

A stylized, light-colored illustration of a plant with several leaves and a cluster of small, round buds or flowers, positioned on the left side of the slide against a dark brown background.

GETTING STARTED WITH DIFFERENTIATION IN MIDDLE SCHOOL

Meeting the needs of high ability
and gifted learners in the middle
grades

Who am I?

- Teach 6th Grade Advanced Humanities
 - (4 years)
- Taught 8th Grade Humanities
 - (5 years)
- Issaquah School District
 - Pacific Cascade Middle School
- Specialty Endorsement from Whitworth (2013)
- Summer: SIG (Overlake and Princeton)
- Interest: Practical Strategies



A Fable



One time, the animals had a school. The curriculum consisted of running, climbing, flying, and swimming; and all the animals took all the subjects.

The duck was good in swimming [gifted perhaps], better than his instructor, and he made passing grades in flying, but was practically hopeless in running. He was made to stay after school and drop his swimming class in order to practice running. He kept this up until he was only average in swimming. But, average is acceptable, so nobody worried about that but the duck.



A Fable

The eagle was considered a problem pupil and was disciplined severely. He beat all the others to the top of the tree in the climbing class, but he had used his own way of getting there.

The rabbit started out at the top of his class in running, but had a nervous breakdown and had to drop out of school on account of so much makeup work in swimming.





A Fable

The squirrel led the climbing class, but his flying teacher made him start his flying lessons from the ground instead of the top of the tree, and he developed charley horses from overexertion at the takeoff and began getting C's in climbing and D's in running.

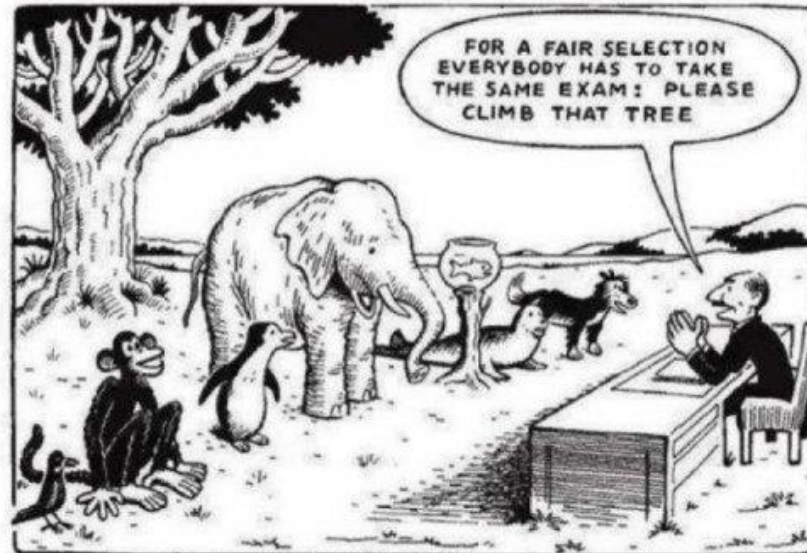


The practical prairie dogs apprenticed their offspring to a badger when the school authorities refused to add digging to the curriculum.

A Fable

At the end of the year, an eel that could swim well, and run, climb, and fly a little was made valedictorian.

Printed in The Instructor, April, 1968.



Our Education System

NAGC's Position on Differentiation

- Differentiation includes...
 - Selection/design of curricular materials
 - Selection/use of Instructional practices
 - Assessment

