Thinking about Quality Differentiation

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1

Why Differentiation Matters…

Who's coming to school these days?

Who's REALLY Coming to School these Days?

Students learning a 2nd language	Students with learning challenges	Students from low-income backgrounds
Advanced learners	Students who are homeless	Students with emotional challenges
Students from "non-majority" races or cultures	Students whose families move often	Students for whom home is unhealthy

Putting Faces on the Categories

Please share with colleagues at your table the kinds of variance you see in your school/district students—and share a story or two that you feel represents the challenges the students face at school—and the ones you/your colleagues face in teaching them well.



Despite the great and growing variety of students in our classrooms, and abundant evidence that schools do not serve many students well, we still teach as though all students of a given age are essentially alike.

John Hattie on Differentiation:

Teachers need to know where each student begins and is in his/her journey to meeting the criteria of the lesson.

- What are his or her strengths and gaps in knowledge and understanding?
- What learning strategies does he or she have and how can we help him or her to develop other useful learning strategies?

7

John Hattie on Differentiation:

- Teaching the class as a whole is unlikely to pitch the lesson correctly for all students.
- The teacher will have to provide different ways in which students can demonstrate mastery and understanding along the way to meeting the criteria for success.

8

The challenge is:

- ❑ To care ***about*** each student
- ❑ To care ***for*** each student

Geneva Gay. *Culturally Competent Teaching*

Because it is the professional thing to do.

Because it is the ethical thing to do..

The teacher's overriding moral purpose is to meet the needs of students, even when it conflicts with personal preferences.

Lorna Earl (2003). *Assessment as Learning*

2

What Differentiation is, really…

TALK ABOUT IT…

What's YOUR definition of differentiation?
(Take a minute to jot it down.)
Now share definitions with 3-4 fence partners.
(Ask one another questions about their definitions to unpack them as fully as possible. Look for similarities & differences among them.)

In Justin's Classroom…

Look for:

Whatever you see that seems to contribute to successful learning for his students.

Please jot down any observations you make as you watch.

What do you think Justin's definition of differentiation would be?

Please be ready to concisely share your group's thinking with another group.

Differentiation is not a set of strategies, but rather a way of thinking about teaching & learning.

Differentiation is
a sequence of common sense
decisions
made by teachers
with a student-first orientation

Adam Hoppe, 2010

The Common Sense of Differentiation

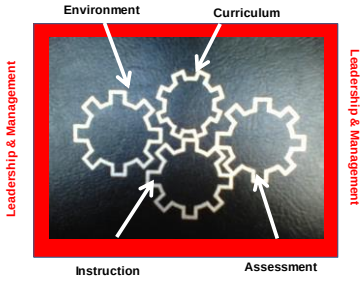
Ensuring an environment that actively supports students in the work of learning (mindset, connections, community),

Absolute clarity about a powerful learning destination (KUDs, engagement, understanding),

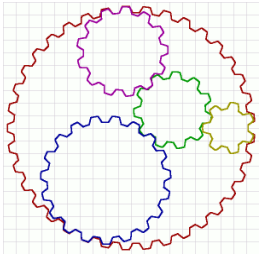
Persistently knowing where students are in relation to the destination all along the way (formative assessment for and as instruction),

Adjusting teaching to make sure each student arrives at the destination and, when possible, moves beyond it (addressing readiness, interest, learning profile),

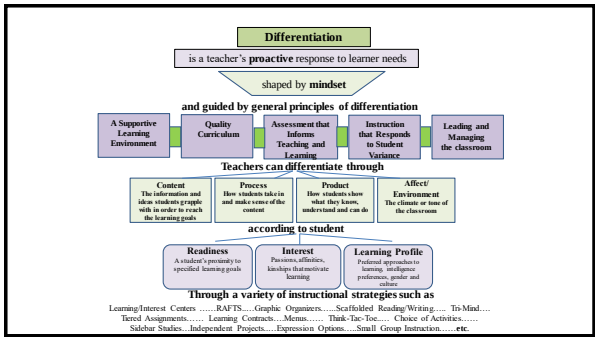
Effective leadership & management of flexible classroom routines.



