



Who, Where, What, and How?

"In effective classrooms, teachers consistently attend to at least four elements:
**whom they teach (students),
 where they teach (learning environment),
 what they teach (curriculum),
 and how they teach (instruction).**"

  - Tomlinson and McTighe (2006)

GIFTED & TALENTED - WHO ARE OUR KIDS?



Myths of Giftedness

Confirmation Bias...

...defined as the tendency to search for, interpret, favor, and recall information in a way that confirms one's beliefs or hypotheses, while giving disproportionately less consideration to alternative possibilities.


- Scott Plous (1993)

STEPHEN COLBERT

Truthiness (n.)

What you want the facts to be, as opposed to what the facts are.

What feels like the right answer, as opposed to what reality will support.



Where on the continuum do you consider yourself to be?...

Never met a gifted kid

All my kids are gifted

Truths of Giftedness: *Personality*

- Insightfulness
- Intensity
- Sensitivity/Empathy
- Need to understand
- Non-conformity
- Perfectionism
- Perseverance
- Acute self-awareness
- Need for mental stimulation
- Excellent sense of humor
- Need for precision of logic
- Questioning/challenging authority

Truths of Giftedness: *Intellectual*

- Capacity for reflection
- Passion for learning
- Early moral concern
- Complex thought processes
- Exceptional reasoning ability
- Divergent thinking/creativity
- Analytical thinking
- Facility with abstraction
- Intellectual curiosity
- Rapid learning rate
- Vivid imagination


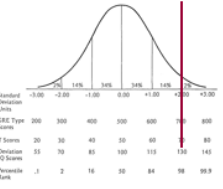
SEVEN (7!) PERSPECTIVES

- High IQ
- Emotional fragility
- Creative Productive Giftedness
- Talent Development
- Unequal opportunities
- Policy and Programs
- Developmental Model

High IQ

Statistical Definition

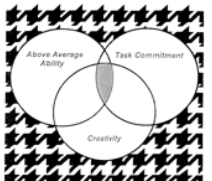
■ Lewis Terman

Standard Deviation Units	IQ Type	Score
+3.00	Gifted	130
+2.00	Gifted	120
+1.00	Gifted	110
0.00	Average	100
-1.00	Below Average	90
-2.00	Below Average	80
-3.00	Below Average	70

Creative Productive Giftedness

WHAT MAKES GIFTEDNESS




— Joe Renzulli

Talent Development

STANLEY & BENBOW's Talent Search Conceptualization

- Study of Mathematically Precocious Youth
- Began at Johns Hopkins University in 1971
- SAT as THE operational definition of giftedness



Policy and Programs

Missouri State Legislation

Those who "exhibit precocious development of mental capacity and learning potential as determined by competent professional evaluation to the extent that continued educational growth and stimulation could best be served by an academic environment beyond that offered through a standard grade level curriculum."




DABROWSKI's Theory of Emotional Development

Three Factors:

Factor 1: Heredity / Constitutional

Factor 2: Environmental / Social

Factor 3: Self-directed / Autonomous




DABROWSKI's Theory of Emotional Development

Developmental Potential:

Overexcitabilities

Special abilities or talents

Autonomous factors




DABROWSKI's Theory of Emotional Development

Overexcitabilities

Higher than average responsiveness to stimuli... in intensity, frequency and duration... [having] the effect of making concrete stimuli more complex, enhancing emotional content, and amplifying every experience.


Described as ...



DABROWSKI's Theory of Emotional Development

Overexcitabilities

- Psychomotor
- Sensual
- Imaginational
- Intellectual
- Emotional




The Columbus Group

"Giftedness is *asynchronous development* in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm..."



The Columbus Group


...This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally."



GIFTED & TALENTED - WHO ARE OUR KIDS?

"**GIFTEDNESS IS A GREATER AWARENESS, A GREATER SENSITIVITY, AND A GREATER ABILITY TO UNDERSTAND AND TRANSFORM PERCEPTIONS INTO INTELLECTUAL AND EMOTIONAL EXPERIENCES.**"

— Annemarie Roeper



GIFTED & TALENTED - WHERE ARE OUR KIDS?



THEIR WORLD TODAY: EDUCATION POLICY AND CONTEXT




WE'RE DOING A GREAT JOB OF PREPARING OUR STUDENTS FOR THE 20TH CENTURY...



The goal of education is not to increase the amount of knowledge but to create possibilities for a child to invent and discover, to create people who are capable of doing new things.

— Jean Piaget

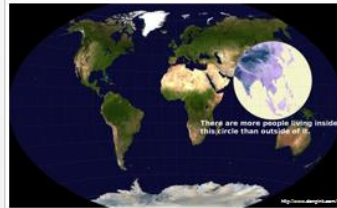
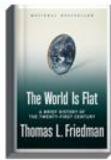



RING

The Society's Need for Gifted and Talented Performance / Productivity

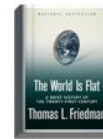
The advancement (preservation?) of our culture.

