient when students are experiencing external or internal challenges that inhibit learning.

Learning supports in classrooms are essential to address factors interfering with learning and enhance equity of opportunity for all students to succeed at school and beyond.

Available evidence makes it clear that what most school improvement guides and plans stress is not sufficient to address the many problems experienced at schools each day.

For example, looking through the lens of how well a classroom *enables* equity of opportunity for *all* students to succeed leads to a recognition that instruction usually is not designed to account for a wide range of individual differences and circumstances. Moreover, too little accommodation and specific help is provided to students who manifest learning, behavior, emotional, and physical problems. And, in situations where students have become disconnected from classroom instruction, professional preparation generally has not equipped teachers to re-engage such youngsters.

To be more specific: in mapping and analyzing how classrooms address barriers to learning and teaching and re-engage disconnected students, we find the following:

(1) Teaching is organized at most schools in ways that presume classroom teachers can do the job alone.

(2) Insufficient attention is being paid to creating a stimulating and caring, as well as manageable learning environment.

(3) Efforts to personalize instruction mainly are interpreted in terms of using technology and are not adequately differentiating instruction with respect to motivational differences.

(4) Classrooms are not focusing enough on promoting intrinsic motivation, preventing problems, responding as soon as feasible after problems arise, and providing appropriate special assistance when students display specific problems.

(5) Teachers' professional development has not effectively prepared them with respect to understanding intrinsic motivation, and this contributes to a tendency to overrely on rewards and punishment as strategies for teaching and controlling behavior.

(6) Classrooms are not designed to be an effective first responder when special assistance for a student and family is needed.

All this hinders and undermines efforts to engage students in learning. Moreover, these conditions contribute to the type of psychological reactance that generates behavior and emotional problems and works against re-engaging disconnected students.

Enhancing learning supports in classrooms helps with these matters by increasing teacher effectiveness in accounting for a wider range of individual differences, fostering a caring context, and preventing and handling a wider range of problems when they arise (see exhibit).

Key Facets of Enhancing Learning Supports in Classrooms

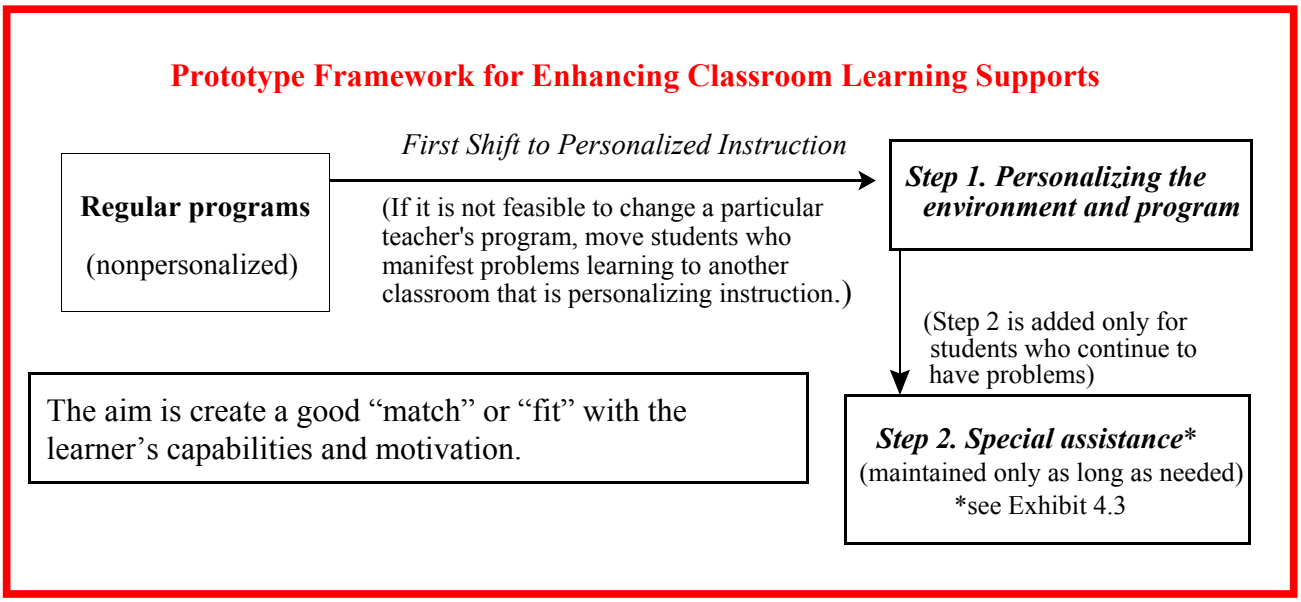
- **Reframing the approach to classroom instruction to enhance teacher capability to prevent and intervene as soon after problems arise and reduce need for out of class referrals** (e.g. personalizing instruction; enhancing necessary special assistance in the classroom; developing small group and independent learning options; reducing negative interactions and over-reliance on social control; expanding the range of curricular and instructional options and choices; systematic use of response to intervention and related prereferral interventions)
- **Opening the classroom door to invite in various forms of collaboration, support, and personalized professional development** (e.g., co-teaching and team teaching with resource teachers; working with student support staff in the classroom; using volunteers in targeted ways to enhance social and academic support; bringing in mentors; creating a learning community focused on intrinsic motivation concepts, their application to schooling, how to minimize use of rewards and punishment, and how to re-engage students who have become disengaged from classroom learning)
- **Enhancing the capability of student and learning supports staff and others to team with teachers in the classroom** (e.g., enhancing student support staff understanding of personalized instruction and how to work as colleagues in the classroom with teachers and others to enhance success for all students)
- **Providing a broad range of curricular and enrichment opportunities** (e.g., stimulating instructional content and processes, ensuring open access to and choice from a variety of enriching options)
- **Contributing to a positive climate in the classroom and school-wide** (e.g., enhancing feelings of competence, self-determination, and relatedness to others at school; reducing threats to such feelings; ensuring staff have good professional and social supports; providing for conflict resolution)

FRAMEWORK AND DESIGN FOR ENHANCING CLASSROOM-BASED LEARNING SUPPORTS

Everyone who works in schools knows that the way the classroom setting is arranged and instruction is organized can help or hinder learning and teaching. The ideal is to have an environment where students and teachers feel comfortable, positively stimulated, and well-supported in pursuing the learning objectives of the day.

Designing classrooms with this ideal involves enabling teachers to personalize and blend instruction for all students, provide a greater range of accommodations and enrichment options, and add special assistance in the context of implementing "Response to Intervention (RtI)." From a motivational perspective, the emphasis is on active learning (e.g., authentic, problem-based, and discovery learning; projects, learning centers, enrichment opportunities) and reducing negative interactions and overreliance on social control disciplinary practices. To facilitate all this, big classes are transformed into a set of smaller workgroups by using small group and independent learning options. (Note how these design features reflect Universal Design for Learning principles.) Properly implemented, the changes can increase the effectiveness of regular classroom instruction, prevent problems, support inclusionary policies, and reduce the need for specialized *services*.

