PaSLP Essential Element 5

Essential Element 5: Differentiated Instruction Differentiated instruction is key to enhancing students' ability to learn. Teachers must have the literacy knowledge and knowledge of students that enable them to plan instruction that accounts for the differences in students' needs, interests, cultures, and experiential backgrounds.

Rationale

Contemporary literacy classrooms are filled with students who have increasingly diverse languages, learning styles, cultural backgrounds, and various experiences. These differences create an increased demand for more differentiated opportunities for literacy development. Faced with the challenge of meeting the needs of all students, educators have a responsibility to recognize and understand the varying differences among students in their classrooms. They also need to employ a variety of "differentiated" instructional practices that maximize the literacy potential of each student. Such differentiated instruction provides all students with greater access to content in both the language arts and the other disciplines. According to Hall, Strangman, and Meyer (2003, p.3):

> "To differentiate instruction is to recognize students' varying background knowledge, readiness, language, preferences in learning and interests; and to react responsively. Differentiated instruction is a process to teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is and assisting in the learning process."

Proponents of differentiation purport that its principles and guidelines are grounded in years of educational research and have roots in theories of learning, such as Vygotsky's (1978) Zone of Proximal Development. In addition to its alignment as an applied practice with learning theory, multiple intelligences, and current neuroscience research, the rationale for differentiation rests upon its ability to address learner variance (Lawrence-Brown, 2004; Tomlinson, 2003; Tomlinson & Kalbfleisch, 1998; Tuttle, 2000). Furthermore, other practices central to differentiation have been validated, including effective management procedures, instructional grouping, and student engagement (Ellis & Worthington, 1994; Ankrum, 2016).

Differentiated instruction is an awareness of and active response to students' various needs. Teachers can address the various needs of the learners in their classrooms by using different materials or approaches, grouping flexibly, and varying assessments. Differentiation does not mean that teachers develop separate lessons for each student, nor does it mean that they expect less from some students. Teachers can immerse students more deeply in a topic or concept, depending upon their current proficiency.

Differentiation is an active response to the various needs of the students in the classroom. Differentiation often requires systemic curriculum adaptations which transcend individual classrooms and require alignment of these practices across classrooms. Mesmer, Jones, Catherwood, and Lester (2012) identified four principles of differentiated instruction: knowledge

of literacy development of students, effective literacy assessment, small group instruction, and organizing the classroom in ways that maximizes the potential for differentiation. Instruction must be aligned to a coherent set of learning outcomes, indicating what students should know and be able to do. Also, quality assessments that accurately describe student needs, learning differences, and language diversity must be used to inform instructional decisions. (See below for a discussion of various dimensions that can be taken into consideration when planning for differentiated reading instruction).

Dimensions of Reading Instruction

Content: With respect to differentiating *content* (the knowledge and skills taught relative to phonological awareness, phonics, fluency, vocabulary, and comprehension), some students may be working on retelling, other students may be summarizing important information from a text. Teachers can differentiate content and instructional focus using teacher led groups.

Instructional Delivery: Instructional delivery may be differentiated relative to explicitness through modeling, systematic instruction with appropriate scaffolding and pacing, and provision of immediate corrective feedback to students with sufficient opportunities to respond.

Time: Time may also be differentiated relative to how much is spent on the other dimensions. For example, how much time is spent on vocabulary? How much time is spent in small group instruction versus whole group instruction across a week? Do students have opportunities to interact and work independently?

Grouping: Grouping may be differentiated relative to number of grouping formats utilized in the classroom including whole group, homogeneous small group, partners, heterogeneous, mixed ability small group, independent and one to one.

Materials: Selecting materials for specific students and purposes is often a challenge. Materials should be evidence-based and adjusted to meet the needs of students.

Learning Environment: The dimensions of reading instruction are differentiated within a positive and safe *learning environment* that has clearly defined and consistently enforced rules and expectations.

Key Variables to Consider
The following variables, adapted from Rock, Gregg, Ellis, and Gable (2008), suggest ways that differentiation can be operationalized in the classroom:

Teacher Variables
- Teachers are aware of misconceptions about differentiating instruction;
- Teachers have adequate knowledge, resources, and support toward change;
- There are reasonable plans for implementing, monitoring, and evaluating change;

• Teachers are aware of their own preferences and biases; and
• School and classroom cultures value diversity and are positive and respectful.

Content Variables
• Standards for each content area are clear, available, and organized;
• An adjusted pacing guide is created; and
• Student surveys are used to inform decisions about differing levels of task completion within a lesson or unit.