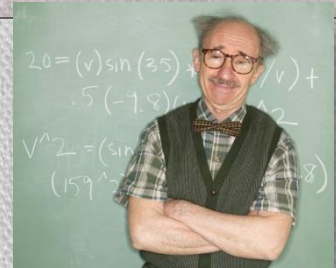


educationaladvancement.wordpress.com

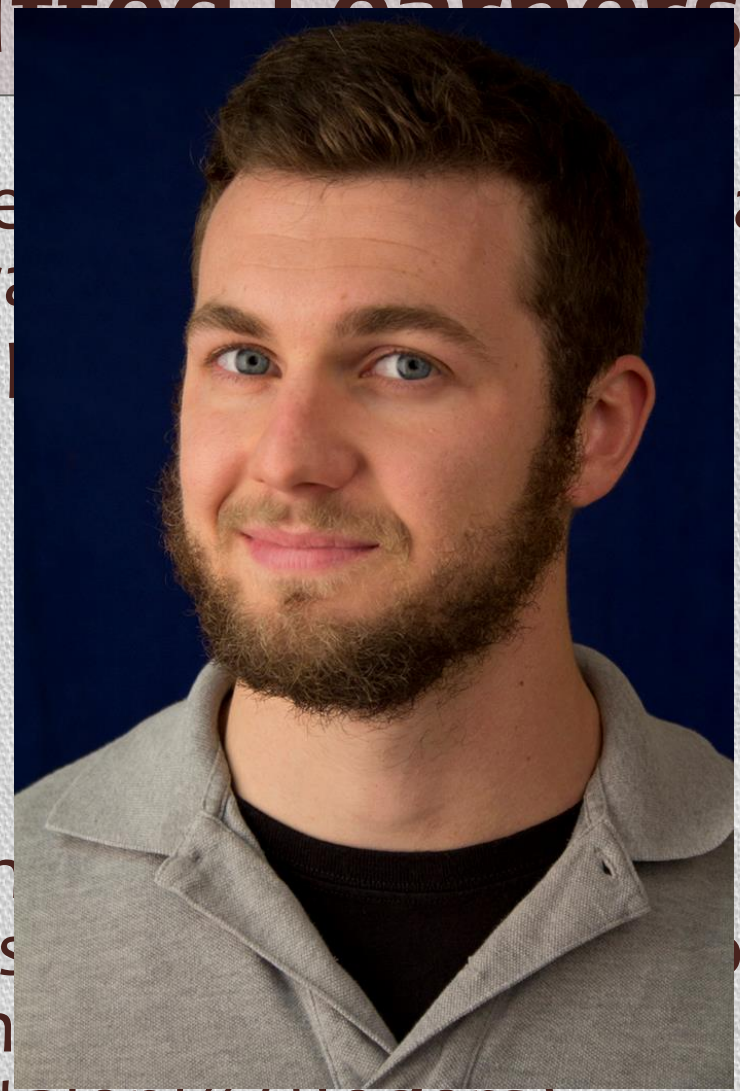
- “For gifted learners, appropriate differentiation allows for increasing levels of advanced, abstract, and complex curriculum that is substantive and responds to learner differences” (National Association For Gifted Children).

NAGC's Position on Differentiation

- Problems occur when teachers...
 - Offer more of the same
 - Provides either enrichment or acceleration alone
 - Focus only on cognitive growth in isolation from affective, physical, or intuitive growth
 - Teach higher-level thinking skills in isolation from academic content
 - Group with intellectual peers without differentiating content and instruction



Middle School Gifted Learners



forward ... in their area of talent" (Rogers)

Differentiation Strategies

- Differentiating with Skill-Based Content (i.e. Math, Writing, and Reading skills)
 - Curriculum Compacting
 - Five Most Difficult
 - Extension Work
- Differentiating with New Content (i.e. Social Studies, Health, Literature and Science)
 - CIM
 - Independent Study
 - Tiered Assignments
 - Digging Deeper Matrix

DIFFERENTIATING WITH SKILL-BASED CONTENT

Math, Writing, Reading





“ When once the child has learned that four and two are six, a thousand repetitions will give him no new information, and it is a waste of time to keep him employed in that manner.”

- J.M. Greenwood

Principles of Education Practically Applied, 1888

Curriculum Compacting

- Definition:
 - A process to help challenge advanced learners where curriculum material is eliminated or shortened to allow more time for enrichment or acceleration activities (Siegle).
 - “Testing Out” of particular content
 - Modifying curriculum to challenge students
 - Examples: Paragraphs, grammar, math concepts, hypothesis, scientific method

“When teachers eliminate as much as 50% of the grade level curriculum for gifted students, there is no difference in achievement test results” (Siegle).