THE HALLMARK OF EFFECTIVE TEACHING



Environment, Curriculum, Assessment, Instruction & Leadership/Management Working Together



How are these ideas about differentiation similar and different from the definitions you generated? To the ones used in your school(s)?

How do the 5 key elements relate to the video of Justin's class?

Would it make any difference in practice in your school(s) if the majority of teachers operated from this perspective on differentiation?

What questions do you have at this point?

Learning Environment & Differentiation

What do you see…

About the **learning environment** here that seems important in supporting student success?

What examples/evidence of **differentiation** do you see?

What's going on here that matters for student success?

https://www.teachingchannel.org/videos/meet-dorina-sackman-2014-ntoy-finalist

1. **Growth Mindset**
   - **Teacher**
   - **Student**
2. **Teacher-Student Connections**
3. **Community**

The Game Plan For Environment

4

Curriculum & Differentiation

The Game Plan For Curriculum

1. Plan for Engagement
2. Clear KUDs
3. Focus on Understanding
4. Teaching Up

5

Formative Assessment & Differentiation

Please share insights and questions with your Think Tank group from the article below that you read last night. Engage the group in a discussion—don't just "report out."

You'll have about 15 minutes for the group to share and discuss. Appoint a time keeper so that everyone has about the same amount of time to guide the discussion.

- *Learning to Love Assessment*
- *We aren't Using Assessment Correctly*
- *Inside the Black Box*

What do you see…

About the nature of **formative assessment** in this teacher's thinking that seems important in supporting student success?

My Favorite No

Based on this strategy, what does Ms. Acala see as the purpose of formative assessment?

Would she be interested in giving students a grade for their index card answers? Why or why not?

Based on what you see in the early part of this whole-class lesson, what might Ms. Acala want/need to do next (or later) in the lesson?

https://www.teachingchannel.org/videos/class-warm-up-routine

6min Grill math

The Game Plan For Assessment

1. Tight alignment with KUDs
2. Focus on Understanding
3. Pre-assessment (including pre-requisite KUDs)
4. Emphasis on Formative Assessment
5. Feedback vs. Grading
6. Formative asssessment for & as learning

6 Differentiating for Readiness, Interest, & Learning Profile

What do you see…

About **responsive instruction** here that seems important in supporting student success?

In this brief clip…

Look for:

1) How the teacher deals with different levels of knowledge and skill while still ensuring that all students deal with key understandings.

The degree to which the task is likely to seem respectful to students.

4) Your own questions/observations.

HOPE 27:10-29:30

The Game Plan For Instruction

1. **Tightly aligned with KUDs**
2. **Based on Formative Assessment**
3. **Responsive to Readiness, Interest, Learning Profile**
4. **Focus on understanding**
5. **"Teaching Up"**
6. **Respectful Tasks**
7. **Flexible Grouping**
8. **Maximum Growth for Each Learner**

Differentiating Content, Process, & Product

Content (input)	Process (sense-making)	Product (output)
1. What we want students to know, understand, & be able to do	How students come to "own" what they learn	How students show what they have learned
2. How students gain access to what they learn	Practice	Summative assessments

Differentiating for Readiness, Interest, Learning Profile

Readiness (growth)	Interest (motivation)	Learning Profile (efficiency)
Refers to a student's current proximity to specific goals	Refers to topics, skill, or applications that are attractive to a student	Refers to a student's preferred ways of approaching learning
Adjust degree of difficulty of materials and tasks to be in a student's ZPD	Connect key learning targets to student's passions or curiosities	Provide varied ways of taking in, processing, and expressing learning

Grade 5 Example

Tiered math lessons from exemplars.com

Personalized Learning (Differentiating?)

Is Mr. McCombs adapting content, process, or product with his students?

Is he attending to students' readiness, interest, and/or learning profile needs?

List all the ways you see that the video illustrates key elements of differentiation.

In what ways does it illustrate personalization vs. differentiation?

