

REL Mid-Atlantic Educator Effectiveness Webinar Series
Effective Differentiation: A Guide for Teachers and Leaders
Q&A for Carol A. Tomlinson, Ed.D.
September 17, 2015

In this webinar, Dr. Carol Tomlinson of the University of Virginia presented the research base supporting the practice of differentiation and described the characteristics of effective differentiation. She led a discussion of how quality preparation can build and strengthen teachers' knowledge and skills in implementing differentiated instruction strategies. The [webinar](#) and [PowerPoint presentation](#) are also available.

Questions

1. How can instructional rounds be used for priority and focus schools?

In any major change initiative, it's important to have clearly defined targets for the long term, the short term, and for individuals. Everyone involved needs to be clear on what those targets for change are and what it looks like to grow in comfort and competence with them. Instructional rounds are one great way to help teachers and leaders alike think about the change targets and progressions of growth in achieving them.

2. How can teachers teach to the multiple intelligences?

Teachers can teach to the multiple intelligences of students by using varied approaches and multiple modes of presentation, which lead to more efficient learning for more students. They can encourage students to use their preferred learning modes by offering a variety of opportunities to engage with the material and show what they know in different ways. Research has demonstrated that providing students with the opportunity to engage with content in different ways will not only lead to greater achievement levels and attitude gains, but also to increased test scores even when the test is not in their preferred mode. I believe it's best to offer students options for taking in information, processing information, and demonstrating what they've learned—and helping them learn to evaluate which approaches work best for them in a particular context—rather than “assigning” students to what a teacher determines to be a student's “preferred mode of learning.”

3. Are there specific strategies for growth for students with disabilities? How do you differentiate instruction so that the special education students grasp the same concepts as the regular education students?

The idea of differentiated instruction stresses that all students follow their own trajectory of learning and growth. All students differ in readiness, point of entry into a given segment of learning, interest, personal proclivity for learning about or participating in specific topics, and learning profile (ways in which individuals approach learning and learn most efficiently). It's important to understand a particular student's disability (there's a vast spectrum of disabilities, of course) and to plan to help that student move ahead from his/her point of entry in terms of readiness, to connect important content with that student's interests, and to provide options for how the student takes in, makes sense of, and expresses learning—based on the student's needs. That's true for any student, but working around some disabilities can require different scaffolding, including different kinds of materials/learning sources, time, room arrangements, etc.

4. What specific advice do you have for world language teachers in differentiation? How should differentiated instruction look in bilingual classrooms (Spanish speakers) and English as a second language classes?

Differentiated instruction is an essential component of teaching, regardless of the content. World language teachers, like all teachers, do best when they understand and address the reality that students learn in their own ways and at their own pace. Using small group settings supports students so that they may collaborate and learn from their peers. In world language classes, it can be helpful to look at student growth in terms of various components such as vocabulary, oral production, writing, translation, cultural understanding, and so on. It may well be that a student who learns vocabulary very readily is weak in oral production, or that a student who has difficulty generating appropriate grammatical frames can translate more successfully because the grammatical frames are in place. There will be times, of course, when the whole class needs to work together, but at other times, it likely makes sense for some students, for example, to work on a particular vocabulary set for only a brief time and move on to oral use of the vocabulary while another group of students may need longer to work with vocabulary before trying to use it orally. Some students might be asked to generate a conversation based only on a prompt, while other students would learn better by working on a conversation on the same prompt with guiding questions or with key words provided.

5. Can you give examples of differentiation that apply to pre-literacy lessons in kindergarten?

For early childhood, teachers can apply the same principles of differentiation to ensure that students have opportunities to learn material in a variety of ways. Encouraging students to interact with and learn about the content and adjustment to kindergarten can support students in developing a passion for learning and an understanding of content. For example, you can teach students about patterns by having them act as scientists and collect leaves (data) on a nature walk and then ask them to work with the data they collected and classify the leaves. This gives students the opportunity to decide how to show categories and contents and how to present the data they collected. It's helpful to encourage students to grow in the foundational skills of literacy and numeracy from their varied points of entry and

at their own pace. It's also important with this age group to understand that adaptation to classroom routines will progress at varied rates and with different scaffolding.

6. How do differentiation practices vary by grade level? How does differentiation differ in different areas of instruction?

