

The Pedagogy of Differentiation



Moving from Strategies to
Learning Design

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- Differentiating instruction is an approach to teaching that advocates active planning for and attention to student differences in the classroom.
- Differentiation is a way of teaching.
- Differentiation is a way to meet the needs of all students.



Differentiation for the Gifted

Is differentiation in gifted education unique or is differentiation a comprehensive approach that truly meets the needs of all students?



Differentiation for the Gifted

If we think that differentiation is comprehensive and meets the needs of all students, then we may decide that gifted education is not necessary, so long as teachers are differentiating for all students.



Differentiation for the Gifted

What if gifted education is bigger than differentiation?

- A longitudinal study of 320 gifted students who participated in gifted education through the secondary level indicated that they were 50 times more likely to pursue advanced degrees than typical students.
- A follow up of those students at age 38 indicated that 63% of them had advanced or terminal degrees.

Kell et al, 2013; Lubinski et al., 2001



Differentiation for the Gifted

What if gifted education is bigger than differentiation?

- A sample of 12,036 students compared like ability students who either did or did not participate in acceleration options in primary and secondary school.
- The accelerated students demonstrated higher achievement in high school and college than similar ability non-accelerated students.

McClarty, 2015



Examine the Role of Differentiation with Gifted and Talented Students

Pedagogy of Differentiation



Differentiation

While differentiation is an approach to teaching that potentially meets the needs of all students, there remains a unique pedagogy of differentiation appropriate for gifted students.



Means to an End

Differentiation is the means to an end.

Differentiation is not the end. It is not the goal.

Differentiation is fundamentally a teacher behavior, but goals of education are almost exclusively related to student behaviors or outcomes.



Possible Goals

Goals requiring differentiation may include the following:

- Student engagement
- Making learning more fun or relevant
- Meeting standards of achievement
- Personalized or customized learning
- Developing career competencies
- Developing advanced or elite talent



More Specific Goals (GT Goals)

Goals requiring differentiation may include:

- Complete through level 8 mathematics by the end of primary school. (GT Math)
- Complete near professional level scientific research project by the end of secondary school. (STEM)
- Develop a portfolio of published written works in one or more genres. (GT English)



Take a Step Back

How do we understand gifted and talented?



Gifted Students

Gifted students are those whose potential is distinctly above average in one or more of the following domains: intellectual, creative, social, and physical. (New South Wales definition)

Gifted individuals are those who demonstrate outstanding levels of aptitude or competence in one or more domains. (National Association for Gifted Children, NAGC definition)



Understanding Giftedness

Giftedness is largely considered potential that is in need of development into talent.

Potential may be quite general in nature, but talent becomes increasingly domain specific in the course of development.



Understanding Giftedness

Systematic training and practice are necessary to develop potential into advanced levels of talent.

Gifted education ought to be thought of as the systematic training and practice.

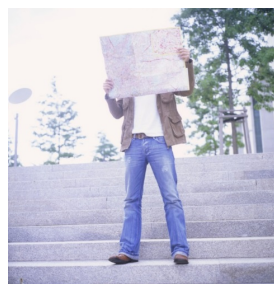


How Should you Differentiate for Gifted Students?

Pedagogy of Differentiation



Two Hard-to-Answer Questions



Two Hard-to-Answer Questions



What should I wear?



Two Hard-to-Answer Questions

How do I get there?



Not-So-Hard to Answer

How should I differentiate for
gifted students?

Know where you are going.

Know where you are starting.



Clear Goals

Curriculum planning must begin with clear goals and objectives if curriculum efforts are to be meaningful.

Without a clear concept of what it is we expect the gifted and talented students to achieve, what it is we want them to become, our curricular efforts will be directionless.

Harry Passow (1986)



Good Curriculum

Good gifted curriculum, where it exists, should set the standards for learning at world-class levels.

Joyce VanTassel-Baska, 1994



World Class Learning?

What does that look like?



Three Approaches to Differentiation

Pedagogy of Differentiation



Incidental Differentiation

Perhaps the most common type of differentiation found across classrooms.

- Differentiation menus
- Student choices in products
- Optional extensions
- Varying activities for different learning preferences



Needs-Based Differentiation

Populations with particular characteristics generate a need for differentiation based on those group characteristics.

- Gifted Students
- English Language Learners
- Students with learning disabilities



Needs-Based Differentiation

The learning **needs** of gifted students often differ from those of other students and should be addressed through **differentiation**.

-NAGC Position Statement on
Differentiation of Curriculum and Instruction



Needs-Based Differentiation

Differentiation is the modification of curriculum and instruction based on the **assessed achievement and interests** of individual students.