Learner Variables
• Readiness, interests, preferences, strengths, and learning needs are considered;
• Group dynamics are evaluated (e.g., competitive vs. cooperative);
• Needs for enrichment, supplementation and/or remediation are identified; and
• Individualized Education Plans (IEP's) are considered.

Instructional Variables
• Varied models of instruction are used (e.g., direct, strategic, constructivist, etc.);
• Multiple learning experiences, activities, and assignments are used to support lessons and units;
• A safe, positive, and inviting learning climate is established;
• Instructional formats are varied (whole class, small group, one-to-one tutoring);
• Flexible grouping is used (e.g., heterogeneous, homogeneous, cross-age, between-class, within-class);
• Sound lesson structure is evident (beginning, middle, end);
• Visual supports are provided (e.g., graphic organizers, multimedia presentations, video, models, real objects, photographs, diagrams, handouts, posters, whiteboards, outlines, pictures. etc.) are used in instruction;
• Instructional pace is varied (brisk vs. slow);
• High rate of opportunities for correct student responding (opportunities to respond) is evident;
• Frequent, immediate, and instructive feedback is provided;
• Accommodations and modifications are offered based on student need;
• Assistive technology is used and encouraged;
• Text materials of varying difficulty are offered; and
• Manipulative materials are readily available.

Assessment Variables
• A continuum of assessment measures is utilized;
• Multi-method assessments are administered to the group or class to determine the students' mastery of subject-specific content and individual strengths and needs;
• Teacher assessments (self, peer) are used to guide reflection and improve classroom practice; and
• Student assessments (peer, self) are used to offer support and feedback to all learners.

Implications
The following section includes a description of Personalized Learning, Universal Design for Learning (UDL), and Multi-Tiered System of Support (MTSS) in PA. Personalized Learning, UDL, and MTSS are systemic approaches to differentiated learning based upon individual needs and learner variability. These frameworks are important to all grade levels and should relate to the goals and foci identified for specific grade ranges (See Essential Element 1). Each of these discussions provide information about how differentiation can be implemented in schools. For Essential Element 5, the implications identified as "general" address all age groups; thus, there are no specific recommendations for the specific grade levels.

Personalized Learning: Beyond Differentiation
One of the differences between differentiated and personalized learning is that in classrooms where there is an emphasis on personalized instruction, students have more control or voice in selecting their learning pathways. Like differentiated instruction, personalized learning addresses the needs of students, but in addition, it relies to a great deal on students' personal interests and their curiosity (Basye, 2016). In personalized learning, the student is involved in the creation of learning activities with the intent of increasing student engagement and helping them learn how to learn. Teachers implementing personalized learning in their classrooms are facilitators rather than lecturers. Personalized learning then is a student-centered construct, in which the teacher facilitates instructional practices that allow for students to develop voice, to co-create, be involved in social construction, and self-discovery (Zmuda and Kallick, 2017). Because personalized learning requires that teachers take into consideration students' interests, preferences, needs, and pace, adaptive technology can be an important resource for implementation (Basye, 2016). At the same time, personalized instruction represents more than "a narrow strategy of computer-based instruction with limited opportunities for human interaction and personal ownership of the learning process" (Coiro, 2016, p.7). Grant and Basye (2014) described four concepts of personalized learning:

- **Learning is Personal:** Personalized learning recognizes that students engage in different ways and in different places. Students benefit from individually paced, targeted learning tasks that formatively assess existing skills and knowledge and that address the student's needs and interests.
- **Learning is Competency-Based:** Students move ahead when they have demonstrated mastery of content, not when they've reached a certain birthday or undergone the required hours in a classroom.
- **Learning Happens Anytime, Anywhere:** Learning takes place beyond the traditional school day and even the school year. The school's walls are permeable—learning is not restricted to the classroom.

• **Students Take Ownership Over Their Learning:** Student-centered learning engages students in their own success and incorporates their interests and skills into the learning process. Students support one another's progress and celebrate success.

Coiro (2016) identified four sets of instructional practices important for implementing personalized learning in classrooms. These principles can be taken into consideration by teachers involved in personalized learning as a means of differentiation.

1. Building a culture of personal inquiry in which students have opportunities to select topics in which they are interested. Provide students with multiple texts, tools, and people (both online and offline) as a means of engaging them in their own learning.

2. Provide students with opportunities to talk. Collaborative discussions can lead to multiple pathways for developing knowledge and for sharing that knowledge. Engage students in both face-to-face and online conversations with opportunities for them to develop presentation skills, and to become involved in argumentation and negotiation.

