



# FOCUS on Results

Office of Special Education and Early Intervention Services

**May 2007**

**Accountability**

**Assessment**

**Curriculum & Instruction**

**Dispute Resolution**

**Early Childhood**

**IEPs & IFSPs**

**Personnel**

**State & Federal Policy**

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**This FOCUS on Results document** offers information about what local district school teams can do to incorporate the spirit of *No Child Left Behind* in the context of cohesion, coordination, and alignment of critical sub-systems that are essential for student achievement.

**Five Critical Sub-Systems:**

- (1) Leadership
- (2) Curriculum
- (3) Pedagogical Improvement
- (4) Data Collection
- (5) Organizational

## Meeting the Spirit of AYP Through School Reform: Systems of Individuation and Differentiation Are Needed to Meet All Stakeholders' Needs

by Troy V. Mariage and Linda Patriarca

This is the fourth article in a five-part series that addresses the question: What can local building/district school teams do to ensure that the spirit of *No Child Left Behind* is realized? The first article, published in the September 2004 *FOCUS on Results* GATA 04-03 (Mariage & Patriarca, September 2004) identified and briefly described four overarching principles of successful school improvement:

- Accountability is *outcomes-based* but *input and process driven*.
- Cohesion, coordination, and alignment of critical sub-systems (such as data, curriculum, and pedagogy) are essential for student achievement.
- *Systems of individuation and differentiation* are needed to meet all stakeholders' needs.
- A *collaborative infrastructure and culture* are critical to sustaining and enhancing school improvement initiatives.

This article will focus specifically on the third principle: *Systems of individuation and differentiation are needed to meet all stakeholders' needs*. This principle relates to each of five sub-systems operating within a building/district, which include:

- (1) Leadership.
- (2) Curriculum.

- (3) Pedagogical improvement.
- (4) Data collection.
- (5) Organizational (personnel resources, culture).

Effective learning organizations view professional development as serving at least two key functions: (1) building the capacity of faculty and staff to deliver the highest quality of instruction in core content to all students and (2) providing collaborative spaces and experiences that are tailored for the diverse professional development needs of each stakeholder. It is this latter goal of professional development that is specifically addressed within this *FOCUS on Results* document. Professional development should be geared toward building the capacity of all faculty and staff, with the dual function of creating shared knowledge and skills around the core curriculum, while providing opportunities for faculty to experience new roles and responsibilities.

Most educators today realize that "one size fits all" methods will likely fail to cause optimal growth and development for any diverse set of individuals, such as students within a classroom or teachers within a building. In fact, much like each student, teachers, too, bring a vast array of experiences and skills.



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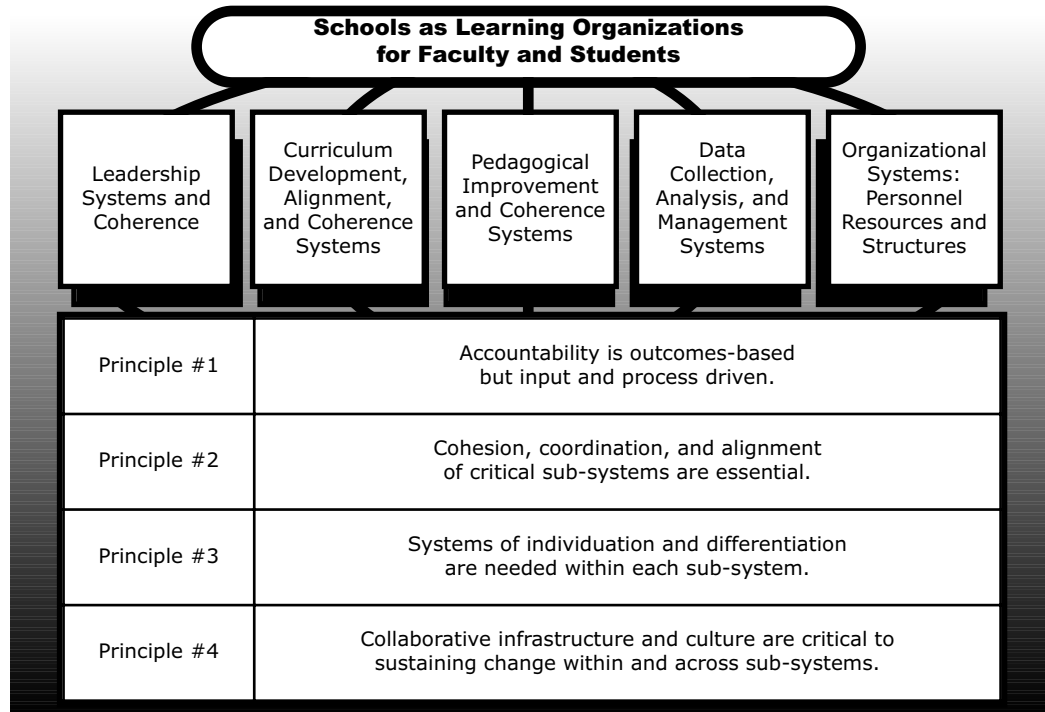


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Figure 1



Just as teachers try to be responsive to students' instructional levels in various curriculum areas, schools that seek to become learning organizations create multiple learning opportunities and experiences for their faculty and staff that are tailored to their unique interests and abilities.