To differentiate effectively, teachers need to have a solid understanding of what their students know and how their students can demonstrate this knowledge. Although the content is different at each grade level, teachers can differentiate by learning about their students and understanding how their students learn best. One way is by using the *teaching up* technique, in which a teacher first plans for advanced learners, and then scaffolds opportunities for other learners, so that the greatest number of students can access the most rigorous and engaging learning experiences. In the end, differentiation in every subject requires teachers to ask: (1) what should my students know, understand, and be able to do as the result of a segment of learning, (2) what are my students' current entry points with those KUDs (knowledge, understanding, and skills), (3) how can I provide classroom time for them to move ahead in proficiency with the KUDs from their varied entry points, (4) how can I help them link the content we need to learn with things they care about (to increase motivation and understanding), and (5) how can I establish classroom routines that allow for both predictability and flexibility and allow a mixture of whole class, small group, and individual work and support?

7. What should pre-service teachers be taught about this subject? How do you present differentiation to new teachers in a way that makes it manageable and not one more stress?

Differentiation is not an add-on, but rather a crucial component of effective instruction. Differentiation should be included from the early stages of teacher training and incorporated throughout teachers' training. Pre-service teachers will become confident using differentiated instruction over time and with practice. By demonstrating the importance of the five key classroom elements in student success—environment, curriculum, formative assessment, responsive instruction, and flexible classroom management—pre-service teachers can begin to understand why differentiation is important within these contexts, how these elements work interdependently, and how they can differentiate effectively. Pre-service teachers must also learn to see students as individuals and trust their students to work independently and collaboratively in a setting appropriately created and monitored by the teacher.

8. How do you help new teachers sort out the difference between differentiation and culturally responsive pedagogy?

New teachers should be aware of the students in their class and teach according to their understanding of their students, including their knowledge of students' age, gender, learning level, challenges, and cultures. New teachers can use differentiation techniques by planning and carrying out routines that invite collaboration and independence, focusing on student variance. Teachers differentiate instruction

and material based on their growing understanding of students’ cultures—as well as their gender, interests, points of readiness, and so on. There is a very strong link (interdependence) between culturally responsive pedagogy and differentiation.

9. Do you have a good resource for informing future and practicing teachers on management of differentiated classrooms?

New teachers should know their students and build strong relationships with them. Managing the classroom is easier and more effective when the teacher knows the students’ personalities, backgrounds, and motivations. Getting to know students and caring for them will support classroom management. Teaching students the skills necessary for effective group work will support students in learning effectively in groups. A colleague and I gave our best shot at “unpacking” the management of differentiation in a book published by ASCD called *Leading and Managing a Differentiated Classroom*.

10. How can a principal support teachers with differentiation?

Substantial, informed, and sustained leadership from the school principal is necessary to encourage teachers in a school to use differentiation techniques. Principals can visit and learn from classrooms where differentiated instruction is effectively used, provide mechanisms for sharing differentiated lessons and materials, and conduct lesson studies with built-in observations. Principals who have a vision for differentiation are the catalyst to supporting this practice in their schools. To lead for change implies not only a strong vision for the change, but the ability to: share the vision in ways that are compelling to colleagues, invite colleagues to shape the vision, establish and support long-term and short-term plans for the change, provide intelligent and sustained opportunities for teachers to learn about the change and implement it (with feedback) in their classrooms, listen carefully to faculty for feedback and observe classrooms carefully with an eye to consistently providing the best support possible for faculty growth, persist over time, celebrate successes, refocus when things don’t go as they should, and, at every hand, model differentiation for their teachers.

11. How do you support administrative leaders with implementation?

Administrative leaders need to understand the importance of differentiation and why it is crucial that educators implement differentiation in their classrooms. That means learning a lot about differentiation—why it matters, what it really ought to look like in a classroom, how teachers develop with the “big ideas and skills” of differentiation, how to respond honestly and helpfully to teachers’ concerns, and so on. Informed leadership is critical to making substantive changes across schools.