HS Eng 12-16

https://www.teachingchannel.org/videos/workshop-model-customized-learning

Stations in World Language

Station 1 **Speaking/Conversation**	**Station 3** **Writing**
Station 2 **Listening**	**Station 4** **Grammar/Vocabulary/ Translation**

The room is divided into 4 quadrants—each focuses on one aspect of language
Students are assigned to a station based on readiness needs
Length of time a student spends in a particular station will vary based on readiness needs
Students may work alone, in pairs, or in small groups based on task requirements & student needs or preferences
Tasks within a station can vary—or not
Small group instruction can take place within one or more centers—or at a 5th station

During Silent Reading/Work Time:

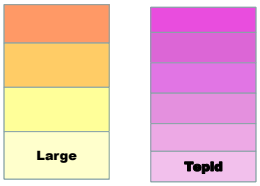
Students could:

- **Work at their desks,**
- **Lie on carpet squares around the perimeter of the room,**
  - **--Heads toward the front of the room**
  - **--Two square rule**

Reading Homework Coupon Name: Date: ❑ Please ask your child to tell you the story in the book he or she brought home today by looking at the pictures.	Reading Homework Coupon Name: Date: ❑ Please echo read the book your child brought home. (Echo reading means you read a line, then your child reads or echoes the same line.) ❑ Ask your child to show you some words in the story he or she recognizes.
Reading Homework Coupon Name: Date: ❑ Ask your child to read with expression as if he or she were reading to entertain someone, ❑ Ask your child to give you several reasons why he or she likes (or dislikes) the book. ❑ Have your child tell you what feelings the character in the book has. Ask for evidence from the book.	Reading Homework Coupon Name: Date: ❑ Ask your child to read with a different voice for each character ❑ After the reading, ask how your child decided on how his/her voice could help you know the various characters better. ❑ Ask your child to tell you which character would be most fun to spend time with. Ask for reasons for his/her choice.

Adapted from Managing A Diverse Classroom by Carol Cummings - by Tomlinson '02

SHADES OF MEANING



Linda Eiler

What Kind of Cookies do you See: A Pre-School Sorting Activity

1) The teacher sorts some paper cookies using a Think-Aloud (Let's see, here's a big chocolate cookie. I'll put it on this plate. Here's another chocolate cookie, but it's small, so I'll put it on another plate. Here's another small cookie, but it's vanilla. I'll put in on another plate and see if I find any other small, vanilla cookies….

2) Give students envelopes of cookies to sort and paper plates (or circles) on which to sort them. Observe the students as they sort.
   Proficient—Sorts by size and color
   In Process—Sorts by size, but is hesitant about color
   Not Yet Ready—Does not yet sort by size or color

3) Follow-up activity
   Proficient students sort by size, color, and "extras" (for example: nuts or raisins)
   In Process students sort by shape and color—can work in pairs
   Not yet ready students work with the teacher to sort by color, and if possible, then by size

4) Talk with students about your favorite cookies and ask them their favorites.
   Have students draw and color their favorite cookies .
   Label the cookies.
   Hold them up one by one and ask students help sort them on a chart or on the blackboard (for example, all chocolate chip cookies together, all sugar cookies together, etc.)
   Ask students question about size, shape, color (for example, "Anthony, show us a cookie that is brown and is small").

-Adapted from School Readiness Activity Cards, preschool activity cards.

The Human Digestive System (The KUDs) Students will:

4th Grade Science

(U) Understand the big idea. In this case, that (a) the human digestive system is an example of a system: a collection of two or more parts that act together to affect the whole thing, and (b) that each part is related to the others in some way.

(K) Know the names and functions (jobs) of the major digestive system organs listed below, and include them in a song, story, skit, or diagram:

Mouth, teeth, saliva

Epiglottis -- The flap of cartilage that prevents food from entering the trachea and lungs.

Esophagus (Optional: Peristalsis, the contraction of muscles in/around the esophagus.)

Stomach -- Muscles mix and mash the food. Hydrochloric acid breaks food up.

Small intestine -- Place where most of the digestion and chemical change of food to simpler forms occurs.

Villi -- Finger-like projections that contain capillaries -- the sites in the small intestine where the broken-down (digested) food nutrients enter the blood stream.

Large intestine -- Where water is absorbed back into the body and the remaining indigestible food passes to the outside.