In this section, two cases taken from a five-year research project in a low income, rural Michigan school are provided to illustrate how the principle of "systems of individuation and differentiation" was applied to two of the five key sub-systems, including the Pedagogical Improvement/Professional Development (PD) sub-system and the Curriculum sub-system.

### Individuation and Differentiation in the Professional Development Sub-System

An explicit goal of schools is to improve the teaching skills of the faculty. Teacher quality is a key variable in improving student achievement and represents a variable that is most directly relevant to student learning (as opposed to "distal" variables, like school schedules, and discipline policies).

Historically, schools have not tended to offer quality learning for faculty and staff. The structure of schools makes adult learning difficult. While professional development (PD) and professional learning communities have been trumpeted as keys to successful schools, this work is not without its challenges. Professional development in some schools continues to be characterized by

- (1) Fragmentation of content.
- (2) Unclear linkages to long-term goals.
- (3) Incomplete apprenticeship opportunities.
- (4) Leadership drift.

Fragmentation of content occurs when PD tends to focus on one-day inservices or workshops that do not provide any follow-up or long-term commitment. Also, PD may not clearly link to the goals of the school. It is common to see professional development take on a "flavor of the month" approach, where popular issues are addressed but not taught in a way that allow faculty and staff to incorporate the concepts into their efforts with students. For example, a school's improvement plan may clearly articulate the need to (1) improve writing across the curriculum and (2) use technology in teaching, but the

professional development provided by the district is not linked to those goals.

A third challenge occurs when PD does not incorporate an apprenticeship cycle, where faculty/staff successfully transfer key skills, strategies, and performances to their work with students. Inservice or workshops may provide excellent explanation, modeling, and demonstration by experts, but if there is not a conscious attempt to help faculty/staff practice and receive feedback/coaching on a skill, there is often uneven uptake of the new learning.

Finally, a school may experience a drift in attention—lose focus on the original school district goals and vision. Without leaders who keep their “eye on the prize,” PD can drift away from original school improvement goals and plans. In summary, a school that wants to become a learning organization needs a PD plan that is coherent, coordinated, and aligned to the goals and curriculum of the school/district.

If a school/district team designs a coherent system of PD that is closely aligned with key curricular goals and objectives [e.g., learning how to teach the new math curriculum, embedding technology in content area instruction, improving the Individualized Education Program (IEP) process, and using writing across the curriculum], the school or team leader may also need to consider how to provide a differentiated set of learning experiences for faculty. A typical school building is likely to have a wide range of expertise and experience among faculty and staff. Additionally, each year may bring new people to the building, necessitating the need for new or yearly initial trainings. At least five issues require having a system of individuation and differentiation in the professional development sub-system:

- (a) The need to train new stakeholders (e.g., teachers, staff, paraeducators).
- (b) The induction of new and/or probationary faculty during their early years of teaching.
- (c) Meeting the unique training needs of specialists.

- (d) The creation of collaborative structures allow faculty/staff the opportunity to pursue their unique interests in PD.
- (e) Creating energy points for brokering new knowledge into the larger building.

**a. Training New Stakeholders.** A building or district is made up of many different stakeholders. A typical school employs administrators, teachers, paraeducators, media specialists, ancillary supports, food services, maintenance workers, and more. Each of these stakeholders has different responsibilities, roles, and routines. The teams or groups to which they belong sometimes overlap and sometimes do not. Each stakeholder has primary responsibilities for key functions of the organization. For teachers, this responsibility is teaching the core curriculum to students. However, newly hired teachers might not know how to teach a school’s curriculum, and they might not follow the curriculum closely enough. Buildings can identify formal (e.g., inservice, workshop, web-based modules, peer coaching) or informal (e.g., faculty mentor) ways to train new personnel. This helps ensure that stakeholders feel confident in their responsibilities and clear in their mission. Gaps in student learning and achievement can be prevented when new faculty are thoroughly prepared to deliver core curriculum.

**b. Induction of new or probationary faculty.** New teachers need a different approach to professional development. Early career faculty are still learning the craft of teaching and how schools work. It’s not a surprise that nearly half of special education teachers leave the profession in the first three to five years (SPeNSE, 2002). Investing in early career faculty is among the most important work a district can do. Districts can create induction programs that target professional development to the unique needs of new teachers, including such things as classroom management, evidence-based practices, assessment, and understanding the curricula used in the district.

## Part IV of a V Part Series

This *FOCUS on Results* article is the fourth in a five-part series that addresses the question: What can local building/district school teams do to ensure that the spirit of *No Child Left Behind* is realized? Part three of this series focused on the importance of cohesion, coordination, and alignment of key sub-systems in the support of educational reform. The article shows that school reform is successful when educators pay attention to the ways in which five key sub-systems support the change effort from its inception to its implementation and long term evaluation. When any one system is not employed in the support of a new reform (e.g., new curriculum, new discipline policy, new schedule), there is risk of subverting the sustainability of that new intervention. The failure to support or sustain the implementation of a new intervention can be traced to a breakdown in one or several of the key sub-systems presented in Figure 1 on page 2.



The Center for Educational Networking (CEN) is a statewide education information network that produces and disseminates publications and documents related to the education of students with Individualized Education Programs (IEPs).