-NAGC Position Statement on
Differentiation of Curriculum and Instruction



Needs-Based Differentiation

Schools meet the **needs** of gifted/talented students by **modifying** the depth, complexity, and pacing of the curriculum ordinarily provided by the school.

Texas State Plan for the Education
of Gifted/Talented Students



Pedagogy of Differentiation

Pedagogy

Directed activities with the purpose of leading children to specific educational goals.

Foundation of a Pedagogy of Differentiation

- Where are you going?
- From where are you beginning?



Pedagogy of Differentiation

How do we make sense of the idea of **need** in gifted education?

Goal Directed Understanding of Need

- Student is a point A and needs to reach point B.
- Where are you going?
- Where are you coming from?



Four Aspects of Curriculum

Course of
Study

Curriculum
Standards

Learning
Design

Authentic
Engagement

Hierarchy of Differentiation

Incidental Differentiation

- Simple and sporadic

Needs-Based Differentiation

- Perceived needs lead to differentiation

Pedagogy of Differentiation

- Clear and distinct outcome goals drive differentiation



Hierarchy of Differentiation

Incidental Differentiation

- Better than no differentiation at all
- Incidental rather than theoretical
- Entry-level differentiation tools such as choices, menus, and learning preference accommodations
- Not connected to either formative or summative assessment



Hierarchy of Differentiation

Needs-Based Differentiation

- More sophisticated than incidental differentiation
- Driven by needs though needs may not be clear
- Inconsistent use of formative assessment
- More reactive, less systematic
- Random acts of differentiation



Hierarchy of Differentiation

Pedagogy of Differentiation

- Clear student outcome goals
- Formative assessment informs instruction
- Systematic, purposeful modification of learning
- Customized for developing talent and expertise
- Informed by student interests and motivations



Gifted and Talented Education

While differentiation is an approach to teaching that potentially meets the needs of all students, there remains a unique pedagogy of differentiation appropriate for gifted students.



Gifted and Talented Education

Incidental Differentiation

- Differentiation for all

Needs Based Differentiation

- Differentiation for special groups (GT, ELL, dyslexia, etc.)

Pedagogy of Differentiation

- Sophisticated approach for gifted education

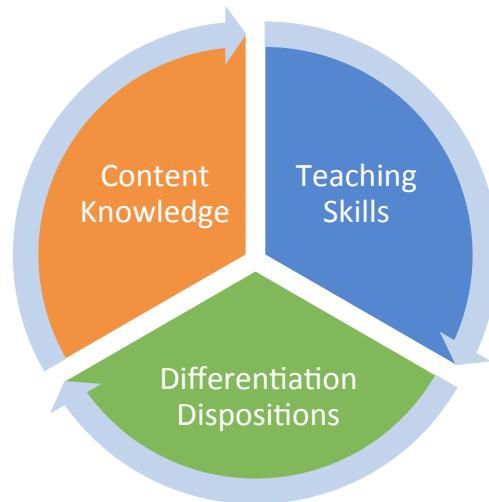


Leading Differentiation

Pedagogy of Differentiation



3 Components of Differentiation



Leading Differentiation

Teaching Skills

- Classroom management
- Multiple techniques for formative assessment
- Clear communication of concepts, ideas, and examples
- Use of authentic, open-ended assessment
- Use of inquiry models
- Ability to teach critical and creative thinking
- Knowledge of differentiation strategies
 - Tiered instruction
 - Compacting and micro-acceleration strategies
 - Grouping tactics



Leading Differentiation

Content Knowledge

- Knowledge and skills of the curriculum
- Concepts, big ideas, and enduring questions
- Deep and complex understandings of topics
- Above grade level standards to support acceleration
- Ability to inspire student interest in topics of the field
- Ongoing learner in the field (read widely, engage in practices of the field, etc.)



Leading Differentiation

Differentiation Dispositions

- A deep conviction that gifted and advanced students need differentiated learning experiences
- Desire to make modifications and accommodations on an routine basis
- Value individual differences
- Willingness to customize
- Attitude of flexibility



Leadership

The Law of Buy-In

People generally buy into the leader first, the vision second.

- Become the person others want to follow.
- Tirelessly study the craft of differentiation and the nature of gifted students.



Leadership

The Law of Navigation

Anyone can steer a ship,
but it takes a leader to chart the course

- Chart a course to move past incidental differentiation toward the Pedagogy of Differentiation.
- Clearly articulate what is expected from educators, and constantly support them on the journey.



Leadership

Leading differentiation requires educators to develop a bold vision of gifted students and gifted education.

The bold visions of a leader are founded on

- Deep understanding
- Imagination
- Conviction



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