Steps of Compacting

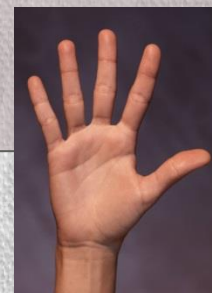
1. Define the goals and outcomes of a particular unit or skill
 - Example: Understanding internal punctuation (commas)
2. Give students time to examine the content to be tested
 - Gifted students may either already have mastered the skill, or will be able to show mastery after a quick review.
3. Offer a pretest opportunity to volunteers
 - An opportunity to show mastery
4. Provide replacement strategies for material already mastered that provides a more challenging and productive use of the student's time

Steps of Compacting

5. Eliminate all standardized test drill, practice, and review for students who demonstrate mastery
6. Decide how to keep accurate records
7. Devise a method for storing compacting documents



Five Most Difficult

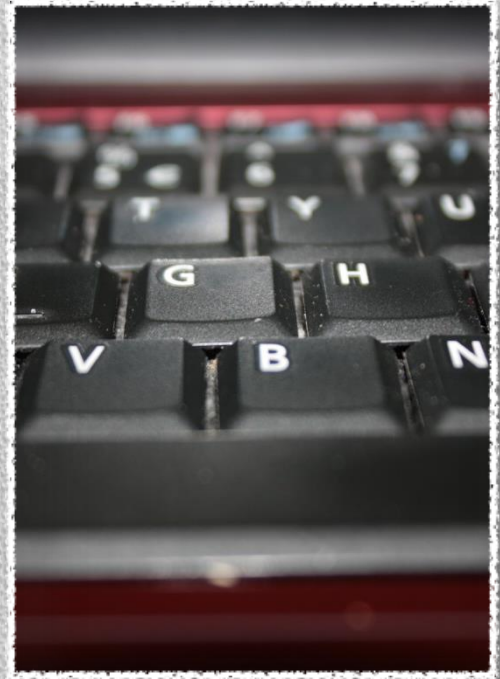


• Five Most Difficult

- Choose the five most challenging problems/items on an assignment
 - The items may appear together or throughout the assignment
 - Get 4/5 right to “pass”
- Students who can demonstrate mastery of the skill with the five most difficult problems can move to more challenging work or extension work
- Use a “checker” to assist with class management
 - Only once a week
 - Cannot provide help; just checks answers
 - Cannot return to a student more than once
- Cannot correct errors – One Chance

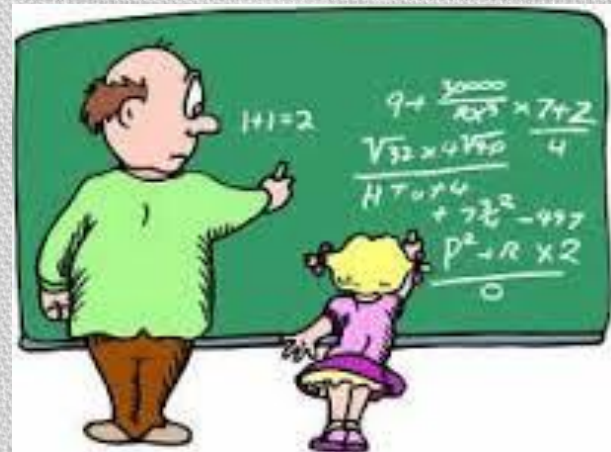
The Learning Contract

- Most effective way for compacting pre-testable content and skills with units lasting longer than a week
- Students complete extension activities, yet still receive direct instruction in areas they have not mastered
- The learning contract is for specific skills



Why it Matters

- Promotes classroom culture of comfortability in a differentiated class
- Values students' time and abilities
- Promotes greater learning for all
- Increases time management
- Greater buy-in to class procedures and assignments





Learning Contract

For: _____

Student's Name: _____

| ✓ | Page/Standard | ✓ | Page/Standard | ✓ | Page/Standard |
|-------|---------------|-------|---------------|-------|---------------|
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