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## Defining Key Terms

### **Systems of Individuation:**

Systems have mechanisms that allow them to be responsive to individual stakeholders within the organization. Institutions and systems can become bureaucratic and procedural, so the principle of individuation is a constant reminder that a system or program has as its primary goal the growth of individuals within the community. In any school, there is an enormous diversity of knowledge, skill, dispositions, experiences, background knowledge, goals, and dreams. Schools need systematic ways to ensure that individuals are acknowledged, understood, and have opportunities to add their voice to the community. A key part of learning for any individual is knowing where they are currently functioning (an assessment system), having instruction that targets their ability level or zone of proximal development (a curricular system), and having measures that demonstrate learning in both formative and summative ways (data management system). In our previous research (Mariage & Garmon, 2003; Patriarca & Ziazi, 2003), we learned that for schools to become learning organizations, they needed a system designed to create a unified vision, a common curriculum, and clear goals. However, in creating this coherent, coordinated, and aligned system, we also learned that different collaborative structures meet different needs for individual faculty. What seems important is that there are multiple professional communities to increase the chance that individual faculty can meet their own unique needs for PD, for connectedness, efficaciousness, creativity,

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### **c. Meeting the unique needs of specially trained faculty and staff.**

Specially trained faculty and staff often have PD needs outside of the general curriculum. The goal of most PD is to help teachers access the general education curriculum through the development of an aligned core curriculum, standards, and benchmarks. Teachers and staff who work in alternative programs, with students who need more tailored supports, may require a different kind of training. For example, as part of a tiered system of behavioral support, school psychologists may need training in conducting a functional behavioral assessment or creating effective behavior intervention plans. Special education teachers may receive training in an alternative curricular approach (e.g., Direct Instruction, Orton-Gillingham, Strategic Intervention Model) to be able to provide more targeted teaching to students who are not progressing with their primary instruction. Support staff and paraeducators may benefit from specific training to work with students for whom they have one-to-one responsibilities, such as how to use visual schedules and time-away procedures. Finally, PD might be targeted to a particular team of teachers and staff who are focusing on specific activities such as the development of an early intervention/prevention system for literacy or the development of a collaborative problem-solving team around students with Autism Spectrum Disorder.

### **d. Creating collaborative structures to meet unique interests of faculty.**

PD and learning should have no endpoint. Rather, schools need to adopt an attitude of continuous improvement. Each staff member at every level of education and experience should expect

to continually learn and to improve their skills. The importance of having a shared vision and building the collective capacity of all members in key curricular areas cannot be over emphasized. School leaders, including teacher leaders, must agree about the focus of PD and how it will be assessed. Yet, they must keep in mind that PD for a master teacher who has taught for 20 years, earned advanced degrees in his or her content area, and has been a curriculum leader for the district, is quite different than a first or second year teacher. Having multiple entry points for PD and creating new roles for faculty are important in developing a collaborative culture in the school building. Figure 2 on page 5 provides a sample of roles created for faculty and staff, including several collaborative structures. In one elementary and primary school that was the lowest achieving building for its size in Michigan, the faculty had few opportunities to develop new roles, opportunities for learning, and professional identities. As shown in Figure 2, over the course of a five-year collaborative partnership with a university the building developed a series of collaborative structures and programs that emphasized problem solving, using data to inform decision making, and careful assessment of learning, inquiry, and leadership. New professional roles and opportunities expanded teacher's role capacity, while simultaneously allowing them to stretch and grow in their responsibilities. The outcome of these collaborative structures for teachers resulted in improved learning for all students.

**e. Creating energy points for building new knowledge.** Every school building develops its own cultural norms, values, and behaviors. This can have

## Focusing Professional Development

Research has demonstrated that the bulk of professional development should focus on improving proximal variables, defined most clearly as those things that impact the teaching/learning relationship (Cuban, 1999). Longitudinal studies of students who have an outstanding teacher for two to five consecutive years show differential achievement compared to similar students who have poor teachers for consecutive years (Jordan, Mendro, and Weesinghe, 1997; Rivers & Sanders, 1996; Wenglinsky, 2002). In one study conducted by Jordan, Mendro, and Weesinghe (1997), students who had a poor teacher for three consecutive years had a 29 percent proficiency rate on 5<sup>th</sup> grade math scores, compared to 83 percent of students who had a high quality teacher for those same three years (3<sup>rd</sup>-5<sup>th</sup> grades).