12. Do you have any resources and/or strategies that make differentiation as accessible and fluid as possible?

Research suggests that students mostly differ in readiness (growth), interest (motivation), and learning profile (efficiency). Teachers can use the teaching up approach, in which teachers first plan for advanced learners, which will scaffold opportunities for other learners. This approach takes advantage of heterogeneous classrooms and the unique backgrounds of each student. More information can be found in the book titled *Leading for Differentiation: Growing Teachers Who Grow Kids* (Tomlinson and Murphy). Additional resources can be found in *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement* and *Visible Learning for Teachers: Maximizing Impact on Learning*, both by John Hattie. Differentiation should be a consistent part of teaching.

13. Can differentiated instruction be a method of instruction used for the entire class that meets the needs of individuals? For example, instructional strategies that have been incorporated into a lesson, like using art in a reading lesson for summarizing?

Differentiated instruction is intended for all students. Teachers have a variety of students in their classrooms and should provide opportunities for students to demonstrate their knowledge in different ways. Teachers should change their teaching styles and how they present information. Teachers should teach through multiple modes to improve achievement and attitude gains across contexts, focus on multiple intelligences and encourage students to use their preferred learning modes, and provide students with the opportunity to learn in accordance with their intelligence preferences. So, we have evidence that your example—teaching in multiple modes or providing multiple modes of expression for students—is useful for a variety of reasons. Those things are likely not adequate, however, to address the readiness needs of students who vary markedly from the “norm” in a classroom. For example, it may help a student who is new to English or who struggles with writing to be able to storyboard a piece of fiction, providing brief captions for the frames of the storyboard rather than writing an essay—but part of the plan also needs to be helping that student learn vocabulary and/or writing skills necessary to grow consistently and markedly in those skills.

14. How do you best reach students who are quiet in class?

Students do not come to class at the same entry points, with the same supports and opportunities, the same interests, or the ability to learn in the same ways. Differentiating by grouping students of different readiness levels, interest, and learning profiles (including quieter students who might prefer to demonstrate their understanding in different ways) allows students to learn from each other and work collaboratively. Some students may need your permission to be quiet in class—with your assurance that you’ll be looking forward to reading their ideas since they are uncomfortable sharing the ideas orally. Other students may respond well to a “heads-up” prompt—such as saying to the class, “In a couple of minutes, I’m going to ask you what you think is the most important reason the U.S. public lost faith in the war in Vietnam, but first, here’s another question....” That cue may be sufficient to help some students who have information but don’t do well with “surprise” questions. *Think-pair-share* is another strategy that’s great for helping students explore ideas in the safety of very small group conversations

prior to whole class discussions. In general, it's critical for students who are quiet to learn that the class is a safe place to speak, with both peers and a teacher who understand and accept learner differences.

15. Can you review the research on positive effects of heterogeneous grouping as evidenced in the current research?

It is advantageous to have heterogeneous classrooms so that students can learn from one another. In these classrooms, peers can work together and bring their different talents, interests, and dispositions to their work. Differentiation relates to addressing students' different phases of learning rather than providing different activities to different groups of students, another reason why differentiation is advantageous to a group that is not necessarily homogeneous. Creating appropriate materials for groups based on their common needs supports them in working together. By building skills so that students can positively benefit from working in groups, students can learn from each other. Check the work of John Hattie here (*Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement* and *Visible Learning for Teachers: Maximizing Impact on Learning*), as well as work around a Complex Instruction model. It's important, too, to consider this topic in the context of work on inequities in learning opportunities within and across schools.

16. What are some websites that could help with differentiation?

These websites include more information about differentiation and resources and examples to support differentiation:

- <http://differentiationcentral.com/>
- <http://www.caroltomlinson.com/>

17. What are some strategies for differentiated instruction when it comes to gifted or talented learners? What are your thoughts on congregated gifted programming vs. regular class with effective differentiated instruction?

All students should feel like they are being pushed to learn and succeed every day. By teaching up, or planning for advanced learners first and then scaffolding opportunities for other learners, teachers can meet the needs of all students in their classrooms. Differentiations and certain practices of it, such as teaching up, are applicable to students of all different groups, including those in different subjects and those who are advanced learners. In order to ensure learning for all students, it is essential that teachers have key learning goals for all students and understand each student trajectory (where the student currently is in the learning stage, and where the student needs to be). Students need to learn that a key goal for the class is maximizing growth for every learner—so that just “being ahead” is not the end game. It's for each student to grow as much as he or she can in knowledge, skills, understanding, engagement, habits of mind, etc.