The following exhibit illustrates a prototype framework for enhancing classroom learning supports. The approach is sequential and hierarchical. It reflects research indicating that "meeting students where they are" often is defined too narrowly. Differentiated instruction in most regular classrooms mainly focuses on individual differences in students' developmental capabilities and pays little systemic attention to differences in motivation, especially intrinsic motivation. And, too little is done within classrooms to follow-up with special assistance when students manifest problems.



What's the First Step? ***Personalized Instruction***

As essential as it is to attend to differences in capability, motivational differences often are the primary concern in personalizing learning, especially for students manifesting problems. We all know students who have learned much more than we anticipated because they were highly motivated; and we certainly know students who learn and perform poorly when they are not invested in the work.

So, our definition of personalization emphasizes that it is the process of accounting for individual differences in *both capability and motivation*. Furthermore, from a psychological perspective, we stress that it is a student's perception that determines whether the instructional "fit" or "match" is good or bad. Given this, personalizing instruction means ensuring conditions for learning are perceived by the learner as good ways to attain goals s/he wants to reach. Thus, a basic intervention concern is that of eliciting learners' perceptions of how well what is offered matches both their interests and abilities. This has fundameental implications for all efforts to assess students and manage behavior.

Personalized instruction is intended to enhancelearning and to prevent many learning and behavior problems. And, it provides an essential foundation for ameliorating learning, behavior, and emotional problems. Indeed, just providing a student with a personalized program may be sufficient to reverse some problems. Other problems, of course, need something more. As highlighted in the above exhibit, the prototype designates that "something more" as Step 2 *special assistance*. We will discuss this soon.

About Personalizing Instruction

After years of being bandied about, the term personalization (of learning/instruction/education) has come to the policy forefront in the U.S., the United Kingdom, Canada, and beyond. It is emphasized in the common core standards initiative, proposed model core teaching standards, the administration's 2010 National Education Technology Plan, the Race to the Top guidelines, and by a variety of reformers and philanthropies.

Despite some ongoing controversies, few argue against the goal of personalization which is to help schools function better in addressing the diverse needs and interests students bring each day. There is also agreement that new technologies can be helpful to a degree in accomplishing the goal. And, there is agreement that improved forms of formative assessments are an important element.

In 2010, the U.S. Department of Education included the following definition in its national technology plan (Administration's National Education Technology Plan, 2010):

> "Personalization refers to instruction that is paced to learning needs, tailored to learning preferences, and tailored to the specific interests of different learners. In an environment that is fully personalized, the learning objectives and content as well as the method and pace may all vary (so personalization encompasses differentiation and individualization)." http://www.ed.gov/technology/netp-2010/learning-engage-and-empower

As part of a series of special reports on the topic, Education Week issued *Taking Stock of Personalized Learning* in 2014. That report highlighted recent definitional efforts and some ongoing issues. http://www.edweek.org/ew/collections/personalized-learning-special-report-2014/index.html?intc=EW-PLSR_10.22-EML

Unfortunately, discussions of personalized learning often leave the impression that the process is mainly about incorporating technological innovations. For the most part, the discussions also fail to place personalized learning within the context of other conditions that must be improved in classrooms and school-wide to address factors interfering with student learning and performance. And, ironically, interventions used to facilitate instruction and control behavior of students who manifest learning and behavior problems often over-emphasize extrinsics, especially in efforts to reduce or eliminate misbehavior. Because over-use of extrinsics can undermine intrinsic motivation, such practices can be counterproductive to personalized learning.

In the 1960s, at UCLA we initiated a focus on a personalized approach to learning as fundamental to effective teaching and to preventing and correcting learning, behavior, and emotional problems. Since then, we have continued to develop and apply the approach.

From our perspective, the aim of personalizing learning is to enhance stable, positive, intrinsic attitudes that mobilize and maintain engagement in learning (in the classroom, throughout the school, and away from school). Developing intrinsic attitudes is basic to increasing the type of motivated practice (e.g., reading for pleasure) that is essential for mastering and assimilating what has just been learned. Personnel preparation programs have not focused enough on these matters.

So, what does it take to personalize a classroom?

First of all, the teacher must expect and value individual differences in students' motivation and development. The teacher must also offer options for learning and help students make decisions among the alternatives. The emphasis in such decision making must be on encouraging students to pursue what they perceive as a good match in terms of learning activities and structure. And as new information about what is and isn't a good match becomes available, there must be a willingness to revise decisions.

Given that a teacher is motivated to personalize a classroom program, both the students and the teacher have to learn how to make it a reality. This usually involves moving toward personalization through a series of transition steps (see *Personalizing Learning and Addressing Barriers to Learning* online at http://smhp.psych.ucla.edu/pdfdocs/personalizeI.pdf). In general, this requires offering an appropriate variety of learning options as a starting point, facilitating student understanding of the content, processes, and outcomes related to the options, and establishing ways for some students to work independently and in small cooperative learning groupings while the teacher pursues one-to-one and small-group interactions.

What's the Second Step? *Special Assistance in the Classroom* *(as needed)*

When students require more than personalized instruction, it is essential to address the problem immediately. That is, with personalized instruction in place, the next step involves providing special assistance as needed. In most instances, such assistance is provided in the classroom.

As illustrated in next exhibit, Step 2 involves three levels of intervention. Note that this second step is introduced only if learners continue to have problems after instruction is personalized. Note also that special assistance is built on the foundation of personalized instruction.

To be a bit more specific**:**

Step 1 personalizing instruction. The intent is to ensure a student *perceives* instructional processes, content, and outcomes as a good match with his or her interests and capabilities.

A first emphasis is on *motivation*. Practices focus on (re)engaging the student in classroom instruction, with special attention paid to increasing intrinsic motivation and minimizing psychological reactance.

Matching *developmental capabilities* is a parallel concern in Step 1. Practices focus on accounting for current knowledge and skills.

Then, based on a student's responses to personalized instruction, it is determined if *special assistance* (step 2) also is needed.

Step 2 special assistance. Students for whom personalized instruction proves insufficient are provided supportive assistance. In keeping with the principle of using the least intervention needed (e.g., doing what is needed in ways that are least intrusive, restrictive, disruptive), step 2 stresses use of different *levels* of *special* intervention. With respect to sequence:

- students with minor problems maintain a direct focus on readily observable problems interfering with classroom learning and performance (Level A);
- students who continue to have problems often require a focus on necessary prerequisites (e.g., readiness attitudes, knowledge, and skills) they haven't acquired (Level B);
- when interventions at Levels A and B don't ameliorate the problem, the focus shifts to possible underlying factors.