**Figure 2**

Collaborative Structure	Rationale and Purpose	Roles and Opportunities for Stakeholders
School Improvement Curriculum Teams—4 Teams (Math, Language Arts, Science, Social Studies)	<ul style="list-style-type: none"> <li>Align content area to <i>Michigan Core Curriculum Framework</i>.</li> <li>Collect, disaggregate, interpret data.</li> <li>Identify evidence-based curricula.</li> <li>Identify possible differentiated curricula or tiers of support.</li> <li>Identify assessments.</li> <li>Visit other districts using proposed curriculum.</li> <li>Identify professional development plan.</li> </ul>	<ul style="list-style-type: none"> <li>Teacher content area leaders.</li> <li>Teachers use data to inform decisions.</li> <li>Teachers become “researchers” for their buildings.</li> <li>Teachers have greater ownership of teaching.</li> </ul>
Grade Level Intervention Team	<ul style="list-style-type: none"> <li>Each grade level forms a collaborative team.</li> <li>Team members engage in problem-solving around academic and behavioral issues.</li> <li>Team members share strategies for working with most challenging learners.</li> <li>Builds distributed expertise of accommodations.</li> </ul>	<ul style="list-style-type: none"> <li>Facilitator, brainstormers, time keeper, recorder.</li> <li>Behavioral consultation and collaborative problem-solving.</li> <li>Learning academic and behavioral strategies from colleagues (role of expert).</li> </ul>
Teacher Research Team	<ul style="list-style-type: none"> <li>Voluntary after school group.</li> <li>Action-research proposal.</li> <li>Share proposal and study progress with colleagues.</li> <li>Builds distributed expertise of using data, designing study, and evaluating outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>Apprenticeship into research process: Design, data collection, methodology, data analysis, and dissemination.</li> <li>Teacher as researcher.</li> <li>Authentic audiences for sharing work.</li> </ul>
Mentor: University Intern Teacher	<ul style="list-style-type: none"> <li>Tenured teacher serves as Mentor Teacher for University Intern Teacher.</li> <li>Participate in weekly Mentor Teacher meetings with university personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Mentor/leader.</li> <li>Apprentice.</li> </ul>
Mentor: Probationary Faculty	<ul style="list-style-type: none"> <li>Tenured teacher serves as Mentor for probationary teacher in district.</li> <li>Develops resource handbook for new teachers.</li> <li>Monthly meetings for 1<sup>st</sup>/2<sup>nd</sup> or 3<sup>rd</sup>/4<sup>th</sup> year teachers.</li> </ul>	<ul style="list-style-type: none"> <li>Mentor/leader.</li> <li>Apprentice.</li> </ul>
Summer School Teacher	<ul style="list-style-type: none"> <li>Co-teaching with university intern and paraeducator.</li> <li>Comprehensive assessment.</li> <li>Inquiry and thematic-based instruction.</li> </ul>	<ul style="list-style-type: none"> <li>Co-planning, co-teaching.</li> <li>Teacher as researcher—using data to target.</li> <li>Creative space to try out new ideas and strategies.</li> </ul>

both positive and negative consequences for teaching and learning. On the positive side, schools that have low faculty/administrative turnover and a quality system of PD can evolve highly effective, coherent, and aligned delivery of core curriculum. Unfortunately, a school’s culture can become complacent and resistant to change. Research suggests that schools lacking a collaborative culture and a fragmented

system of PD should create new collaborative structures (see Figure 2 above) in order to move the building toward an atmosphere of learning and inquiry. Points of learning and inquiry can be referred to as “energy points” for motivating individuals and an entire staff. New spaces and places to share information allow individual staff members to share their knowledge with others. As an example, the introduction

**Defining Key Terms**

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leadership, and autonomy—that there is a system of individuation for faculty development, not only tiered menus of varying academic and behavioral support for students.

**Differentiation:** The most popular reference to the idea of differentiation is the common usage of “differentiated” instruction. For example, Universal Design for Learning ([www.CAST.org](http://www.CAST.org)) has at its core the idea that students should have (1) multiple means to represent their learning, (2) multiple means to express their learning, and (3) access to multiple ways to engage with learning. In this sense, there needs to be a differentiated menu of opportunities at every level of the learning process to increase the likelihood that all students will have an entry point into the learning process. Differentiation recognizes diversity and normal human variance as the norm, not the exception. Differentiation is not merely the act of providing multiple ways to represent, express, and engage, but is a disposition towards learning that is more inclusive and expands what can count as learning—it privileges an equity pedagogy over views of teaching and learning that might artificially narrow learning outcomes.

**Letter Recognition:** Building letter-recognition, or learning to recognize letters, is an integral part of most kindergarten programs. The challenge is to keep students’ interest while practicing until they are fluent.

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## Defining Key Terms

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Students apply their knowledge of letters and letter sounds as they play games and interact with letters online, using what they see and learn to create their own ABC book.

*Read, Write, Think. Retrieved online January 24, 2007 from [www.readwritethink.org/lessons/lesson\\_view.asp?id=132](http://www.readwritethink.org/lessons/lesson_view.asp?id=132).*

### **Phonological Awareness:**

Phonological awareness is the understanding of different ways that oral language can be divided into smaller components and manipulated. Spoken language can be broken down in many different ways, including sentences into words and words into syllables (e.g., in the word simple, /sim/ and /ple/), onset and rime (e.g., in the word broom, /br/ and /oom/), and individual phonemes (e.g., in the word hamper, /h/, /a/, /m/, /p/, /er/). Manipulating sounds includes deleting, adding, or substituting syllables or sounds (e.g., say can; say it without the /k/; say can with /m/ instead of /k/). Being phonologically aware means having a general understanding at all of these levels.

*LD Online. Retrieved online January 24, 2007 from [www.ldonline.org/article/6254](http://www.ldonline.org/article/6254).*

### **Phonemic Awareness:**

Phonemic awareness refers to the ability to segment and manipulate the sounds of oral language. It is not the same as phonics, which involves knowing how written letters relate to spoken sounds. Activities that develop phonemic awareness in children provide practice with rhyme and with beginning sounds and syllables.

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of an “action-research” group with a small research stipend created a space where educators brought their plans for changing their teaching practices to members of the group. As teachers shared their practices and ideas, these practices were often implemented by other teachers and became part of the larger culture.