18. Can you describe differentiation across cultural worldviews?

Members of different cultures see differentiation differently. Where lockstep instruction is the norm and creating very homogeneous and compliant populations is highly valued, differentiation doesn't make a great deal of sense. However, there is huge interest in differentiation in many, many countries around the globe—even in a good number of places where standardization has been the order of the day. For a constellation of reasons, there seems to be broad understanding around the world that we live in a time where we can't afford to waste individual capacity—and in a time where “customization” is becoming an expectation for young people and adults alike—with school being no exception.

19. What is your advice on moving reluctant teachers toward differentiation?

Principals and administrative leaders are paramount in encouraging teachers to use differentiation practices. They must support teachers in developing competence and confidence to attend to learner variance. School leadership should provide support, actionable feedback, and time for teachers to practice and develop their differentiation skills. Administrators can remind teachers that differentiation is not an add-on, but a crucial aspect of teaching that should be developed and practiced. There is an important balance leaders need to achieve in giving teachers a voice about their own next steps in learning and useful support in taking those next steps without relinquishing the imperative for growth. It's much like a differentiated classroom where a teacher gives students the message that she can help them find varied ways to achieve critical goals and will be eager to do that—but that working vigorously toward those goals is not negotiable.

20. What are the best practices in assessing whether teachers are effectively using differentiated instruction in the classroom?

Principals can tell the difference between good differentiated instruction and poor differentiated instruction by building a solid foundation for their own understanding of differentiation, observing classrooms, and measuring student growth across grades and in individual classrooms. Principals can look for evidence of teaching up, grouping students appropriately, and creating meaningful learning opportunities directed at students' specific needs and learning styles. Principals can measure teachers on continua by understanding and measuring the five key classroom elements—learning environment, curriculum, assessment, instruction, and leadership and management—and the role that each of them plays in student success and how they are interdependent. Leadership can encourage teachers and support them in developing high impact within each of the five elements. There are tools such as those shared during this webinar on differentiation that can help teachers and principals develop a shared language about the characteristics of quality differentiation.

21. What is the difference between differentiated instruction and competency-based education?

Competency-based education encourages teachers to ensure that their students attain certain competencies based on a specific timeline. Differentiated instruction understands that students learn at different rates and that all students are on different learning progressions. Grouping students at different places on their learning progressions encourages them to move forward and learn from students around them. In that way, the two approaches have similar aims. Structures built around the two models may vary, but their intent is overlapping in some key ways.

22. How do you incorporate this learning to prepare students for the National GED test?

Research suggests that providing students with the opportunity to learn in accordance with their intelligence preferences results in higher standardized test scores, even when the test was not in their preferred mode. Research also states that on achievement tests, students who learned and expressed learning in preferred learning modes outperformed students who did not have that opportunity. That's likely the case for two reasons. First, students learn more when they are working on their own next steps in a learning trajectory. Second, they develop a greater sense of confidence when they can see themselves succeeding and growing.

Preparing for the GED test is really a perfect context for differentiation. Any group of students preparing for that test is likely to be all over the map in terms of readiness in a variety of topics on the test. While it may make sense to have whole class sessions, for example, on mathematical reasoning or how to solve a quadratic equation, it's also highly likely that some students in the group will have a much more sophisticated understanding of math than others. It's not likely to be fruitful for all the students to do the same things in preparation for the test without regard to what they already know and what their next steps in learning are. Students are also likely to learn best in varied ways which also offers an opportunity for differentiation.

23. What data can be collected regularly to track the effectiveness of differentiated instruction across a grade level?

Leadership can track the effectiveness of teachers within the five key classroom elements: learning environment, curriculum, assessment, instruction, and leadership and management. Administrators can track the effectiveness of their teachers in each of these elements and support them in developing necessary skills to improve in them. Student achievement can be tracked through various types of assessment across grade levels. In making substantive changes in teaching (such as effective differentiation), it's important to first track teacher development for a good while (likely 2–3 years) before expecting that enough change will have occurred to impact student outcomes significantly. We've seen settings where student improvement was evident quite a bit sooner than that—but studies on school change tend to offer that advice.