3. Encourage digital creation. Provide many opportunities for students to create original products and to make connections to different aspects of their lives (school, home, and community).
4. "Make space for students to participate and matter" (Coiro, p. 7). Students should be actively involved in experiences that develop academic achievement, reflection, and civic engagement. This kind of participation helps them assert their autonomy and ownership of learning.

The following books provide specific information about how educators might involve their students in personalized learning.

Bray, B.A. & McClaskey, K.A. (2017). *How to Personalize Learning: A practical guide for getting started and going deeper.* California: Corwin Press.
The authors discuss how to build classrooms that support personalized learning using the Universal Design for Learning (UDL) framework. Also included are: tools and templates to get started and go deeper, lesson and project examples that show how teachers can change instructional practice, and links to electronic versions of tools, templates, activities, and checklists.

Kallick, B. & Zmuda, A. (2017). *Students at the center: Personalized learning with habits of mind.* Alexandria, VA: Association of Supervision and Curriculum Development.
The authors map out a transformative model of personalization that puts students at the center and asks them to employ the set of dispositions for engagement and learning known as the Habits of Mind. They share the perspectives of educators engaged in this work and highlight the habits that empower students to pursue aspirations, investigate problems, design solutions, chase curiosities, and create

performances. They also provide tools and recommendations for adjusting classroom practices to facilitate learning that is self-directed, dynamic, sometimes messy, and always meaningful.

McGarvey, B. & Schwahn, C. (2012) Inevitable: Mass Customized Learning. Createspace Independent Publishing Platform
Inevitable: Mass Customizing Learning (MCL) describes a detailed vision of how schools can change from the present outdated Industrial Age, assembly line structure to a mass customized learning structure with the capacity to meet the individual learning needs of every learner.

For more information on personalized learning, see the following links. Several of these links include specific ideas about ways that school districts, including several in Pennsylvania, have involved students in personalized learning.

- 10 Quick Ideas for Getting Started with Personalized Learning
- The Whole Child Blog: The Power of Personalized Learning
- Alliance for Excellent Education
- ESSA Fact Sheet: Personalized Learning
- Personalizing the Learning Experience: The Changing Role of the Learner
- Personalized Learning: The Latest Buzz in Classroom Instruction
- SAS
- The Apollo School: What 21st Century Learning Looks Like

In the 21st century classroom, with its many technological tools, teachers can deliver effective differentiated and personalized instruction. They can use approaches to meet the needs of students, and at the same time, provide opportunities for student choice and control of their own learning.

Universal Design for Learning (UDL)
Universal Design for Learning (UDL) is an educational framework for applying universal design principles to learning environments with a goal toward greater accessibility for all students, including students with disabilities. The purpose of UDL is to adapt curricula to accommodate learner variations in expression, recognition, and engagement (www.udlcenter.org).

UDL is an approach for designing curriculum and instruction that ensures all students can be successful. Adapted from the concept of *Universal Design* found in architecture, universally designed environments have features that minimize or remove barriers and allow access for all possible users (NCUDL, 2011). Similarly, UDL "builds flexible features into curriculum thereby removing barriers and inviting engagement for the widest range of students, while maintaining high standards" (NCUDL, 2011, p.1).

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The term "*universal design for learning*" is a scientifically valid framework for guiding educational practice that:

- Provides flexibility in the presentation of information, in student response options to demonstrate knowledge and skills, and in student engagement.
- Reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient (CAST, 2011).

In addition, there are three primary principles that organize the guidelines for UDL implementation:

- Provision of multiple means of representation or the "what" of learning, since there is not one means of representation that is optimal for all learners.
- Provision of multiple means of action and expression or the "how" of learning, since there is not one means of action and expression that will be optimal for all learners.
- Provision of multiple means of engagement or the "why" of learning, since there is not one means of engagement that will be optimal for all learners in all contexts (CAST, 2011).