## **Individuation and Differentiation in the Curriculum Sub-System**

This section provides a second case example of the principle of individuation and differentiation in the area of curriculum and instruction. Recently, researchers from Michigan State University worked with a Michigan primary (K-2<sup>nd</sup>) and an elementary (3<sup>rd</sup>-5<sup>th</sup>) building. Assessment of the district revealed that the district had no common curriculum across the elementary grades, no alignment with the *Michigan Core Curriculum Framework*, and no collaborative “energy points” were available for faculty to discuss curriculum and instruction. For several consecutive years, the district’s 4<sup>th</sup> and 5<sup>th</sup> grade students had the lowest Michigan Educational Assessment Program (MEAP) scores in every curriculum content area (English language arts, math, science, social studies) when compared to 37 other districts in the region.

At the start of this research, the fourth-grade MEAP reading score was 17.8 percent proficient and the MEAP math score was 25 percent proficient. Even more telling was that 48 percent and 49 percent of the students scored in the “low” area, respectively. Curriculum-based measures in mathematics revealed that 97 percent of the 5<sup>th</sup> grade students were below grade level at the conclusion of the year, with 77 percent of those students more than one grade below level. In short, the achievement levels of the students necessitated that content area teams examine curriculum that could accommodate students, most of whom were functioning at an instructional level below their grade placement.

Examining the academic performance of the two buildings led to a number of observations that became the eventual focus of professional and curriculum development in the district.

- Many students came to school with low-school readiness skills.
- Literacy was not directly taught in the kindergarten classrooms.
- The absence of a common curriculum made targeting PD difficult.
- No assessment measures existed for determining a baseline or assessing change.
- The overall poor achievement required a curriculum that could address this diversity and be differentiated to target instruction in basic skills at students’ appropriate level.
- No collaborative “energy points” existed for faculty to discuss curriculum, assessment, or instruction.
- Closing the achievement gap would require that interventions be extended to include birth to preschool-aged children.
- Students needed to increase their opportunities to learn.
- Families and their unique needs had to become an important focus for the buildings.

The result of the system assessment was a new plan to address each of the challenges observed above. The first order of business was to assign curriculum development teams in the areas of reading, math, science, and social skills/behavior. These teams aligned the curriculum with the *Michigan Core Curriculum Framework*, including the development of grade level benchmarks for each content area. Teams then analyzed existing data and began to investigate possible curricular choices through research and site visits to regional schools that were similar in demographic make up. After adopting curricula, the schools developed an assessment system for students that included curriculum-based measures.

**Differentiated assessment in curriculum.** In the beginning of this project, the schools had no systematic data collected beyond MEAP test scores.

However, the challenge was not collecting more and more data. Rather they needed systematic ways to analyze, interpret, and communicate data in order to inform future decisions. In short, there were very few opportunities for faculty and administrators to be apprenticed into a complete cycle of activity where they were able to determine appropriate measures, interpret results, make public those results for real purposes, and then connect data to concrete improvements in instructional practice.

It became evident that schools in this research project would need to use data to inform instructional decisions. To begin to develop the use of data as a cultural value in the schools, data was systematically collected for nearly every aspect of school change (See Table 1 below). For example, the research team developed curriculum-based measures on a pre/post basis in the core areas of reading, writing, and mathematics for each grade level. Teachers were surveyed about their use of the writing process and technology to choose the level and type of professional support that might be needed as the district moved forward. The schools also collected behavioral data since research shows that many behavioral problems have their root in learning difficulties. Finally, parents and students themselves added opinions about a new summer school program.

“Where’s the data?” became a part of the language in all the district’s buildings. Initially, teachers resisted data collection due to potential issues of blaming specific teachers for student failure—the use of data can be extremely risky. The research team tackled this issue both directly and indirectly. Administrators and the curriculum director publicly made clear that data would not be used in punitive ways. Data about an individual teacher’s success or failure was not shared publicly.

Even more important, the team shifted the culture of the district by having teachers become researchers who collected, analyzed (when possible), and made public the data of their building. For the first time in years, teachers in this district came to routinely present data at faculty meetings and school board meetings. In this way, teachers developed ownership of the data, which is not possible when data is collected and analyzed by other school authorities. Participating in the entire data collection and publication cycle moved attention more directly towards teaching and learning. Teachers paid more attention to the importance of outcome data and its role in helping them to use data to leverage changes in curriculum and professional development. Administrators played a central role in all aspects of data use by helping teachers to take ownership of

**Table 1. Examples of Assessments to Inform Curriculum and Instruction**

Student Learning Assessments	<ul style="list-style-type: none"> <li>Disaggregated MEAP data by proficiency levels.</li> <li>Reading placement tests.</li> <li>Computer-assisted instruction grade level scores on pre/post basis in reading/math.</li> <li>Pre-assessment tests for summer school students.</li> </ul>
Teacher Surveys/Assessments	<ul style="list-style-type: none"> <li>Teacher survey on writing instruction.</li> <li>Teacher survey on technology use in teaching.</li> <li>Action/research assessments.</li> </ul>
Behavioral Data	<ul style="list-style-type: none"> <li>Behavioral charting of office referrals and suspension data.</li> <li>Grade level intervention assistance team academic/behavioral profile.</li> </ul>
Parent Survey	<ul style="list-style-type: none"> <li>Summer school survey (student satisfaction, usefulness, perceived learning).</li> </ul>
Student Survey	<ul style="list-style-type: none"> <li>Summer school survey (student satisfaction, curricular activities ranking).</li> </ul>

## Defining Key Terms

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*International Reading Association. Retrieved online January 24, 2007 from [www.reading.org/resources/issues/positions\\_phonemic.html](http://www.reading.org/resources/issues/positions_phonemic.html).*

### **Concepts About Print:**

Concepts about print (CAP) refers to what beginning readers need to understand about how printed language works and how it represents language. Successful beginning readers develop concepts about print at an early age, building on emergent literacy that starts before formal schooling.