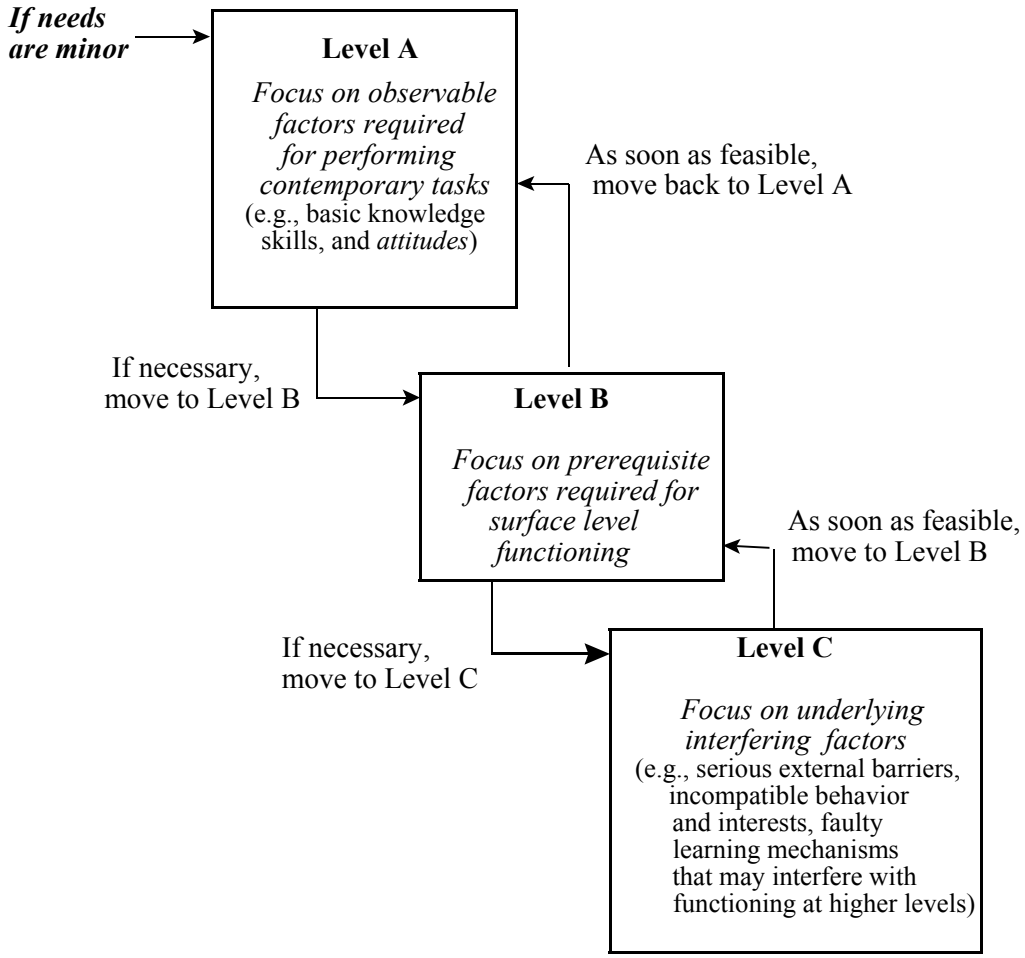
Students with severe and chronic problems require attention at all three levels.

(More on special assistance is discussed in the context of *Student and Family Special Assistance*.)

This sequence can help minimize false positive diagnoses (e.g., LD, ADHD) and identify those who should be referred for special education assessment.

Special Assistance Sequence and Hierarchy

Step 2 is introduced as necessary using best practices for special assistance (remediation, rehabilitation, treatment). These are applied differentially for minor and severe problems.



Primary concerns throughout are to (a) ensure motivational readiness, (b) enhance motivation during learning, and (c) increase intrinsic motivation as an outcome. Also important is minimizing conditions that decrease engagement in learning. Remember that the impact at any time depends on the student's perception of how well an intervention fits his/her motivation as well as capabilities.

With respect to both personalization and special assistance, understanding intrinsic motivation clarifies how essential it is to avoid processes that limit options and decision making and that make students feel controlled and coerced. Restricting the focus mainly to "remedying" problems cuts students off from experiences that enhance good feelings about learning at school. Overemphasis on controlling behavior produces psychological reactance. Overreliance on extrinsic motivation risks undermining efforts to enhance intrinsic motivation and can produce avoidance reactions in the classroom and to school. All this can reduce opportunities for positive learning and for development of positive attitudes. Over time, such practices result in too many students disengaging from classroom learning.

In contrast, practices that capitalize on intrinsic motivation enable and support learning. Such practices offer a broad range of content, outcomes, and procedural options, including a personalized structure to support and guide learning. With real options come real opportunities for involving learners in decision making. The focus on intrinsic motivation also stresses the importance of developing nonthreatening ways to provide ongoing information about learning and performance. And, of course, it calls for a significant focus on enrichment opportunities.

Where Does Response to Intervention Fit as a Learning Support?

Response to Intervention (RtI) is a prominently advocated strategy in efforts to address learning problems as soon as they arise. The process involves analyses of authentic responses made to instruction, as well to other interventions designed to address problems. The goal is to identify not only students' needs but also their interests. Thus, the analyses must consider (a) motivational as well as developmental considerations and (b) whether the problem requires a deeper look. Does the problem stem from the student not having acquired readiness skills? Does it arise from "critical student dispositions" that have produced avoidance motivation to curricula content and instructional processes? What accommodations and interventions are needed to ameliorate the student's problems? And, when problems persist, what other external and internal factors must be considered? All this is consistent with the prototype that first *personalizes* instruction and then assesses learning and behavior problems using a hierarchical set of interventions. And implementing these processes effectively is best accomplished through collaborative actions. For more, see *Response to Intervention* (http://smhp.psych.ucla.edu/pdfdocs/rtii.pdf).

A Few Words about Transforming Disciplinary Practices

In discussing her early frustrations with maintaining order in the classroom, Margaret Metzger notes that it was helpful to keep in mind her own experiences as a student.

> "If I was going to stay in education, I knew I had to get past the discipline issues. . . . I wrote down what I liked and hated about my own teachers . . . . I remembered how much I wanted the teachers I adored to like or notice me; I remembered how criticism bruised my fragile ego; I remembered how I resented teacher power plays. Mostly, I remembered how much I hated the infantilizing nature of high school. . . . I reminded myself that I already know a lot – just from the student side of the desk. If I could keep remembering, I could convey genuine empathy and have honest interactions."

Clearly, managing learning requires order in the classroom. Misbehavior disrupts; it may be hurtful; it may disinhibit others. When a student misbehaves, a natural reaction is to want that youngster to experience and other students to see the consequences of misbehaving. A hope is that public awareness of consequences will deter subsequent problems. As a result, schools spend considerable time and resources on *discipline* – sometimes embedding it all in the broader concept of *classroom management*. To minimize misbehavior schools stress the importance of student self-discipline and employ a variety of external disciplinary and social control practices. The latter include some practices that model behaviors which foster (rather than counter) development of negative values.

In schools, short of suspending the individual, punishment essentially takes the form of a decision to do something to students that they do not want done. In addition, a demand for future compliance usually is made, along with threats of harsher punishment if compliance is not forthcoming. And, the discipline may be administered in ways that suggest a student is an undesirable person. As students get older, suspension increasingly comes into play. Indeed, suspension remains one of the most common disciplinary responses for the transgressions of secondary students.

As often happens with reactive procedures, the benefits of using punishment to control behavior are offset by many negative consequences. These include increased negative attitudes toward school and school personnel which often lead to behavior problems, anti-social acts, and various mental health problems. Disciplinary procedures also are associated with dropping out of school. It is not surprising, then, that some concerned professionals refer to extreme disciplinary practices as "pushout" strategies.