Extension Options: _____

SPECIAL INSTRUCTIONS

Student-Selected Activity (needs teacher approval):

Working Conditions

Teacher's Signature: _____

Student's Signature: _____

Learning Contract

For: Math Chapter 4

Student's Name: Julie

| ✓ | Page/Standard | ✓ | Page/Standard | ✓ | Page/Standard |
|---|---------------|---|----------------------------|---|------------------------------|
| | <u>60</u> | ✓ | <u>64</u> | ✓ | <u>68</u> |
| ✓ | <u>61</u> | | <u>65</u> | | <u>69</u> |
| | <u>62</u> | ✓ | <u>66 - Mixed Problems</u> | | <u>70 - Review Questions</u> |
| | <u>63</u> | | <u>67</u> | ✓ | <u>Post-Test</u> |

Extension Options:

SPECIAL INSTRUCTIONS

Verso-Tiles

Write Story Problems

Cross Number Puzzles

Student-Selected Activity (needs teacher approval):

Working Conditions

1. Use your group's question chip carefully. Refrain from asking the teacher a question someone in your group can answer.
2. If you need help and the teacher is busy, ask someone else, keep trying, or go on to another activity until the teacher is available.
3. Work on math for the entire math period.
4. Do your work without bothering anyone or calling attention to yourself in any way.
5. Keep track of your contract.

Teacher's Signature: _____

Student's Signature: _____



Contract for Reading Skills, Grammar & Language Mechanics

Student's Name: Leandra

| | | | | | |
|---|------------------------------------|---|----------------------------|---|-----------------------------|
| ✓ | Page/Standard | ✓ | Page/Standard | ✓ | Page/Standard |
| | <u>58 (plurals)</u> | | <u>62 (compound words)</u> | ✓ | <u>65 (possessives)</u> |
| ✓ | <u>59 (subject/verb agreement)</u> | | <u>63 (suffixes)</u> | ✓ | <u>66 (possessives)</u> |
| | <u>60 (prefixes)</u> | | <u>64 (suffixes)</u> | | <u>67 (parts of speech)</u> |
| | <u>61 (prefixes)</u> | | | | |

Alternate Activities

Record the way you spent your time while the rest of the class was working on standards you have mastered. The only expectation is that you spend your time reading and/or writing.

| Date | Activity |
|------|----------|
| | |

Teacher's Signature: _____

Student's Signature: _____

Math Contract

For: Math Chapter 7

Student Name: _____

| <input checked="" type="checkbox"/> Page/Concept | <input checked="" type="checkbox"/> Page/Concept | <input checked="" type="checkbox"/> Page/Concept |
|--|--|--|
| p. 107, 108: Use Mental math to practice adding tens. | p. 115, 116: To use the problem solving strategy 'make a model' to solve problems. | |
| p. 109, 110: To count on by tens and ones to a 2-digit number. | p. 117, 118: Extra Practice | |
| p. 111, 112: To model adding 1-digit to 2-digit numbers. | Chapter Test. | |
| p. 113, 114: To model adding 2-digit numbers. | | |

If any of the above items are checked, you must participate with the class on that day.

Implementing the Learning Contract

- Introduce the concept of a learning contract to the entire class.
 - Avoid win-lose words (qualify, eligible, deserve)
- Offer a pretest on the unit to ALL students, regardless of perceived skill. Students can volunteer to take the pretest. (Achieving mastery is 90%)
 - Students can abandon the pretest at any time if they realize they will not achieve mastery



Implementing the Learning Contract

- Communicate the following (regarding pretest) to students:
 - Avoid congratulating students for achieving mastery on the pretest
 - Use phrases such as, “You have shown you do not need more practice” or “You have shown you need more practice.”
 - Neither option (learning contract or planned unit) is better than the other

Implementing the Learning Contract

- Have a meeting with students who have passed at 90% level or higher.
 - Inform students that with a contract they will be able to work through the unit more independently.
- Students will join the class for instruction regarding skills they have not yet mastered.