*Annenberg Media. Retrieved online January 24, 2007 from [www.learner.org/channel/libraries/readingk2/front/otherterms.html](http://www.learner.org/channel/libraries/readingk2/front/otherterms.html).*

### **Learning Community:**

According to the *Michigan School Improvement Framework*, a learning community is a professional environment in which the teachers, administrators, and support staff in a school continuously seek and share learning and then act on what they learn to improve and enrich their effectiveness as content providers and instructional coaches. For more information, visit [www.michigan.gov/schoolimprovement](http://www.michigan.gov/schoolimprovement).

*Retrieved on January 24, 2007 from the glossary found at [www.cenmi.org](http://www.cenmi.org).*



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**Figure 3**

Examples of How Universal Design uses Systems of Individuation and Differentiation	Universal Early Intervention and Prevention	Universal Reading Instruction	Universal Positive Behavioral Intervention and Support	Universal Design for Learning	Universal School Reform
	<p><b>Tier 1: Primary Intervention</b></p> <ul style="list-style-type: none"> <li>• Universal screening.</li> <li>• Universal curriculum.</li> <li>• Progress monitoring.</li> </ul> <p><b>Tier 2: Secondary Intervention</b></p> <ul style="list-style-type: none"> <li>• Targeted assessments.</li> <li>• Teaching adjustments in intensity, explicitness, modality.</li> <li>• Progress monitoring.</li> </ul> <p><b>Tier 3: Tertiary Intervention</b></p> <ul style="list-style-type: none"> <li>• Specialized services.</li> <li>• Tailored instruction.</li> </ul>	<p><b>National Reading Panel (2002)</b></p> <ul style="list-style-type: none"> <li>• Phonological awareness.</li> <li>• Phonics.</li> <li>• Fluency.</li> <li>• Vocabulary.</li> <li>• Comprehension.</li> </ul>	<p><b>Tier 1: Primary Intervention</b></p> <ul style="list-style-type: none"> <li>• Universal system of positive behavioral support.</li> <li>• Proactive teaching of routines.</li> <li>• Continuous collection of data.</li> </ul> <p><b>Tier 2: Secondary Intervention</b></p> <ul style="list-style-type: none"> <li>• Additional assessment.</li> <li>• Targeted interventions.</li> <li>• Functional assessment.</li> </ul> <p><b>Tier 3: Tertiary Intervention</b></p> <ul style="list-style-type: none"> <li>• Specialized services.</li> <li>• Behavior intervention plan.</li> </ul>	<p><b>Multiple means of representation</b> to give learners various ways of acquiring information and knowledge.</p> <p><b>Multiple means of expression</b> to provide learners alternatives for demonstrating what they know.</p> <p><b>Multiple means of engagement</b> to tap into learners' interests, challenge them appropriately, and motivate them to learn.</p>	<p>Schools as learning organizations.</p> <p>Professional communities of practice.</p> <p>Distributed expertise.</p> <p>Targeted professional development.</p> <p>Tailored professional development.</p> <p>Capacity building.</p> <p>Continuous improvement.</p> <p><b>Key Sub-Systems:</b></p> <ul style="list-style-type: none"> <li>• Leadership.</li> <li>• Curriculum.</li> <li>• Pedagogical improvement.</li> <li>• Data collection.</li> <li>• Organization.</li> </ul>

\*Note: This table illustrates in general terms how systems of individuation and differentiation occur across universal systems. It is not meant to be used prescriptively. Many variations exist within the field of education and are being researched (e.g., some models use two "tiers," while others use four or even five "tiers").

some of the data process and analyzing and publicizing the data. The result was that the school became more disciplined in its inquiry residing in a more careful and thoughtful link between teaching and student achievement.

**Early Intervention and Prevention in Reading Play a Central Role**

Educators often disagree about when to begin formal, explicit literacy instruction. Learning theorists believe that "development leads learning," while others feel that "learning leads development." While doing the research, the team noticed that students came to school lacking many literacy skills, including letter recognition, phonological awareness, phonemic awareness, and concepts about print.

The team identified six strategies for creating a system of individuating and differentiating instruction, including:

- (1) Hiring a learning specialist to work one-on-one or in pairs with those most at-risk K-2<sup>nd</sup> grade students in literacy.
- (2) Purchasing an evidence-based reading program that utilizes developmentally appropriate reading groups, frequent monitoring, and ongoing assessment.
- (3) Using a home/school liaison to work with parents and children ages birth to five years.
- (4) Adopting a computer-assisted reading and mathematics program where each student in grades K-8 is provided with 50 additional minutes of reading and mathematics instruction each week.



- (5) Teaching literacy directly in the second half of the kindergarten year.
- (6) Creating a pre-K section to the seven-week summer school program.

Over a period of several years, the school district reorganized its approach to early instruction, moving toward a much more active view of teaching literacy and creating new opportunities to increase younger students' exposure to literacy. This was the beginning stage for building an achievement capacity, where students in the early grades were provided with a system of individuation that allowed them to receive direct instruction at their appropriate instructional level. Over time, the number of students who were achieving at grade level increased. In 2005, this same district had 90 percent of its 4<sup>th</sup> grade students meeting or exceeding the fourth grade reading standard, with 75 percent meeting the math standard.

