Wise Ways

The school culture supports teachers in practicing effective and responsive instruction to meet individual student needs. (CL8)

Evidence Review:
Schools are seeing increasingly academically diverse student populations (Gable et al., 2000; Guild, 2001; Hall, 2002; Hess, 1999; McAdamis, 2001; McCoy and Ketterlin-Geller, 2004; Sizer, 1999; Tomlinson, 2004a; Tomlinson, Moon, and Callahan, 1998) and it is essential for these differences among students to be taken into account. The use of the one-size-fits-all curriculum and single-paced lessons no longer meets the needs of the majority of students (Forsten, Grant, and Hollas, 2002; McBride, 2004; McCoy and Ketterlin-Geller, 2004; Tomlinson, 2002; Tomlinson and Kalbfleisch, 1998).

Differentiated instruction takes into consideration students' various cultural and socioeconomic backgrounds, languages, readiness levels, interests and learning profiles (Hall, 2002). It balances more specific needs of individual learners with the needs common to all students (Tomlinson, 2001a). The instructional process and the pace and rate toward understanding concepts varies, but the teacher can remain focused on specific key principles for all students (McAdamis, 2001; Tuttle, 2000). Students are valued for their strengths and are offered opportunities to demonstrate mastery of skills through a variety of assessment techniques (Mulroy and Eddinger, 2003; Tomlinson, 2001a; Tomlinson and Kalbfleisch, 1998; Tuttle, 2000).

Source- Subban, Pearl. 2006. Differentiated Instruction: A Research Basis.

References and Other Resources:
Forsten, C., Grant, J., and Hollas, B. (2002). *Differentiated Instruction. Different Strategies for Different Learners.* Peterborough: Crystal Springs Books.
Gable, R. A., Hendrickson, J. M., Tonelson, S. W., and Van Acker, R. (2000). Changing disciplinary and instructional practices in the middle school to address IDEA. *The Clearing House, 73*(4), 205-208.
Guild, P. B. (2001). *Diversity, Learning Style and Culture. New Horizons for Learning.* [Online] http://www.newhorizons.org/strategies/styles.guild.htm [15 May 2005].
Hall, T. (2002). *Differentiated Instruction. Effective Classroom Practices Report.* National Center on Accessing the General Curriculum, CAST, U.S. Office of Special Education Programs. [Online] http://www.cast.org/ncac/classroompractice/cpractice02.doc [15 May 2005].
Hess, M. A. (1999, 26 March 1999). *Teaching in mixed ability classrooms*. Wisconsin Education Association Council. [Online] http://www.weac.org/kids/1998-99/march99/differ.htm [31October, 2003].
McAdamis, S. (2001). Teachers tailor their instruction to meet a variety of student needs. *Journal of Staff Development, 22*(2), 1-5.
McBride, B. (2004). Data-driven instructional methods: "One-strategy-fits-all" doesn't work in real classrooms. *T.H.E Journal, 31*(11), 38-40.
McCoy, J. D., and Ketterlin-Geller, L. R. (2004). Rethinking instructional delivery for diverse student populations. *Intervention in School and Clinic, 40*(2), 88-95.
Mulroy, H., and Eddinger, K. (2003). Differentiation and literacy. Paper presented at the Institute on Inclusive Education, Rochester.
Sizer, T. R. (1999). No two are quite alike. *Educational Leadership, 57*(1), 6-11.
Tomlinson, C. A. (2001a). Differentiated instruction in the regular classroom. *Understanding Our Gifted, 14*(1), 3-6.
Tomlinson, C. A. (2002). Different learners different lessons. *Instructor, 112*(2), 21-25.
Tomlinson, C. A. (2004a). Differentiation in diverse settings. *School Administrator, 61*(7), 28-33.
Tomlinson, C. A., and Kalbfleisch, M. L. (1998). Teach me, teach my brain: A call for differentiated classrooms. *Educational Leadership, 56*(3), 52-55.
Tomlinson, C. A., Moon, T. R., and Callahan, C. M. (1998). How well are we addressing academic diversity in the middle school? *Middle School Journal, 29*(3), 3-11.

Examples:
Subban (2006) reported that a number of studies have demonstrated positive outcomes from the use of differentiated instruction. The Rockwood School District (Missouri) implemented a whole-

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school approach to differentiated instruction that included professional development, mentoring and intensive planning (McAdamis, 2001). Strategies like peer coaching, study groups and workshops were utilized to provide teachers with on-going support and feedback over a five year period and required a concerted effort from all stakeholders including school principals, teachers, district trainers and school authorities. McAdamis reported significant improvement in the test scores of low-scoring students following the use of differentiated instruction and teachers reported that their students were more motivated and enthusiastic about learning (McAdamis, 2001). Findings from this study also revealed that the initial stage of implementation was overcoming teacher resistance and results of the differentiated program were not actualized in the first couple of years.