- Friedman
- Pink
- Drucker



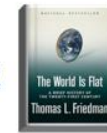
The Society's Need for Gifted and Talented Performance / Productivity

The changing nature of work
 • Gifted/talented students' traditional career choices were "Knowledge Workers"
 — (people who get paid for putting to work what one learns in school...)



The Society's Need for Gifted and Talented Performance / Productivity

Transitioning of the global economy from the "Information Age" to the "Conceptual Age" in which our children's livelihoods will be increasingly dependent on their ability to master skills that enhance creativity; "value added" is the new watch word.



ANTI-INTELLECTUALISM IN AMERICA



"NO COURSE SHOULD BE TAUGHT AT A UNIVERSITY THAT DOESN'T LEAD TO A JOB."

America's Love-Hate Relationship with the Gifted



"What was educationally significant and hard to measure has been replaced by what is educationally insignificant and easy to measure. So now we measure how well we taught something that isn't worth learning."



--Art Costa

Why do we teach?
 To change lives...

--Joseph Renzulli, University of Connecticut

JAMES J. GALLAGHER

"Failure to help the handicapped child reach his potential is a personal failure for him and his family. Failure to help the gifted child reach his potential is a societal tragedy, the extent of which is difficult to measure but which is surely great. How can we measure the sonata unwritten, the curative drug undiscovered, the absence of political insight? They are the difference between what we are and what we could be as a society."



Reaching the Gifted Child, 1975

GIFTED & TALENTED - WHAT DO OUR KIDS NEED? READING & LITERACY

"Scout" To Kill A Mockingbird



Now that I was compelled to think about it, reading was something that just came to me... I could not remember when the lines above Atticus's moving finger separated into words. But I had stared at them all the evenings in my memory, listening to the news of the day... anything Atticus happened to be reading when I crawled into his lap every night. Until I feared I would lose it, I never loved to read. One does not love breathing."

J. K. Rowling

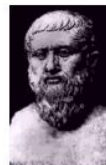


[To understand something]... is to see it in its relations to other things: to note how it operates or functions, what consequences follow from it, and what causes it.



--John Dewey

PLATO 429-347 B.C.E.



- Student of Socrates
- Teacher of Aristotle, who in turn taught Alexander the Great
- Tells of Socrates and the Oracle at Delphi

SOCRATES 470-399 B.C.E.



- Ugly, potbellied, with bulging eyes and a snub nose
- Teacher of Plato
- Unconventional, tactless, and assumed rough and vulgar mannerisms.
- Provoked the "Sophists"



"Socrates, of all mortals, is the wisest."



I only know that I know nothing.

-- Socrates

"Teachers no longer are the sole keepers of knowledge to impart to their students...Children today can find information on any subject within seconds via the Internet. A teacher's job now is to teach students how to find primary sources, critically analyze the vast amounts of information out there and then apply their new learning to useful, real-world problems."

-- Robin Wagner, excellent superintendent, Progressive School District, California



ESSENTIAL QUESTIONS...

- ...inquire about key problems, issues, themes, concerns, or interests relevant to our students and our community
- ...are open-ended—why, how, what if, questions
- ...Socratic, non-judgmental, neutral, inviting exploration of ideas



ESSENTIAL QUESTIONS

- ...spark discussion
- ...ask for interpretations, claims, argument
- ...require evidence gathering
- ...lead to Essential Understandings (thesis of the moment)
- ...lead to products and performances



ESSENTIAL QUESTIONS

- Emphasizes the production of *solutions* to real world problems in the manner of the practicing expert/specialist.



THEMES, OR ESSENTIAL UNDERSTANDINGS OF 21ST CENTURY LEARNING

- Just-in-time content instead of just-in-case content
- Big problems need conceptual thinkers

Essential Question:

- What *problem* must we solve today?



21ST CENTURY LEARNING...

- ...poses the problem, dilemma, or creative project FIRST.
- ...BEFORE the mastery of facts begins.



21ST CENTURY LEARNING...

"A master teaches essence. When the essence is perceived, (s/he) teaches what is necessary to expand the perception.
The Wu Li master does not speak of gravity until the student stands in wonder at the flower petal falling to the ground."

Gary Zukav



The Dancing Wu Li Masters: An Overview of the New Physics.

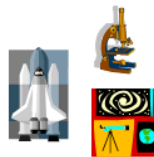
THE NEW PARADIGM

- Every day, teachers coaching students in skill practice, in answer to a *driving question*...
- What will your students question today? Discuss? Research? Debate? Create?



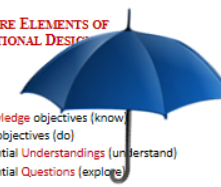
GIFTED KIDS CAN HANDLE "THE BIG IDEAS"...