### **Increasing Opportunities to Learn**

In this project, closing the achievement gap demanded that the schools expose students to more opportunities to learn. They started by breaking students into developmentally appropriate groups at their instructional levels in math and reading. Small groups of students received intensive hour-long daily lessons that focused on explicit instruction, frequent response, positive reinforcement, and frequent review. Students also participated in 50 minutes of reading and 50 minutes of mathematics instruction each week via a computer-assisted curriculum that was targeted to each instructional level. Each daily lesson focused on a balanced approach to reading and mathematics, respectively. The school also adopted a home/school reading program in an attempt to increase reading outside of school. An after-school cross-age tutoring program, developed with the local high school, allowed high school students to work directly with elementary age students on homework. Finally, the school created a three-week, all-day summer program for high achieving students and a general seven-week, all-day summer program for all students. The seven-week summer school included a minimum of

two hours of English language arts instruction that reflected a balanced approach to literacy. Students also continued to use the school's computer-assisted instruction software system to supplement reading.

The activities described illustrate that "systems of individuation and differentiation are necessary for improving all stakeholders' needs." When it comes to PD, it is important to build the capacity of each individual member of the school community. Whether it is improving content knowledge, teaching knowledge, technology skills, or school discipline, it is a worthy goal to improve each individual's knowledge, skill, disposition, and performance. Schools can become much more responsive to the range of students' learning needs through the careful collection of data across multiple stakeholder groups by adopting multifaceted curricular systems and by increasing students' opportunities to learn. The principle of individuation and differentiation is at the core of many of the major "universal design" approaches that are beginning to change the landscape of how we teach all students—those with and those without disabilities.

### **A Vision for the Delivery of Special Education in U.S. Schools: Systems of Individuation and Differentiation Within Universal Approaches to Prevention, Teaching, and Learning**

Educators have seen a series of recent advances in research, theory, and practice that have the potential to dramatically alter the landscape of educational practice for students with and without disabilities. Hehir (2005), in his book *New Directions in Special Education: Eliminating Ableism in Policy and Practice*, identifies at least five movements that, when put together, form a systemic perspective toward delivering services to students. These movements include (1) universal approaches to early intervention and prevention, including Response to Intervention (RtI), (2) universal

***"The goal of becoming a building and district that continually learns and gradually moves towards universal systems that are proactive, inclusive, and comprehensive is a new frontier for most districts."***

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application of evidenced-based reading instruction, (3) universal application of Positive Behavioral Intervention and Support, (4) Universal Design for Learning, and (5) Universal Systemic School Reform (See Figure 3 on page 8). A closer examination of each of these areas reveals that they all have embedded systems of individuation and differentiation. For example, recent research in providing academic and behavioral support draws upon a "tier" model, where all students receive evidenced-based interventions (Tier 1: Primary Intervention), some students receive more intense and targeted interventions (Tier 2: Secondary Intervention), and a small group of students receive highly tailored and individualized interventions (Tier 3: Tertiary Intervention). One of the most ambitious and elegant examples of the principle of "systems of individuation and differentiation" is Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi). This project, now in more than 100 Michigan schools, seeks to help schools create prevention and intervention systems in both academic and behavioral areas. Using a tiered model for both areas, the MiBLSi project helps schools to develop, implement, and evaluate their efforts at creating a system of individuation and differentiation in academic and behavioral prevention/intervention. Specifically, the project helps identify evidence-based interventions for each tier, collects formative and summative data in academic and behavioral areas, provides districts with technical assistance in developing data-based decisions, and provides various types of PD for ongoing capacity building.

In looking at Figure 3 on page 8, it is evident that a fundamental requirement of meeting "universal" needs is systems of individuation and differentiation—responding to what different people know, how they know, what they are able to do, and how they can show what they know. The potential for universal systems in early readiness, reading, behavior, transition, and school reform has the potential to create precisely the types of schools that this series has argued for. The goal of becoming a

building and district that continually learns and gradually moves towards universal systems that are proactive, inclusive, and comprehensive is a new frontier for most districts. This type of effort demands reculturing schools to adopt particular values, beliefs, dispositions, and behaviors. This is the focus of the next and final article in the series.

## Conclusion

Creating schools that serve all stakeholders—students, faculty, staff, parents—requires a vision about how a system can become responsive to the diversity of its members. Different schools will demand different systems of individuation and differentiation. Before schools can achieve this principle, they must pay attention to each of the other principles outlined in this series, especially the importance of having coherent, coordinated, and aligned sub-systems. Ultimately, the goal of any school is improvement in student growth and development. Reaching this goal for all students demands schools that can build the capacity of teachers and other school staff on a continuous and responsive basis. Accomplishing this capacity building requires that each of the five sub-systems balance two factors:

- System clarity through coherent, coordinated, and aligned efforts.
- Flexibility within each sub-system through the development of systems of individuation and differentiation.

This dual focus increases the chance that schools will meet the collective needs of the organization and the unique needs of individuals (See Figure 4 on page 11). Schools that become learning organizations build capacity at both levels.

Visit [www.cenmi.org](http://www.cenmi.org) to download past FOCUS on Results issues on meeting the spirit of AYP.