Another study conducted by Affholder (2003) concluded that teachers who used differentiated instructional strategies more intensively showed "improved individual perception and adopted greater responsibility for student growth". In addition, teachers who employed higher levels of differentiated techniques experienced "increased feelings of self-efficacy and demonstrated greater willingness to try new instructional approaches" (Affholder, 2003).

Source- Subban, Pearl. 2006. Differentiated Instruction: A Research Basis.

References and Other Resources:
Affholder, L. P. (2003). Differentiated instruction in inclusive elementary classrooms. Unpublished EdD thesis. University of Kansas, Kansas.
McAdamis, S. (2001). Teachers tailor their instruction to meet a variety of student needs. *Journal of Staff Development, 22*(2), 1-5.

Evidence Review:
Response to Intervention (RtI) is "the practice of providing 1) high-quality instruction/ intervention matched to student needs and 2) using learning rate over time and level of performance to 3) make important educational decisions" (*Batsche, et al., 2005)*. This means using differentiated instructional strategies for all learners, providing all learners with scientific, research-based interventions, continuously measuring student performance using scientifically research-based progress monitoring instruments for all learners and making educational decisions based on a student's response to interventions.

RtI has three essential components: 1) using a three tier model of school supports, 2) utilizing a problem-solving method for decision-making, and 3) having an integrated data system that informs instruction.

Source- The Illinois State Response to Intervention (RtI) Plan, January 1, 2008

Evidence Review:
According to Adelman and Taylor (2010), if Response to Intervention (RtI) is treated simply as a matter of providing more and better instruction and student motivation is not taken into account, there is no way to validly assess whether or not a student has a true disability or disorder. If this is the premise, it is also unlikely to be effective for a great many students. However, if the strategies are understood as part of a comprehensive system of classroom and school-wide learning supports, schools will be in a position to not only address problems effectively early after their onset, but will prevent many from occurring.

Adelman and Taylor (2010) recommend that the 3-tiered RtI framework expand to ensure an optimal learning environment that takes student motivation into account and addresses barriers to teaching and learning and re-engages disengaged students. "Implied in all this is that specified staff are working to ensure (1) development of an optimal learning environment in classrooms and schoolwide, (2) classroom teachers are learning how to implement "well-designed early intervention" in the classroom, and (3) support staff are learning how to play a role, often directly in the classroom, to expand intervention strategies as necessary."   RtI needs to be embedded into a comprehensive system of learning supports that clarifies the full continuum of supports (i.e.,

promotion of social, emotional, behavioral and cognitive development and prevention of problems, targeted interventions that occur early after onset, and intensive interventions) and the critical arenas of intervention (e.g., classroom, supports for transitions, crisis response/prevention, home involvement, community engagement, and student & family assistance). In addition, the framework needs to allow the weaving together of school-community-home resources to develop the system.

Source- Center for Mental Health in Schools at UCLA, Response to Intervention

Evidence Review:
A meta-analysis of Three-Tier Models of Reading and Behavior was conducted in which the relative impact of a reading only model, a behavior only model and an integrated model were evaluated. The majority of the studies took place at the elementary level. The reading investigations and the integrated investigations primarily occurred at the Tier II level where as the behavior investigations typically took place at the Tier I level. Findings from this meta-analysis showed that reading outcomes were positive for all three models. However, the integrated model resulted in the largest magnitude of the effect size. The magnitude of the effect sizes for the reading and behavior only models on reading outcomes were moderate and small, respectively. The integrated model and the behavior only models also positively impacted behavioral outcomes. A moderate effect size was found for the integrated model on behavioral outcomes…, whereas the magnitude of the behavior-only model on behavior… was slightly lower." Although findings from this meta-analysis did not indicate a positive impact on behavioral outcomes from the reading only models, other researchers have found that improving reading skills through reading interventions also improves social adjustment (Benner, Kinder, Beaudoin, Stein, & Hirschmann, 2005; National Reading Pan, 2000; Simmons & Kameenui, 1998). Based on these findings, Sugai and Horner (1999) suggest that "an integrated systems approach to preventing reading difficulties and behavioral challenges many not only maximize outcomes but also be a resourceful tactic to address both issues simultaneously."

Source: Stewart, Rachel M., et.al. (2007). Three-Tier Models of Reading and Behavior: A Research Review. *Journal of Positive Behavior Interventions.*

References and Other Resources:
Benner, G.J., Kinder, D., Beaudoin, K., Stein, M., & Hirschmann, K. (2005). The effects of the Corrective Reading Decoding program on the basic reading skills and social adjustment of students with high-incidence disabilities. Journal of Direct Instruction, 5, 67-80.
National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754_. Washington, DC: U.S. Government Printing Office.
Simmons, D.C., & Kameenui, E.J. (1998). *What reading research tells us about children with diverse learning needs: Bases and basics.* Mahwah, NJ: Erlbaum.
Sugai, G., & Horner, R. H. (1999). Discipline and behavioral support: Practices, pitfalls, and promises. *Effective School Practices, 17, 10-22.*