With the growing awareness that widely used discipline practices are insufficient and often counterproductive, advocates for a more positive approach have called for a greater focus on prevention by adding programs for character education, social skills and emotional "intelligence" training, and positive behavior support initiatives. A more transformative perspective emphasizes developing a comprehensive approach encompassing:

- efforts to prevent misbehavior (e.g., improving programs to enhance student engagement and minimize conditions that foment misbehavior; enhancing home responsibility for childrens' behavior and learning; promoting a school climate that embraces a holistic and family-centered orientation; working with students to establish a set of logical consequences that are reasonable, fair, and nondenigrating)

- actions taken during misbehavior (e.g., reestablishing a calm and safe atmosphere and applying established logical consequences in keeping with the framework for personalization and special assistance)

- steps taken afterwards (e.g., making program changes if necessary; preventing further problems with those who misbehaved by following-up with special assistance).

Remember: The aim is not only to reduce misbehavior, but to use events as teachable moments to enhance personal responsibility (social and moral), integrity, self-regulation/self-discipline, a work ethic, appreciation of diversity, and positive feelings about self and others.

Chapter 9 focuses on addressing behavior problems when special assistance is needed for individual students and their families.

And for more, see:
Behavioral Initiatives in Broad Perspective (http://smhp.psych.ucla.edu/pdfdocs/behavioral/behini.pdf).

OPENING THE CLASSROOM DOOR TO ENHANCE COLLABORATION AND PERSONALIZED PROFESSIONAL DEVELOPMENT RELATED TO LEARNING SUPPORTS

As former teacher Claudia Graziano related in an Edutopia article:

> *New teachers, however naive and idealistic, often know before they enter the profession that the salaries are paltry, the class sizes large, and the supplies scant. What they don't know is how little support . . . they can expect once the door is closed and the textbooks are opened.*

The point seems evident: *Even the best teachers can't do the job alone.* Teachers need a system of supports in the classroom and school-wide to help when students are not responding effectively to instruction. This means classrooms and schools need to have a more open-door policy.

Opening the classroom door can enhance student support, staff development, and outcomes. The crux of the matter is to ensure both in-class mentoring and collaboration with other teachers and student support staff, as well as with parents, professionals-in-training, volunteers, and so forth. Collaboration and teaming are key to facilitating personalized instruction and special assistance, creating a stimulating and manageable learning environment, and generally addressing barriers to learning and teaching.

ABOUT ENHANCING THE CAPABILITY OF STUDENT AND LEARNING SUPPORTS STAFF TO COLLABORATE IN THE CLASSROOM

Student support staff (e.g., school psychologists, counselors, social workers, nurses) have specialized expertise. Their training prepares them to provide targeted direct assistance and support to students and their families and to offer consultation to teachers, school administrators, and other school staff.

However, effective collaboration with teachers involves much more than consultation and making recommendations about addressing student problems. It involves helping teachers (re)design their classrooms to address barriers to learning and teaching; this requires spending time in the classroom working collaboratively with teachers to model, guide, and team in implementing systemic changes.

With some additional training, student and learning support staff can bring into the classroom not only their special expertise, but ideas for how the classroom design can incorporate practices that will engage students who have not been doing well and accommodate those with special needs. This type of in-classroom collaboration can go far in enabling student learning and enhancing teacher competence for preventing and correcting problems.

The personnel preparation programs for student and learning supports staff generally do not prepare them for classroom teaching. So, if they are to effectively collaborate in the classroom, the nature and scope of their preparation programs needs to expand. For instance, they must learn what is involved in implementing personalized instruction and special assistance in the classroom and how to effectively team with teachers and other colleagues in developing a unified and comprehensive system of classroom and school-wide learning supports.

NEEDED: ENRICHMENT OPPORTUNITIES AS A KEY FACET OF LEARNING SUPPORTS

Because so many people think of enrichment as a frill, it is not surprising when such activities are overlooked in discussing learning supports. Moreover, youngsters who manifest learning, behavior, and emotional problems are seen as needing all the time that is available in order to deal with their problems and "catch up" and thus often are deprived of available enrichment opportunities.

The reality is that enrichment activities increase the possibilities for creating a good motivational match and for facilitating learning, development, and remediation. Enrichment embellishes the classroom and school environment and increases the likelihood that students will discover new interests, information, and skills through exploration, inquiry, discovery, and recreation. The activities can play a role in preventing, minimizing, and overcoming school and individual problems. In some cases, enrichment experiences lead to lifelong interests or careers.

From a motivational perspective, many enrichment opportunities can be offered as personal choice activities that are open to all and are intended to enhance nonspecific motivation and developmental capabilities. Among enrichment offerings at schools are activities related to the arts, science, computers, athletics, student government, school newspapers and may include participation in clubs, exhibitions, performances, service learning programs, and competitions. Such activities often are more attractive and intriguing than those offered in the specified curriculum. In part, this is because they are not required, and individuals can seek out those that match their interests and abilities.

Because they are seen as extra-curricular, the impact of enrichment experiences is not separated out in assessing academic accountability. Nevertheless, it is a reasonable assumption that much will be learned, and equally as important, the learning will be pursued with a sense of value and joy and will enhance students' feelings of competence, self-determination, and affiliation with significant others.

Staffing a broad range of enrichment activities is another facet that calls for opening the school and classroom doors to colleagues and volunteers who have special knowledge and skills to add to the mix. In addition, students who have specific talents can play a special role.

Well-designed and structured enrichment activities are basic to encouraging proactive behavior and should be an integral part of daily classroom time. However, they should not be used as a behavior modification strategy (i.e., used as rewards and withdrawn as punishment). Rather, think of them as engagement strategies. They can help re-engage a student in classroom instruction. Offered before school, they can lure students to school early and thus reduce tardies. Offered at lunch, they can reduce the incidence of harassment and other negative interactions. After school, they provide alternatives to antisocial interactions in the community.

LEARNING SUPPORTS HELP CREATE AND MAINTAIN A POSITIVE CLIMATE

In focusing on climate, the intent to establish and maintain a positive context that facilitates classroom learning. In practice, school and classroom climates range from hostile or toxic to caring and supportive and can fluctuate daily and over the school year. The impact on students and staff can be beneficial or another barrier to learning and teaching.

Analyses of research suggest that school and classroom climate are significantly related to matters such as student engagement, behavior, self-efficacy, achievement, and social and emotional development, principal leadership style, stages of educational reform, teacher burnout, and overall quality of school life. For example, studies report strong associations between achievement levels and classrooms that are perceived as having greater cohesion and goal-direction and less disorganization and conflict. Research also suggests that the impact of classroom and school climate may be greater on students from low-income homes and groups that often are discriminated against.

From a psychological perspective, classroom climate is perceived as an emergent quality. Each individual at a school has a personal view of the climate in a classroom and school-wide. That view reflects the degree to which the setting is seen as enhancing or threatening the individual's feelings of competence, self-determination, and relatedness to significant others in the setting and is further influenced by what others in the setting communicate about the climate.

A Couple of Notes About School Climate

- Given the correlational nature of school climate research, cause and effect interpretations remain speculative. The broader body of organizational research does indicate the profound role accountability pressures play in shaping organizational climate. Thus, it is likely that the increasing demands for higher achievement test scores and control of student behavior contribute to a school climate that is reactive, over-controlling, and over-reliant on external reinforcement to motivate positive functioning. Regardless of the current status of research, understanding the nature of classroom and school climate is a basic element in improving schools, and learning supports are a basic component in enhancing creating and maintaining a positive climate.