- *Meeting the Challenge of Adequate Yearly Progress (AYP) (GATA 04-03).*
- *Meeting the Spirit of AYP Through School Reform: Accountability Is Outcomes Based, But Input and Process Driven (GATA 05-05).*



**Figure 4**

5 Sub-Systems	Coherence, Cohesion, and Alignment	Example of a System of Individuation and Differentiation
Leadership	<ul style="list-style-type: none"> <li>• There is a written vision statement that is disseminated, rehearsed.</li> <li>• There is an explicit building discipline and behavioral program that focuses on prevention and explicit teaching of desired behaviors.</li> <li>• A clearly delineated and communicated set of goals for the building in the areas of curriculum, teaching, data management, and organization is used to guide the building's collective work.</li> </ul>	<ul style="list-style-type: none"> <li>• Building administrator distributes leadership to capable stakeholders to lead different teams and groups.</li> <li>• Administrator builds capacity of stakeholders through creating opportunities to be apprenticed in cycles of disciplined inquiry, including question generation, data collection, analysis, publication, and using data to inform instructional decisions.</li> </ul>
Curriculum	<ul style="list-style-type: none"> <li>• Curriculum is aligned to the <i>Michigan Core Curriculum Framework</i>.</li> <li>• Formative and summative assessment system is in place for key content benchmarks in reading, English language arts, math, science, social studies.</li> <li>• Curriculum, strategies, and activities are evidenced based.</li> </ul>	<ul style="list-style-type: none"> <li>• A system of differentiated curriculum that changes intensity, duration, frequency, and/or modality of instruction is available for students.</li> <li>• Targeted and tailored behavioral assessments and interventions are available to some students (e.g., functional behavioral assessment).</li> <li>• Special groups to tailor services are available (e.g., anger management, social skills).</li> </ul>
Teaching	<ul style="list-style-type: none"> <li>• Professional development plan for building capacity in key content areas identified, especially as related to teaching core curriculum.</li> <li>• Principles of effective teaching for skill development, strategy instruction, and higher order thinking are made explicit, practiced, and reinforced (e.g., time management, lesson presentation, classroom management, seatwork management, cognitive apprenticeship).</li> <li>• Mechanisms are created for providing feedback on teaching performance to individual teachers through multiple measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Teachers are afforded opportunities to take on additional roles, including mentor, coach, team leader, curriculum leader, school improvement leader, cooperating teacher.</li> <li>• Teachers have opportunities to self select and identify areas that they want to pursue their own professional development (e.g., coursework, inservice, action-research, Web-based networking).</li> <li>• Novice teachers or voluntary teachers have opportunities to receive specific and tailored support through peer mentoring, coaching.</li> </ul>
Data Management	<ul style="list-style-type: none"> <li>• A system for collecting, analyzing, and disseminating data to key stakeholders is identified.</li> <li>• A system for communicating data to next grade level and key stakeholders is established.</li> <li>• A process of using data to inform each of the other sub-systems is established—data is explicitly used to inform decision making.</li> </ul>	<ul style="list-style-type: none"> <li>• Assessments in basic skill areas are available to some students to more accurately track learning.</li> <li>• Transition programming includes job-interest inventory, explicit skills training, and tailored job placement sites in a developmental sequence that focuses on self determination and student-led IEPs.</li> </ul>
Organization: Resources, Personnel, and Structures	<ul style="list-style-type: none"> <li>• There are a shared set of norms, values, and professional dispositions that guide the collaborative work of the community.</li> <li>• There are multiple avenues for stakeholders (faculty, staff, students, and parents) to provide feedback to and help establish the policies, procedures, and resource needs of the building.</li> <li>• There is an explicit system for training new personnel each year, including new teachers, new paraeducators, lunchroom personnel.</li> </ul>	<ul style="list-style-type: none"> <li>• Structures are created to increase opportunities to learn for some students: summer school, after school, home school, computer-assisted instruction, co-op.</li> <li>• Personnel are identified (e.g., curriculum director) who have responsibility of disaggregating data for individual faculty.</li> </ul>

- *Meeting the Spirit of AYP Through School Reform: Cohesion, Coordination, and Alignment Lead to Student Achievement (Issue #8, Volume #3, GATA 06-09).*



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### **School Improvement Tools**

#### **IDEAs that Work**

##### **Office of Special Education and Rehabilitative Services (OSERS)**

[www.ed.gov/about/offices/list/osers/osep/index.html](http://www.ed.gov/about/offices/list/osers/osep/index.html)

##### **Michigan School Improvement Framework**

[www.michigan.gov/schoolimprovement](http://www.michigan.gov/schoolimprovement)

##### **National Reading Panel**

[www.nationalreadingpanel.org/default.htm](http://www.nationalreadingpanel.org/default.htm)

##### **Early Intervention/Prevention and Response to Intervention**

<http://iris.peabody.vanderbilt.edu>

##### **Universal School Reform**

(National Staff Development Council)

[www.nsd.org](http://www.nsd.org)

##### **Universal Design for Learning**

[www.CAST.org](http://www.CAST.org)

### **Michigan Special Education Web Sites**

#### **Citizens Alliance to Uphold Special Education (CAUSE)**

##### **Michigan's designated parent training and information center**

[www.causeonline.org](http://www.causeonline.org)

#### **Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi)**

[www.cenmi.org/miblsi](http://www.cenmi.org/miblsi)

#### **Michigan Department of Education (MDE)**

##### **Office of Special Education/Early Intervention Services (OSE/EIS)**

[www.michigan.gov/ose-eis](http://www.michigan.gov/ose-eis)

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