To facilitate the development of expert learners, who are distinguished by their resourcefulness, knowledge, goal-directed behavior and motivation, primary UDL curricular components that include goals, methods, materials and assessments are utilized. For more information on UDL guidelines, see:

- Center for Applied Special Technology (CAST)
- National Center on Universal Design for Learning
- PA Standards Aligned System: Universal Design for Learning
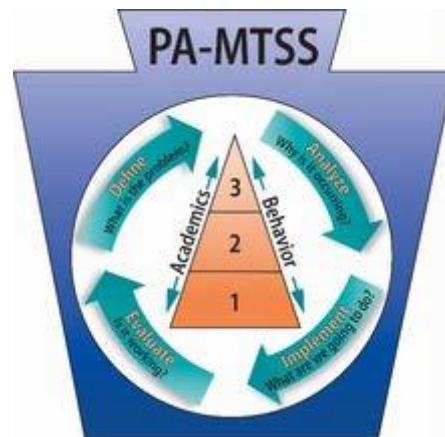
Multi-Tiered Systems of Support (MTSS-RtI) Response to Instruction and Intervention (RtI)

Effective reading instruction and the implementation of evidence-based practices lie at the very heart of Multi-Tiered System of Supports (MTSS). Pennsylvania's MTSS is defined as a comprehensive system of supports that in the commonwealth includes standards-aligned, culturally responsive, and high-quality core instruction, universal screening, data-based decision making, tiered services and supports, family engagement, central or building level leadership, RtI/SLD determination and professional learning. Simply put, PA-MTSS represents a broad set of evidence-based practices that may be implemented across a system to include Academics and Behavior within a recursive and systematic problem-solving process. PA-MTSS is relatively synonymous with RtI and is intended to help all students meet with continuous academic and behavioral success.

RtI in MTSS includes the practice of providing high-quality instruction and intervention matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying student response data to important educational decisions. When this process is adopted, systematic and systemic decision making is applied in general, remedial, and special education, creating a well-integrated system of instruction and intervention that is guided by student outcome data (Batsche et al., 2005). For the past several years, Pennsylvania Training and Technical Assistance Network (PaTTAN) has provided coordinated training and technical assistance in an effort to support the adoption and sound implementation of the Response to Instruction and Intervention (RtI) framework. PA leaders recognize that standards-aligned core instruction lies at the heart of RtI and is fundamental to technically adequate implementation and sustainable practices.

Educators need to establish connections between both UDL and MTSS. Both are systems which focus on a solid core of practices, including supplemental interventions and strategies that build upon this core. Furthermore, when the components of quality literacy instruction are efficiently and effectively organized and delivered within a comprehensive service delivery framework, progression toward systems alignment and better outcomes is possible.

The intent of multi-tiered systems of support is to use student performance data to allocate instructional resources to improve learning for all students using the most effective, efficient, and equitable means possible. The sound integration and scaling of MTSS framework components over time holds significant promise for transforming current systems and ultimately sustaining the following outcomes:

- Shared leadership for student learning facilitated by strong principal leadership and ongoing, job-embedded professional learning.
- Rapid cycles of improvement relative to teaching and learning.
- Data-informed decision-making that leads to knowledgeable curricular, assessment, and instructional improvements.

- Implementation of research-based instruction using a continuum of reliable and valid data sources.
- Improved and sustainable student learning outcomes.

The following checklist, adapted from Gersten, et al. (*Assisting Students Struggling with Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades*, 2008), may be helpful to school leaders addressing differentiation of literacy instruction. RtI is a component of MTSS that stresses literacy content. For a review of the complete checklist, please visit www.readingrockets.org.

1. All students are screened for potential reading problems at the beginning of the year and again in the middle of the year, and the progress of students who are at elevated risk for developing reading disabilities is regularly monitored.
2. Differentiated reading instruction is provided for all students based on assessments of students' current reading levels (Tier 1).
3. Intensive, systematic instruction is provided for 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 (Tier 2).
4. The progress of students receiving Tier 2 support is monitored at least once a month. These data are used to determine whether students still require intervention. For those students still making insufficient progress, school wide teams should design a Tier 3 intervention plan.
5. Intensive instruction (Tier 3), provided daily, promotes the development of the various components of reading proficiency to students who show minimal progress after reasonable time in Tier 2 small group instruction.

MTSS and UDL are both systematic and systemic roadmaps for organizing differentiated practices so that student needs are met as efficiently and effectively as possible through:

- Alignment of instructional foci to Pennsylvania Core Standards within and across tiered supports;
- Analysis and synthesis of data across multiple sources;
- Creation of flexible instructional groups;
- Evaluation of effectiveness of classroom instruction;
- Refinement of instructional practices matched to student need;
- Identification and monitoring of individual students in need of intensive differentiated instruction and intervention; and
- Establishment of structures that support ongoing, differentiated professional learning relative to student needs and systems level outcomes.

For more information on MTSS, see:

- Center on Instruction
- National Center on Response to Intervention
- Pennsylvania Training and Technical Assistance Network
- RtI Action Network
- Intervention Resources at PDE SAS