24. What are differentiation strategies that align with the Common Core State Standards (CCSS)?

Differentiation is an essential component of teaching, so differentiation practices can align with any standards, including the CCSS. An example of interest-based inquiry is in middle school English, in which the teacher can focus on the Common Core English Language Arts Standards: development of theme, understanding text, and using text evidence to support a position. This inquiry centers on a cluster of standards and functions as a performance assessment (product) for a unit of study. Students have the ability to work on the inquiry at varied points in a unit that explores the cluster of standards so they have a context for applying what they are learning in an area of interest to them. Teachers and students can also monitor understanding of skills through application and transfer along the way. The bottom line is that CCSS is a predominately curricular issue. Differentiation is predominately an instructional issue. The two models are flip sides of the same coin. Implemented appropriately, differentiation can help more students do much better with CCSS than they are likely to do without differentiation.

25. Given the time pressures that teaching staff are under, what are some effective strategies that can be employed to cluster students into manageable groups initially and then monitor on an ongoing basis?

It's important to encourage teachers to begin with manageable steps rather than trying to do too many things at once. Trite as it sounds, it's nearly always wise to learn to walk before learning to run. So the message is, begin small, begin with steps you feel make sense for you, your students, and your content—but do begin! It's also helpful to give teachers an opportunity to do shared planning with appropriate structures in place to support meaningful work. It makes much better sense for fifth grade teachers to differentiate a unit in which each of them takes responsibility for one or two differentiated tasks (or formative assessments, etc.) than to have all of them try to differentiate the whole unit alone. It can also be helpful for administrators to help teachers see what they can eliminate in their current work to save some time (for example, giving feedback on a set of papers on just two target skills vs. trying to “grade” or comment on everything in all the papers).

26. Is there an existing lesson plan format that incorporates differentiated instruction and Universal Design for Learning?

The foundational principles of Universal Design for Learning (UDL) are engagement, action and expression, and representation. Engagement calls for flexible instruction, which is a core tenet of differentiated instruction. Action and expression refers to students and teachers knowing students' most desirable methods of learning strategies and calls on teachers to vary their methodologies. Representation and the importance of using flexible methods of presentation when teaching that are satisfactory for every learner are also stressed in effective differentiation. UDL and differentiated instruction go together and have roots in the same intentions to work with all students to ensure student achievement. In the end, teachers need to be clear about goals, the goals need to be rich and meaningful, and teachers need to explain ways in which they will differentiate content, process, and/or product based on student readiness, interest, and/or learning profile. Flexibility of taking in information,

making sense of information, and expressing information—as well as flexibility in teacher support—is implicit in the language of UDL and differentiated instruction.

27. How do you differentiate for students who have undiagnosed learning disabilities?

A key focus of differentiation is for teachers to know and work with their students where they are and by following the methods and practices that work best for them. Students are unique and at different levels of readiness and have different learning profiles, which means that teachers should get to know their students and understand how all of their students learn, whether or not they have undiagnosed learning disabilities.

28. What is the difference between differentiation and modifications?

Modifications refer to changes made to curriculum expectations in an attempt to meet the needs of specific students. They are made when the expectations are beyond a particular student's level of ability and may be minimal or complex. Differentiation is the process of teaching that meets the needs of all students with differing abilities in the same classroom. Teachers have the ability to provide different approaches and methods by which all students can learn the same material. Differentiation is used to address student differences in readiness, interest, and learning needs.

29. What suggestions would you give teachers who are at the beginning stages of differentiated instruction?

To ensure effective differentiation, teachers should get to know their students and understand how their students learn. Teachers should work to master the five key classroom elements of learning environment, curriculum, assessment, instruction, and leadership and management.

30. How does standardized testing fit in with Hattie's research regarding promising practices from meta-analyses?

Differentiation should be about knowing where students are and using scores and grades to understand how to further support students. Whether using results from standardized testing or from other assessments, teachers can still use the strategy of teaching students in Vygotsky's zone of proximal development, which explains that teachers should build a solid understanding of knowing where their students are and meeting them there and basing their instruction on these results.

31. What does research say about whether a variety of approaches or one specific learning style should be used for each individual student?

Basically, the preponderance of research says, “Don’t do that!” in regards to addressing only one specific learning style. There is no reason to assume that students learn the same way in each content area and even at different times of the day. Teachers should monitor their students along the way to learn more about them as individuals and to offer different opportunities for their learning to develop.

Resources

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