GREAT SCHOOLS PARTNERSHIP

Varied Content, Materials, and Methods of Instruction: Evidence and Resources

3. Varied Content, Materials, and Methods of Instruction: Students explore ideas and information in varied ways and access learning through multiple entry points. Teachers select content and materials to engage and meet the needs of all learners.

Supporting Beliefs

- Selected content must foster and reflect an understanding of multiple perspectives, critical issues, and the diversity of our world.
- Learners must see themselves represented in the materials and connect to the content in authentic ways to become fully engaged.
- Different entry points, options for exploration, and end products are critical for student engagement and success.

Key Traits

Content	Process	Assessment
• Instructional materials and activities reflect the identities of learners in the community and the diversity of our world. • Content is selected and explored in ways that foster and reflect an understanding of multiple perspectives and critical issues. • Teachers select materials for instructional activities to meet the needs of a variety of learners. • Students have choice in materials and topics in order to meet learning outcomes.	• Students make meaningful choices about their learning and are taught how to make those choices well. • Students learn new information in different ways–inquiry, investigation, presentation, etc. • Student groupings are flexible, varied and intentionally matched to the activity and learner. • Students use a range of methods (differentiated homework, reading, activities) and supports (including technology) to advance their learning. • Time and structures support reteaching and extension of learning, as needed. • Resources and materials improve accessibility for a variety of learners.	• Students have choices about how they demonstrate their learning. • Students use multiple and varied pathways to reach common ends. • Students use varied tools and supports (including technology) to demonstrate learning. • Assessments are relevant, authentic, and purposeful.

Literature Supporting the Element

1. "Of all elements of an instructional plan, the most critical is the design of instructional activities. The important question to be answered is this: 'What could students *do* in order to learn X?' There are many choices, of course. They could listen to a presentation or they could work--either alone or in groups--to solve a problem or to engage in a project. They could participate in a class discussion or reflect in a journal on new information. The list is endless, and

skilled teachers draw on an extensive repertoire in making their decisions. Given the importance of students' active intellectual engagement in learning, skilled teachers, in their design of activities, favor those that challenge students to be cognitively active, that offer students the opportunity to select an activity from among several options, and that permit students the opportunity to develop their own understanding."
—Danielson, C. (2007). *Enhancing Professional Practice: A Framework for Teaching* (2nd ed.) (p. 57). Alexandria, VA: Association for Supervision and Curriculum Development.

2. "A 2008 meta-analysis of 41 studies found a strong link between giving students choices and their intrinsic motivation for doing a task, their overall performance on the task, and their willingness to accept challenging tasks (Patall, Cooper, & Robinson, 2008)."
—Goodwin, B. (2010, September). "Research Says...Choice is a Matter of Degree." *Giving Students Meaningful Work 68*(1), 68.

3. "When teachers can present tasks in ways that make success seem attainable, and when they provide students with the support and tools to be successful, students are more likely to engage and persist in those tasks (Dweck, Walton, & Cohen, 2011)."
—Farrington, C.A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T.S., Johnson, D.W., & Beechum, N. (2012). *Teaching Adolescents to Become Learners. The Role of Noncognitive Factors in Shaping School Performance: A Critical Literature Review* (p. 26).Chicago: University of Chicago Consortium on Chicago School Research.

4. "One aspect of previous knowledge that is extremely important for understanding learning is cultural practices that support learners' prior knowledge. Effective teaching supports positive transfer by actively identifying the relevant knowledge and strengths that students bring to a learning situation and building on them. Transfer from school to everyday environments is the ultimate purpose of school-based learning. An analysis of everyday environments provides opportunities to rethink school practices in order to bring them into alignment with the requirements of everyday environments. But it is important to avoid instruction that is overly dependent on context. Helping learners choose, adapt, and invent tools for solving problems is one way to facilitate transfer while also encouraging flexibility.
—Bransford, J.D., Brown, A.L, & Cocking, R.R. (Eds.). (2000). *How People Learn: Brain, Mind, Experience, and School*. Washington, DC: National Academy of Sciences.

5. "A teacher who is differentiating understands a student's needs to express humor, or work with a group, or have additional teaching on a particular skill, or delve more deeply into a particular topic, or have guided help with a reading passage—and the teacher responds actively and positively to that need. Differentiation is simply attending to the learning needs of a particular student or small group of students rather than the more typical pattern of teaching the class as though all individuals in it were basically alike."
—Tomlinson, C., & Allan, S. (2000). *Leadership for Differentiating Schools and Classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