- Classroom and school climate sometimes are referred to as the learning environment or the supportive learning environment, as well as by terms such as atmosphere, ambience, ecology, milieu, conditions for learning. It generally is acknowledged that the climate is a temporal, and somewhat fluid, perceived quality which emerges from the complex transaction of many factors and reflects the influence of the underlying, institutionalized values and belief systems, norms, ideologies, rituals, and traditions that constitute the school culture. And, of course, the climate and culture at a school are affected by the surrounding political, social, cultural, and economic contexts (e.g., home, neighborhood, city, state, country).

CONCLUDING COMMENTS

Teachers need learning supports in their classrooms. This arena provides a fundamental example not only of how learning supports overlap regular instructional efforts, but how they add value to prevailing efforts to improve instruction and learning and ameliorate learning, behavior, and emotional problems.

Classroom-based learning supports can prevent problems, facilitate intervening as soon as problems are noted, enhance intrinsic motivation for learning, and re-engage disconnected students in classroom learning. This is accomplished by (a) reframing how the classroom personalizes instruction and provides more classroom-based special assistance to account for a wider range of individual differences, (b) opening the classroom door to enhance collaboration and personalized professional development related to learning supports, (c) enhancing the capabilities of student and learning supports staff to team with teachers in the classroom, (d) ensuring enrichment opportunities, and (e) facilitating emergence of a positive climate for learning.

For more specific examples of ways to enhance *Classroom-based Learning Supports*, see the self-study survey included in this packet. (Also accessible at http://smhp.psych.ucla.edu/pdfdocs/toolsforpractice/classroomsurvey.pdf **)**

For Free and Easily Accessed Online Resources Related to *Classroom-based Learning Supports*

See our Center's Quick Find on
Classroom-Based Learning Supports
>http://smhp.psych.ucla.edu/qf/classenable.htm

Also see related topics listed on the Quick Find menu
>http://smhp.psych.ucla.edu/quicksearch.htm

A Few of the References Used in Preparing this Article

Adelman, H.S., & Taylor, L. (1993). *Learning problems and learning disabilities: Moving forward.* Pacific Grove, CA: Brooks/Cole.

Adelman, H.S. & Taylor, L. (2005). Classroom climate. In S.W. Lee, P.A. Lowe, & E. Robinson (Eds.), *Encyclopedia of School Psychology*. Thousand Oaks, CA: Sage.

Adelman, H.S., & Taylor, L. (2006). *The implementation guide to student learning supports in the classroom and schoolwide: New directions for addressing barriers to learning*. Thousand Oaks, CA: Corwin Press.

Administration's National Education Technology Plan (2010), *Transforming American education: Learning powered by technology*. Washington, DC: U.S. Department of Education. http://www.ed.gov/technology/netp-2010/letter-secretary

American Youth Policy Forum (2000). *High schools of the millennium report*. Washington, DC: Author.

Batsche, G.M., Kavale, K.A., & Kovaleski, J.F. (2006). Competing views: A dialogue on response to intervention. *Assessment for Effective Intervention, 32*, 6-19.

Brown-Chidsey, R., & Steege, M.W. (2010). *Response to Intervention: Principles and Strategies for Effective Practice*. New York: Guilford Press.

Brophy, J. (2004). *Motivating students to learn*. Mahwah, NJ: Lawrence Erlbaum Associates.

CCSSO (2011). *Interstate Teacher Assessment and Support Consortium, InTASC model core teaching standards: A resource for state dialogue*. Washington, DC: Author. http://www.ccsso.org/Resources/Programs/Interstate_Teacher_Assessment_Consortium_(InTASC).html

Center for Mental Health in Schools (2001). *Enhancing classroom approaches for addressing barriers to learning: Classroom Focused Enabling*. Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/pdfdocs/contedu/cfe.pdf

Center for Mental Health in School (2011). *Moving beyond the three tier intervention pyramid toward a comprehensive framework for student and learning supports*. Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/pdfdocs/briefs/threetier.pdf

Center for Mental Health in Schools (2012). *RTI and classroom & school-wide learning supports*. Los Angeles: Author at UCLA. http://smhp.psych.ucla.edu/dbsimple2.asp?primary=2311&number=9897

Center for Mental Health in School (2012). *Engaging* and Re-engaging Students and Families. Author at UCLA. http://smhp.psych.ucla.edu/pdfdocs/engagei.pdf

Chase, P., Hilliard, L., Geldhof, G., et al. (2014). Academic achievement in the high school years: The changing role of school engagement. *Journal of Youth and Adolescence*, ePub http://link.springer.com/article/10.1007/s10964-013-0085-4

Cohen, J. (2006). Social, emotional, ethical and academic education: Creating a climate for learning, participation in democracy and well-being. *Harvard Educational Review, 76,* 201-237.

Cohen, J,. McCabe, E.M, Michelli, N.M & Pickeral, T. (2009). School climate: Research, policy, teacher education and practice. *Teachers College Record, 111*, 180-213. http://www.tcrecord.org/Content.asp?ContentId=15220

Debnam, K.J., Johnson, S.L., Waasdorp, T.E., & Bradshaw, C.P. (2014). Equity, connection, and engagement in the school context to promote positive youth development. *Journal of Research on Adolescence, 24,* 447–459. http://onlinelibrary.wiley.com/doi/10.1111/jora.12083/full

Deci, E.L. (2009). Large-scale school reform as viewed from the self-determination theory perspective. *Theory and Research in Education, 7,* 244-252.

Deci, E.L. & Ryan, R.M. (2002). The paradox of achievement: The harder you push, the worse it gets. In J. Aronson (Ed.), *Improving academic achievement: Contributions of social psychology*. (Pp. 59-85). New York: Academic Press.

Ferri, B.A. (2011). Undermining inclusion? A critical reading of response to intervention (RTI). *International Journal of Inclusive Education*, 1-18, iFirst article. http://syr.academia.edu/BethFerri/Papers/688978/Undermining_inclusion_A_critical_reading_of_response_to_intervention_RTI_

Feshbach, S. & Adelman, H. S. (1971). An experimental program of personalized classroom instruction in disadvantaged area schools. *Psychology in the Schools, VIII*, 114-120.

Fredricks, J.A., Blumenfeld, P.C., & Paris, A.H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*, 59-109.