- Can be coached to ask the tough questions
- ...to tackle the big problems
- ...to find the cures
- ...to see the hidden themes



FOUR CORE ELEMENTS OF INSTRUCTIONAL DESIGN

- Knowledge objectives (know)
 - Skill objectives (do)
 - Essential Understandings (understand)
 - Essential Questions (explore)
- ...organized by an overarching *concept*



CONCEPTS ORGANIZE OUR LIVES.

- They make the content objectives—all the bits and bytes of data—matter.
- They prompt us to ask the Big Questions of Life.
- They make us use critical thinking skills to solve the Big Questions of Life.



"The concepts fundamental to the human condition [*family, authority, faith, love, change, causality, truth, and wisdom*] are also fundamental to human learning—to our understanding of the world around us and within us. Consequently, such ideas can and should be fundamental to the educational process."

— Joseph 'Joe' David Banks and Catherine A. Wells, *Essential Read: Curriculum for High Ability Learners*



CONCEPTS: ABSTRACT, BIG, OPEN!

- Concepts are usually one word: abstract, infinite, and vague.
- Concepts inspire questions.
- Concepts require analysis, synthesis, and evaluation.
- Concepts lead to generalizations, themes, and the art of argumentation.



WHEN BEGINNING A UNIT:

Which *concepts* are you *passionate* about?

Individuality
Society
Legality/Illegality
Access
Force
Freedom
Order
Structure
Good/Evil
Communication
Systems
Conflict
Patterns
Change
Power
Origins



- Relevance
- Connection
- Meaning



Students do **not** get excited about *facts*.

Learners get excited and passionate about *ideas*.



GIFTED & TALENTED - WHAT DO OUR KIDS NEED?

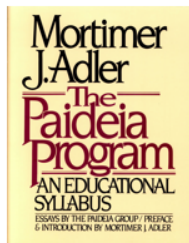
DIFFERENTIATION!

DIFFERENTIATION FOR GIFTED/ADVANCED LEARNERS: THE KEY QUESTIONS

- Would all children/students want to do this?
- Could all children/students do this?
- Should all children/students expect to *succeed* in doing this?



A. Harry Passow
Columbia University Teachers College



THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
Acquisition of Knowledge By means of Lecture and Textbooks in Language, Literature, Math Science and Social Studies	Develop Skills By means of Exercises Questioning about skills in problem solving critical thinking, communication	Enlarge Understanding By means of Socratic Questioning about ideas in the discussion of books, arts...

TEACHING / LEARNING OUTCOMES IN THE THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
Knowledge	Skills	Understanding

CURRICULUM & INSTRUCTION DIFFERENTIATION IN THE THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
Content	Process	Product

COGNITION IN THE THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
Knowledge Comprehension	Application Analysis	Synthesis Evaluation

QUESTIONING IN THE THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
WHO WHAT WHEN WHERE	HOW	WHY WHAT IF

ROLES IN THE THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
Teacher	Instructor	Educator

LEARNING ENVIRONMENT MODIFICATION IN THE THREE COLUMN DIAGRAM

DIDACTIC	COACHING	MAIEUTIC or SOCRATIC
HOW SHOULD THE LEARNING ENVIRONMENT BE MODIFIED?		

LEARNING ENVIRONMENT MODIFICATION IN THE THREE COLUMN DIAGRAM

DIDACTIC TEACHER

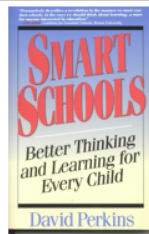

LEARNING ENVIRONMENT MODIFICATION
IN THE THREE COLUMN DIAGRAM

COACHING
INSTRUCTOR



LEARNING ENVIRONMENT MODIFICATION
IN THE THREE COLUMN DIAGRAM

MAIEUTIC or SOCRATIC
EDUCATOR



The mystery boils down to this.
Knowing is a state of possession,
and I can easily check whether the
students have the knowledge
they are supposed to...

But understanding somehow goes
beyond possession. The person who
understands is capable of
'going beyond the information given,'
in Jerome Bruner's eloquent phrase.
So let us view understanding not
as a state of possession, but one of
enablement.

When we understand something,
we not only possess certain information
about something, but are enabled to
do certain things with that
knowledge.

-- David Perkins

When you understand,
what happens is
your heart lights up.

-- Michael Clay Thompson

Understanding by Differentiated Design



"But in the end, education is about learning.
Learning happens within students, not to them. Learning is a process of making
meaning that happens one student at a
time... We have to acknowledge that
however impressive our curricular design, it
will have to be implemented in diverse ways
according to diverse timetables and in
response to diverse learner needs."

The Differentiated Classroom --
Carol Ann Tomlinson

RICK COURTRIGHT

Gifted Education Research Specialist

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