6. "Studies have shown that 'contracts' can have positive effects on students' ability to set objectives for their learning (Brophy, 2004; Greenwood, 2002; Kahle & Kelly, 1994; Miller & Kelley, 1994; Tomlinson, 2001). These contracts provide students with control over their learning and provide opportunities for teachers to differentiate instruction to better accommodate students' learning needs (Tomlinson, 1995).... [C]ontracts can include teacher-identified or student-identified learning objectives. They can take the form of a learning plan that provides options for the kinds of activities students do on particular days and at specific times. In addition, they also provide students with guidance about what they need to accomplish, help students organize their time, and provide ongoing opportunities for students to seek or provide their own feedback."
—Dean, C.B.,Hubbell, E.R., Pitler, H., & Stone, B. (2012). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

7. "The most important thing is to focus on keeping students academically engaged so that they are invested as learners. Generally, this requires teachers to utilize strategies that are more interactive and more hands on. Most students learn better by doing than by sitting and listening passively. Teachers who employ strategies that challenge students to think and use their problem-solving abilities will be more successful in creating a learning environment that pushes kids to excel. We must challenge kids and give them the opportunity to see how what they learn in school can be applied in the real world. Cultural relevance is a really important part of this so it is imperative that we utilize multicultural books and learning materials that will engage kids and motivate them to apply themselves."
—Rea, D. W. (2015). Interview with Pedro Noguera: How to Help Students and Schools in Poverty. *National Youth-At-Risk Journal 1*(1), 11-21.

8. "Culturally relevant teachers understand that learning is facilitated when we capitalize on learners' prior knowledge. Rather than seeing students' culture as an impediment to learning, it becomes the vehicle through which they can acquire the official knowledge and skills of the school curriculum. However, to capitalize on students' cultures, teachers have to know students' cultures."
   —Ladson-Billings, G. (2001). *Crossing Over to Canaan: The Journey of New Teachers in Diverse Classrooms*. San Francisco, CA: Jossey-Bass Inc.

9. "It is important to keep in mind that construction of knowledge is not the same as physical involvement with manipulative materials. So-called hands-on learning may or may not be constructivist. Students can follow directions as mindlessly when using physical objects as they can when completing a worksheet. In a constructivist approach, students are cognitively engaged in what they are doing; the activities in other words, must be 'minds-on.' Although in many situations physical involvement with real objects aids this process, physical involvement provides no guarantee that students will be mentally engaged."
   —Danielson, C. (2007). *Enhancing Professional Practice: A Framework for Teaching* (2nd ed.) (p. 17). Alexandria, VA: Association for Supervision and Curriculum Development.

10. "Effective education requires the fusion of skill and will such that intrinsic interest and motivation are given at least as much attention as cognitive outcomes (Crooks, 1988). Research suggests that when students share in the assessment process, they perceive more control of, and more responsibility for, their own learning (Rieg, 2007). Allowing students to help determine the criteria by which their work is judged gives them a feeling of empowerment and makes evaluation of their work seem less punitive and more constructive (Brookhart, 1997; Rieg, 2007). In turn, the positive effects on self-efficacy and motivation are likely to promote learning and achievement. Consistent with this notion, Haydel & Roeser (2002) found that students who believe they can affect their learning through persistently engaging in the educational process score better on standardized tests."
    —Clark, Tedra, Englert, K., Frazee, D., Shebby, S., & Randel, B. *Stupski Foundation's Learning System: Assessment*. Mid-continent Research for Learning. Denver, CO: McREL. Retrieved from https://files.eric.ed.gov/fulltext/ED544626.pdf.

Resources and Readings

Brief Articles

1. Armstrong, T. (2017, April). Neurodiversity: The Future of Special Education. *Differences, Not Disabilities 74*(7), 10-16.
   This article explains the concept of neurodiversity as a way to recognize and honor neurological differences rather than seeing them as deficits. The author argues that field of special education has much to learn from the neurodiversity movement and that special education should shift practices to better reflect the concepts behind neurodiversity.

2. Gonzalez, J. (2014, November 19). A Starter Kit for Differentiated Instruction. *Cult of Pedagogy*. Retrieved from https://www.cultofpedagogy.com/starter-kit-differentiated-instruction.
   This article includes links to a collection of high-quality resources for learning how to differentiate including videos from The Teaching Channel and Edutopia. Resources are focused on application to a classroom setting.

3. Powell, W., & Kusuma-Powell, O. (2012, February). Planning for Personalization. *For Each to Excel 69*(5), 52-55.
   The article explores the connection between standards-based education and personalized learning with a focus on meeting learners where they are and using rich concepts as the base of teaching and learning.

4. Stephens, C. (2015, September 15). Levels of Understanding: Learning That Fits All. *Edutopia*. https://www.edutopia.org/blog/levels-of-understanding-learning-fits-all-charity-stephens.
   This short article describes how to "tier for levels of understanding" using depth of knowledge to describe levels and sharing those descriptions with students. The article includes links to other useful resources.