Froiland, J., Oros, E., Smith, L., & Hirchert, T. (2012). Intrinsic motivation to learn: The nexus between psychological health and academic success *Contemporary School Psychology, 16*, 91-102. http://www.casponline.org/pdfs/pdfs/intrinsic_motivation.pdf

Fullan, M. 2009. *Michael Fullan's Answer to "What Is Personalized Learning?"* Microsoft Education Partner Network. http://cs.mseducommunity.com/wikis/personal/michael-fullan-s-answer-to-quot-what-ispersonalized-learning-quot/revision/3.aspx

Guess, P., & Bowling, S. (2014). Students' perceptions of teachers: Implications for classroom practices for supporting students' success. *Preventing School Failure: AlternativeEducation for Children and Youth, 58*, 201-206. http://www.tandfonline.com/toc/vpsf20/58/4#.U9_PH03n_QN

Hargreaves, D. (2006). *Personalising learning 6: The final gateway: School design and organisation.* London: Specialist Schools and Academics Trust. iNet – International Networking for Educational Transformation. (2010). What we do: Our priorities: Personalising learning. Taunton, Somerset: Specialist Schools and Academics Trust. www.ssat-inet.net/whatwedo/personalisinglearning.aspx

Lee, H.S. & Anderson, J.R. (2013). Student learning: What has instruction got to do with it? *Annual Review of Psychology, 64*, 3.1-3.25. http://www.annualreviews.org

McRae, P. (2010). *The politics of personalization in the 21st century.* http://www.teachers.ab.ca/Publications/ATA%20Magazine/Volume-91/Number-1/Pages/The-Politics-of-Personalization-in-the-21st-Century.aspx

National Center on Response to Intervention (2010). *Essential Components of RTI – A Closer Look at Response to Intervention.* Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention. http://www.rti4success.org/images/stories/pdfs/rtiessentialcomponents_051310.pdf

National Research Council and the Institute of Medicine (2004). *Engaging schools: Fostering high school students' motivation to learn*. Washington, DC: National Academies Press.

Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement: Motivation, learning, and well-being. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook on motivation at school* (pp. 171-196). New York: Routledge.

Software & Information Industry Association. (2010, November). *Innovate to educate: System [re]design for personalized learning. 2010 Symposium Report*. In collaboration with ASCD and the Council of Chief State School Officers. Washington, DC. Author: M.A. Wolf. http://siia.net/pli/presentations/PerLearnPaper.pdf

Stiglbauer, B., Gnambs, T., Gamsjager, M. & Batinic, B. (2013). The upward spiral of adolescents' positive school experiences and happiness: Investigating reciprocal effects over time. *Journal of School Psychology, 51*, 231-242 http://www.sciencedirect.com

Taylor, L. & Adelman, H.S. (1999). Personalizing classroom instruction to account for motivational and developmental differences. *Reading and Writing Quarterly, 15*, 255-276.

U.S. Department of Education. *What Works Clearinghouse*. http://ies.ed.gov/ncee/wwc/topics.aspx

Wehrmeyer, M. L. & Sands, D. J. (1998). *Making it happen: Student involvement in education planning, decision making, and instruction.* Baltimore, MD: Paul Brookes Publishing Co.

West, D.M. (2011). Using technology to personalize learning and assess students in real-time. Washington, DC: Center for Technology Innovation at Brookings.

NATIONAL CENTER ON UNIVERSAL DESIGN for LEARNING

What is UDL?

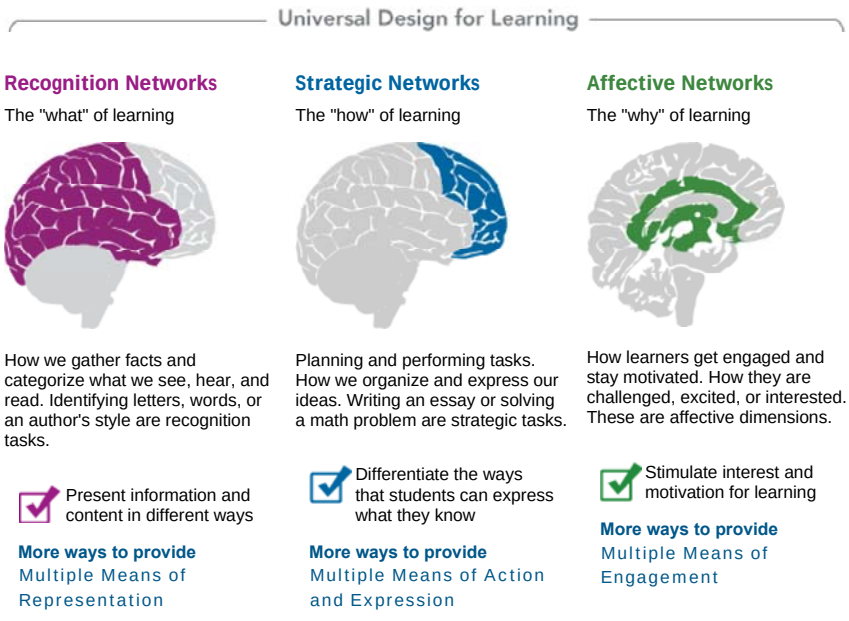
http://www.udlcenter.org/aboutudl/whatisudl

Universal Design for Learning is a set of principles for curriculum development that give all individuals equal opportunities to learn.

UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone--not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs.

Why is UDL necessary?

Individuals bring a huge variety of skills, needs, and interests to learning. Neuroscience reveals that these differences are as varied and unique as our DNA or fingerprints. Three primary brain networks come into play:



Source: CAST - What is UDL? (http://www.cast.org/research/udl)

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IES PRACTICE GUIDE
NCEE 2009-4045
U.S. DEPARTMENT OF EDUCATION
WHAT WORKS CLEARINGHOUSE

Assisting Students Struggling with Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades

http://www.ies.ed.gov/ncee/wwc/pdf/practice_guides/rti_reading_pg_021809.pdf

Summary

This guide offers five specific recommendations to help educators identify struggling readers and implement evidence-based strategies to promote their reading achievement. Teachers and reading specialists can utilize these strategies to implement RtI and multi-tier intervention methods and frameworks at the classroom or school level. Recommendations cover how to screen students for reading problems, design a multi-tier intervention program, adjust instruction to help struggling readers, and monitor student progress.

Table 2. Recommendations and corresponding levels of evidence

Recommendation	Level of evidence
1. *Screen all students for potential reading problems at the beginning of the year and again in the middle of the year.* Regularly monitor the progress of students at risk for developing reading disabilities.	**Moderate**
Tier 1 intervention/general education	
2. *Provide time for differentiated reading instruction for all students based on assessments of students' current reading level.*	**Low**
Tier 2 intervention	
3. *Provide intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark score on universal screening.* Typically, these groups meet between three and five times a week, for 20 to 40 minutes.	**Strong**
4. *Monitor the progress of tier 2 students at least once a month.* Use these data to determine whether students still require intervention. For those students still making insufficient progress, schoolwide teams should design a tier 3 intervention plan.	**Low**
Tier 3 intervention	
5. *Provide intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark score on universal screening.* Typically, these groups meet between three and five times a week, for 20 to 40 minutes.	**Low**

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Improving Reading Comprehension in Kindergarten Through 3rd Grade

http://www.ies.ed.gov/ncee/wwc/pdf/practice_guides/readingcomp_pg_092810.pdf

Summary

Students who read with understanding at an early age gain access to a broader range of texts, knowledge, and educational opportunities, making early reading comprehension instruction particularly critical. This guide recommends five specific steps that teachers, reading coaches, and principals can take to successfully improve reading comprehension for young readers.