(D) Demonstrate their understanding using the correct structure and function vocabulary to show how a piece of food moves through and provides fuel for the human body -- from the time it enters the mouth to the time waste leaves the body.

Howard Miller

Kate's diagram explaining how a cookie is digested

Emma writing a story about the digestion of broccoli

A group of students practicing their skit on the digestion of a slice of pizza

Student Interest Impacts Algebra Performance

Using personalized math problems not only made it easier for students to understand what was being asked, but also helped boost the confidence of students who may have been intimidated by the subject.

A researcher at SMU surveyed 145 9th graders about their interests in areas such as sports, music, and movies. Then she randomly assigned them to take the linear-equation unit either receiving standard word problems or one of four variations tailored to their interests.

Students who received personalized word problems solved them faster, more accurately, and with more confidence than students who received the standard questions, particularly when it came to translating the story scenarios into symbolic equations. Strongest gains were found for students who were struggling most before the personalization.

Sparks, S. (2012, Sept. 25). Studies find payoff in "personalizing" algebra. *Education Week*, 32(5), pp. 1, 14-15.

Interest-Based Differentiation Results in Math Achievement Gains

Original Problem
One method for estimating the cost of new home construction is based on the proposed square footage of the home. Locally, the average cost per square foot is estimated to be $46.50.

Sports
You are working at the ticket office for a college football team. Each ticket to the first home football game costs **$46.50**.

Music
You are helping to organize a concert where some local R&B artists will performing. Each ticket to the concert costs **$46.50**.

Art
You have been working for the school yearbook, taking pictures and designing pages, and now it's time for the school to sell the yearbooks for **$46.50** each.

Games
You work for a Best Buy store that is selling the newest Rock Band game for **$46.50**.

SOURCE: Candace A. Walkington, Southern Methodist University

Leading & Managing Differentiation

A Five Minute Metaphor

The Schmidts had a dog and a cat and two jobs. They were busy, but happy.

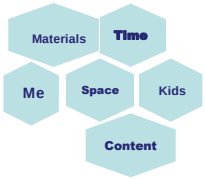
When their son Will was born, everything changed. They were happier than they had ever been, but much busier. At first, they felt disoriented—like they didn't know how to make all the parts work.

About 14 months after Will was born, Elizabeth came into their world and the world shifted. Now they had two jobs, a cat and a dog, and two children. They loved all the parts of their life, they felt a bit overwhelmed at first, and the two children were markedly different from one another.

They were quite surprised two years later to find that Mrs. Schmidt was expecting again—and this time, they would bring home triplets. They knew that their gradual and rather stepwise pattern of adjustment when Will and Elizabeth entered their lives would not be adequate for the change ahead.

They loved being parents and were thrilled to be expanding their family by 3—but they freely admitted that they were terrified, too—even though they now felt they understood parenting reasonably well.

The Essential Question for Differentiating Instruction



How do I organize the elements I work with so more kids can learn better?

The Other Half of the Metaphor

Let's look at some teachers who lead effectively differentiated classrooms....

In what ways does their classroom world connect with your conversation about the Schmidts?

In other words, what do they seem to be doing to meet the needs of a room full of kids whose needs differ from one another?

How would it feel if you dropped in on one of their classes? (Familiar? Disorienting? Chaotic? Productive?)

How do you imagine they feel at the end of a day in school? (More exhausted than you are? Less satisfied with their work than most teachers? Like the effort is worthwhile? Like this is just "how you do school?"

What questions would you like to ask them?

In this clip...

Look for:

1) **How the teachers think about both leadership & management in their classroom.**

2) **Ways in which their thinking makes it easier to differentiate instruction.**

3) **A common element across teachers that explains why their classrooms run smoothly.**

4) **Your own questions/observations.**

Managing DI

What do you see…

about **classroom leadership & management** here that seems important in supporting student success?

The Game Plan For Leadership/Management

1. Clear & Shared Vision
2. Student-Teacher Partnership
3. Lead People
4. Manage Routines & Tasks
5. Rehearse, Revise, Celebrate
6. Goal is Maximizing Student Learning