5. Tomlinson, C., & Javius, E.L. (2012, February). Teach up for Excellence. *For Each to Excel 69*(5), 28-33.
   In this article Tomlinson and Javius explore the way that sorting students into different tracks within a school correlates strongly with student race and economic status and predicts and contributes to student outcomes. They outline strategies for creating classrooms that support equity of access to excellence.

6. Will, M. (2017, May 24). What happens when students design their own assessments? *Education Week*. Retrieved from http://www.edweek.org/ew/articles/2017/05/24/what-happens-when-students-design-their-own.html.
   This article details the efforts of the Roanoke Virginia County district to move toward student-led assessments. It includes the voices and perspectives of students, teachers and administrators.

7. Edutopia. (2016, September 12). Differentiated Instruction: Resource Roundup. *Edutopia*. Retrieved from https://

www.edutopia.org/article/differentiated-instruction-resources.
This article includes links to many helpful resources related to differentiated learning including resources that focus on use of technology, project-based learning and examples from schools.

Books and Reports

1. Ballenger, C. (2009). *Puzzling Moments, Teachable Moments: Practicing Teacher Research in Urban Classrooms.* New York, NY: Teachers College Press.
   In this book, Ballenger highlights the intellectual strengths of poor, urban, immigrant, or bilingual children. She challenges long-held notions about these groups of children and offers ideas for how teachers might change their thinking and practices in the classroom.

2. American Institutes for Research. (2016). *Study of Deeper Learning: Opportunities and Outcomes*. American Institutes for Research. Retrieved from http://www.air.org/project/study-deeper-learning-opportunities-and-outcomes.
   This report examines how some schools have provided opportunities for students to acquire deeper learning skills and how these opportunities are related to student outcomes.

3. Center for Opportunity Policy in Education, Stanford University. (2014). *Student Centered Schools: Closing the Opportunity Gap*. Stanford, CA: SCOPE. https://edpolicy.stanford.edu/sites/default/files/scope-pub-student-centered-research-brief.pdf
   This report reviews the practices and outcomes of four urban high schools. It reviews the student-centered approaches being implemented in those schools as well and the student outcomes achieved.

4. Gandara, P. *Deeper Learning Research Series: The Implications of Deeper Learning for Adolescent Immigrants and English Language Learners*. (2015, November). Students at the Center: Jobs for the Future. Retrieved from http://www.jff.org/sites/default/files/publications/materials/The-Implications-of-DL-for-Adolescent%20Immigrants-and-ELLs-110415a.pdf.
   In this this report Gandara argues that while English language learners are likely to receive great benefits from an education based in the principles of Deeper Learning, they are often overlooked as deficient students in need of remediation. She details the barriers many such student face and suggests ways to reframe how we look at ELL and immigrant student populations in relation to deeper learning.

5. Gay, G. (2010). *Culturally Responsive Teaching: Theory, Research, and Practice*. New York, NY: Teachers College Press.
   Combining insights from multicultural education theory and research with real-life classroom stories, Gay demonstrates that all students will perform better on multiple measures of achievement when teaching is filtered through their own cultural experiences.

6. Thomas B. Fordham Institute. (2017). *What Teens Want From Their Schools: A National Survey of High School Student Engagement*. Washington, DC: Crux Research.
   This national survey of students uncovers students' feelings about school and what motivates and engages them to learn.

7. Kallick, B., & Zmuda, A. (2017). *Students at the Center: Personalized Learning with the Habits of Mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
   This book explores and explains a model of personalized learning that focuses on helping students develop and apply habits of mind. It includes practical suggestions and examples for application.

8. Martinez, M., and McGrath, D. (2014). *Deeper Learning: How Eight Innovative Public Schools are Transforming Education in the Twenty-First Century*. New York, NY: New Press.
   In this book, Martinez and McGrath detail the work of eight innovative public schools. They explore the role of innovation and highlight the real work of students and teachers in these schools.

9. Tomlinson, C. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
   This book includes a balance of theory behind differentiated instruction and instructional strategies that can be implemented in the classroom. It includes examples of how teachers are differentiating classrooms across grade levels and content areas.

Videos

1. Edutopia. Project Based Learning: Success Start to Finish.
   Retrieved from https://www.youtube.com/watch?v=-OWX6KZQDoE

2. Teaching Channel. Daily Assessment with Tiered Exit Cards.
   Retrieved from https://www.teachingchannel.org/videos/student-daily-assessment

3. Teaching Channel. Learning Menus: Giving Options and Independence.
   Retrieved from https://www.teachingchannel.org/videos/independence-in-learning

4. Teaching Channel. Making Learning Personalized and Customized.
   Retrieved from https://www.teachingchannel.org/videos/workshop-model-customized-learning

5. EL Education. The Four Ts. Retrieved from https://eleducation.org/resources/the-four-ts

6. EL Education. Matching Module Lessons to Learner's Needs.
   Retrieved from https://eleducation.org/resources/matching-module-lessons-to-learners-needs