Table 2. Recommendations and corresponding levels of evidence

	Levels of Evidence		
Recommendation	**Minimal Evidence**	**Moderate Evidence**	**Strong Evidence**
1. Teach students how to use reading comprehension strategies.			◆
2. Teach students to identify and use the text's organizational structure to comprehend, learn, and remember content.		◆	
3. Guide students through focused, high-quality discussion on the meaning of text.	◆		
4. Select texts purposefully to support comprehension development.	◆		
5. Establish an engaging and motivating context in which to teach reading comprehension.		◆	

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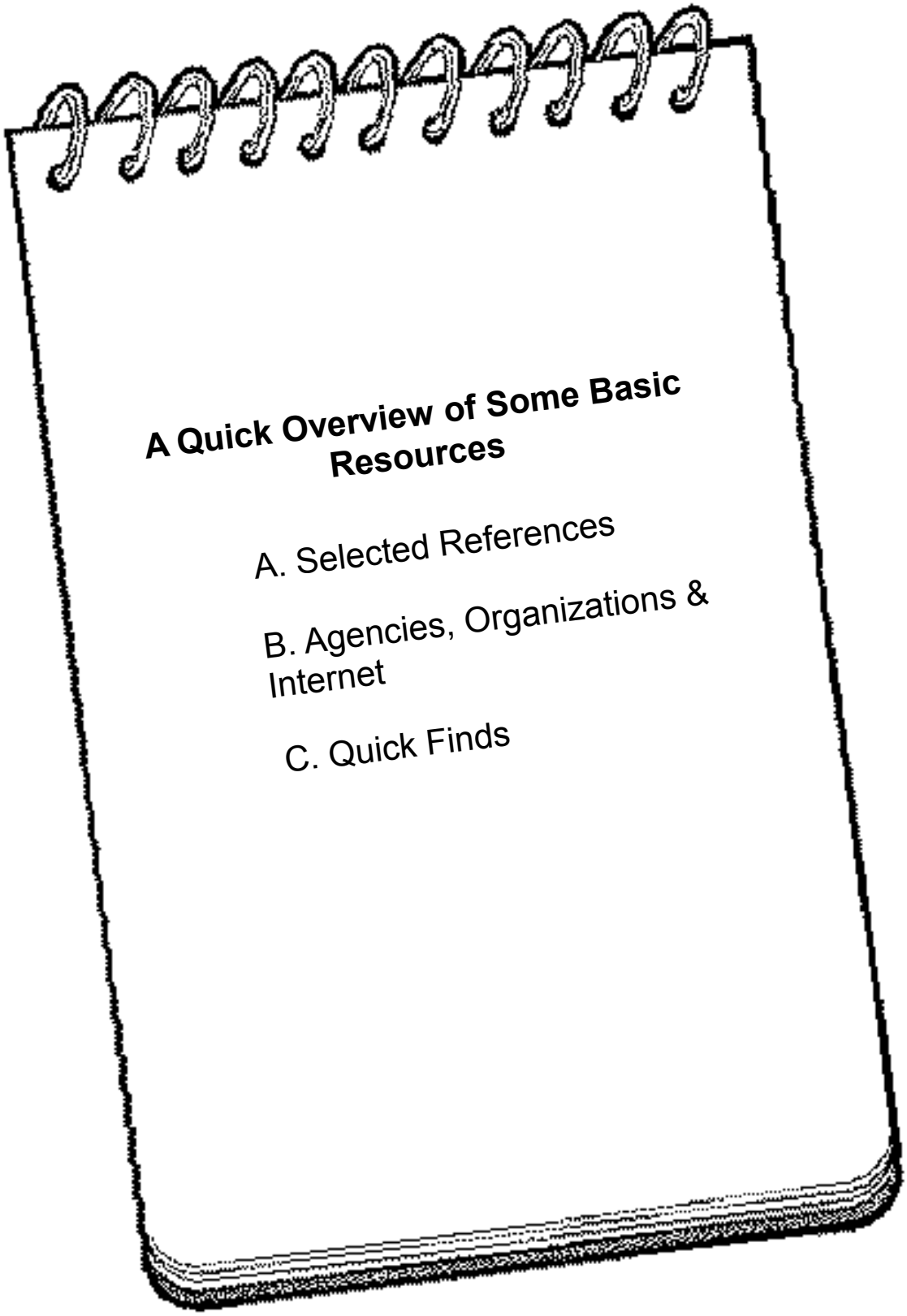
Improving Adolescent Literacy: Effective Classroom and Intervention

http://www.ies.ed.gov/ncee/wwc/PracticeGuide.aspx?sid=8

Summary

This guide presents strategies that classroom teachers and specialists can use to increase the reading ability of adolescent students. The recommendations aim to help students gain more from their reading tasks, improve their motivation for and engagement in the learning process, and assist struggling readers who may need intensive and individualized attention.

Recommendations	***Level of Evidence***
1. Provide explicit vocabulary instruction. Source PDF –	Strong
2. Provide direct and explicit comprehension strategy instruction. Source PDF –	Strong
3. Provide opportunities for extended discussion of text meaning and interpretation.	Moderate
4. Increase student motivation and engagement in literacy learning. Source PDF	Moderate
5. Make available intensive and individualized interventions for struggling readers that can be provided by trained specialists.	Strong



A Quick Overview of Some Basic Resources

A. Selected References

B. Agencies, Organizations & Internet

C. Quick Finds

A. Selected References

Baker, S., Fien. H & Baker, D. (2010). Robust reading instruction in the early grades: Conceptual and practical issues in the integration and evaluation of tier 1 and tier 2 instructional supports. *Focus on Exceptional Children, 42,* 1-20.

Blatchford, P., Bassett, P. & Brown, P. (2011). Examining the effect of class size on classroom engagement and teacher-pupil interaction: differences in relation to pupil prior attainment and privary vs. second schools. *Learning and Instruction, 21*, 715-730.

Case, L., Speece, D., Silverman, R., et al. (2010). Validation of a supplemental reading intervention for first grade children. *Journal of Learning Disabilities, 43*, 402-417.

Catts., H., Compton, D., Tomblin, J et al (2012) Prevalence and nature of late emerging poor readers. Journal of Educational Psychology, 104 (1) 166-181

Chambers, B., Slavin, R., Madden, N. et al. (2011). Small group, computer assisted tutoring to improve reading outcomes for struggling first and second grades. *Elementary School Journal, 111,* 625-640.

Compton, D., Fuchs, D., Fuchs, L. et al. (2010). Selecting at risk first grade readers for early intervention: eliminating false positives and exploring the promise of a two stage gated screening process. *Journal of Educational Psychology, 102,* 327-340.

Coyne, M., Kame'eniu, E. & Carnine, D. (2011). Effective teaching strategies that accommodate diverse learners. Upper Saddle River, NJ: Merrill.

Denton, C. (2012). Response to intervention for reading disabilities in the primary grades: some answers and lingering questions. *Journal of Learning Disabilities, 45*, 232-243.

Dufrene, B. Reisener, C., Olmi, D., et al. (2010). Peer tutoring for reading fluency as a feasible and effective alternative in response to intervention systems. *Journal of Behavior Education, 19,* 239-256.

Hill, D., Kings, S., Lemons, C. et al. (2012). Fidelity of implementation and instructional alignment in response to intervention research. *Learning Disabilities Research & Practices, 27*, 116-124.

MuCulley, L., Katz, S. & Vaughn, S. (2013). Reading instruction and students with learning disabilities. In J. P. Bakken, F. E. Obiakor & A. F. Rotatori (Eds.), *Learning disabilities: Practice concerns and students with LD, Advances in special education* (Vol. 25). Bingley, UK: Emerald.

O'Connor, R., Bocian, K. Sanchez, V. et al. (2014). Access to a responsiveness to intervention model: does beginning intervention in kindergarten matter? *Journal of Learning Disabilities 47*, 307-328.

Okilwa, N., & Shelfy, L. (2010). The effects of peer tutoring on academic performance of students with disabilities in grades 6 through 12. A synthesis of the literature. *Remedial and Special Education, 31*, 450-463.

Reed, D., Sorrells, A., Cole, H. et al. (2013). The ecological and population validity of reading interventions for adolescents; can effectiveness be generalized? *Learning Disability Quarterly, 36,* 131-144.

>A Synthesis of Peer-Mediated Academic Interventions for Secondary Struggling Learners J. Wexler, D. Reed, N. Pyle, M. Mitchell, & E. Barton (2015). *Journal of Learning Disabilities, 48,* 451-470.

Abstract: A synthesis of the extant research on peer-mediated reading and math interventions for students in regular or alternative education settings with academic difficulties and disabilities in Grades 6 to 12 (ages 11–18) is presented. Interventions conducted between 2001 and 2012 targeting reading and math were included if they measured effects on at least one academic outcome measure. A total of 13 intervention studies were synthesized in which 10 studies employed an experimental or quasi-experimental design and three studies used a single-case design. Findings from the 13 studies revealed mostly moderate to high effects favoring peer mediation, particularly when implementing a peer-mediated feedback component. In addition, findings suggest such interventions have social validity among adolescents and teachers. More rigorous research on secondary peer-mediated math interventions, peer-mediated interventions in alternative settings, and effective ways to pair dyads to incorporate a structured feedback component is warranted. Implications for peer-mediated instruction for academically struggling adolescents are discussed.

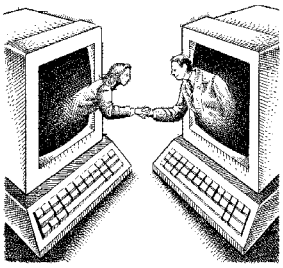
>**Early Response-to-Intervention Measures and Criteria as Predictors of Reading Disability in the Beginning of Third Grade.** K. Beach & R. O' Connor (2015). *Journal of Learning Disabilities, 48*, 196-223.

Abstract: We explored the usefulness of first and second grade reading measures and responsiveness criteria collected within a response-to-intervention (RtI) framework for predicting reading disability (RD) in third grade. We used existing data from 387 linguistically diverse students who had participated in a longitudinal RtI study. Model-based predictors of RD were analyzed using logistic regression; isolated measure/criteria combinations for predicting RD were analyzed using classification analysis. Models yielded superior classification rates compared to single measure approaches and did not systematically misclassify English learners. However, particular first and second grade measure/criteria combinations also showed promise as isolated predictors of RD in word reading/text fluency. Model-based approaches were required for acceptable classification of students with RD in comprehension. Although the former finding is promising for early identification of students in need of more intensive instruction in lexical or fluency-based skills, the latter finding reaffirms literature attesting to the comllexity of RD in comprehension and difficulty of predicting deficits using early measures of reading, which primarily assess word reading skill. Results replicated well with an independent sample, thus enhancing confidence in study conclusions. Implications regarding the use of RtI for predicting RD are discussed.

>**An Examination of the Efficacy of a Multitiered Intervention on Early Reading Outcomes for First Grade Students at Risk for Reading Difficulties**. H. Fien, J. Smith, K. Smolkowski, S. Baker, N. Nelson, & E. Chaparro (2015). *Journal of Learning Disabilities, 48*, 602-621,

Abstract: This article presents findings of an efficacy trial examining the effect of a multitiered instruction and intervention model on first grade at-risk students' reading outcomes. Schools (N = 16) were randomly assigned to the treatment or control condition. In the fall of Grade 1, students were assigned to an instructional tier on the basis of Stanford Achievement Test-10th Edition scores (31st percentile and above = Tier 1; from the 10th to the 30th percentile = Tier 2). In both conditions, students identified as at risk (i.e., Tier 2; n = 267) received 90 minutes of whole group instruction (Tier 1) and an additional 30 min of daily small group intervention (Tier 2). In the treatment condition, teachers were trained to enhance core reading instruction by making instruction more explicit and increasing practice opportunities for students in Tier 1. In addition,at-risk readers were provided an additional 30-min daily small group intervention with content that was highly aligned with the Tier 1 core reading program. Results indicate significant, positive effects of the intervention on students' decoding and first semester fluent reading and potentially positive effects on reading comprehension and total reading achievement.

B. Agencies, Organizations, and Internet Sites



There are many agencies and organizations that help and advocate for those with disabilities. The following is a list of agencies, organizations and sites that offer information and resources related to special education in general, and, in some cases, to learning problems and learning disabilities specifically. This is not a comprehensive list, but is meant to highlight some premier resources and serve as a beginning.

CES - Cooperative Educational Services
Website: http://www.ces.k12.ct.us/

Council for Learning Disabilities
http://www.c

Learning Disabilities Association of America (LDA)
www.ldanatl.org

National Research Center on Learning Disabilities (NRCLD)
http://www.nrcld.org

Teaching Learning Disabilities
http://www.teachingld.org

National Center for Learning Disabilities
http://www.ncld.org/

Quick Find On-line Clearinghouse

TOPIC: Learning Problems & Disabilities -- http://smhp.psych.ucla.edu/qf/learnprob.htm

TOPIC: Response to Intervention -- http://smhp.psych.ucla.edu/qf/responsetointervention.htm11

TOPIC: "Individuals with Disabilities Education Act" and Accommodations/Inclusion -- http://smhp.psych.ucla.edu/qf/idea.htm

CONCLUDING COMMENTS

From the foregoing perspective, then, proposed translations of research into practice should be evaluated in terms of whether they are appropriate for Type I, II, or III learning problems and where they fit into a comprehensive scheme of intervention needs.

Turning the matter around, researchers primarily concerned with application (i.e., improving intervention for those with learning problems) must at the very least broaden their view of teaching; optimally, they need to expand their view of intervention beyond teaching. With respect to the former, my colleagues and I have argued that it seems particularly important to focus on motivation as a primary intervention concern and, in doing so, to pursue personalized, sequential, and hierarchical teaching strategies. Beyond teaching, it is important to think in terms of a societal approach encompassing an integrated continuum of preventive and treatment services. There is a considerable agenda of research that warrants attention related to these ideas.

As the world around us is changing at an exponential rate, so must the way we approach learning problems. Over the coming decade, we all will be called upon to play a role in doing something about the many individuals who have trouble learning academic skills. In responding to this call, it will be essential to have a broad understanding of what causes learning problems (including learning disabilities) and what society in general and schools in particular need to do to address such problems. Anyone concerned with research applications must evaluate them within a broad context, not just from the narrow perspective of specific assessment practices or direct instruction of observable skills. To do less is to risk too much.