Extension Activities

- When students document mastery, their first activity should be to engage with that material at a higher level
 - Focus on depth and complexity
- How can a standard be extended in more challenging ways?
- Don't use extension work time to have students work on areas of weaknesses

SLOW



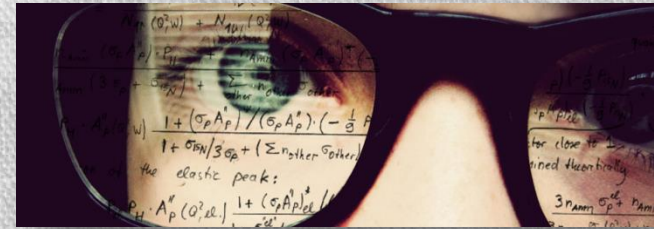
**CHILDREN
PLAYING**

• E

• C

Tic-Tac-Toe Board/Extension Menu

- Can be used as extension work, a tiered assignment, or a way to offer choice to gifted students
- Options:
 - Student choices create a “tic-tac-toe”
 - Choose one option that ALL students must do
 - Base on skill level, interest, multiple intelligences, etc.
- Allows for creativity, and students feel empowered to dictate the direction of their own learning



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American Wars Extension Menu

| | | |
|---|--|--|
| Present a detailed biography of an important person during the time of this conflict. Include evidence of this person's influence during the war period. | Research the patriotic music used by both sides in the war. Point out similarities and differences. Describe how music influences patriotism in civilians and soldiers. Compare the patriotic music of this war to that of other wars. | Locate information about the medical practices used on the battlefield and in field hospitals during this war. Include biographical information about famous medical people of that time. |
| Discover how military people communicated with each other and with their commander-in-chief during this war. Focus on events in which poorly understood or poorly delivered communications influenced the outcome of a military effort. | Student Choice | Investigate battles in which creative or uncommonly used tactics were employed. OR design strategies that you think would have led to more victories and fewer casualties. Be sure to use only the technology available during that time period. |
| Discover words or phrases that were "coined" during this war period and remain part of our English usage today. | | Investigate other types of wars: between families, clans, children in school, mythical creatures, etc. Share information about them and include a comparison of elements found in a traditional war between countries. |
| | | Investigate and describe ways in which this conflict or wars in general could be avoided. |



Biography Extension Menu

| | | |
|--|---|---|
| Create a bibliography of biographies in a specific category. Examples: women, astronauts, children, musicians, inventors, sports heroes, entertainers. Read those that look interesting to you. Find a way to get others interested in reading them. | Read three biographies in a specific category (see the box at the left). Illustrate the elements they have in common. | Illustrate the relationship between the subject's life and the time period in which he or she lived. Include information about specific events and how they influenced the person's life. |
| Describe gender or ethnic issues in biographies written for your age group during the past 10 years, and during the first 5 years of any previous decade. | Student Choice | Discover some things about which the subject would have been proud. Use these to create his or her obituary and epitaph. |
| Create an illustrated timeline showing major and minor events in the subject's life. Create a second timeline showing things the person might have wanted to do or accomplish. | | Act out a biography of a person who was connected to a particular historical event your classmates are studying. Challenge your audience to guess the person's identity. |
| | | Use photography to illustrate the "snapshot method" of biography, in which you show common themes or elements found in three biographies. |

WASHINGTON STATE FINAL PROJECT: TIC-TAC-TOE STUDENT CHOICE ACTIVITIES

Anchor Standard: LA/Reading: Integration of Knowledge and Ideas

Anchor Standard: LA/Writing: Research to Build and Present Knowledge

Common Core Standards:

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- Conduct short research projects that build knowledge about a topic.
- Draw evidence from literary or informational texts to support analysis, reflection and research.

| | | |
|---|---|--|
| <p>1. Construct a diagram or model that shows an event in Washington State History. Incorporate symbols or drawings to represent each branch.</p> <p><i>20/20</i> * Suffrage movement clay model was amazing! Your attention to detail was impressive!</p> | <p>2. Create a PowerPoint Presentation that explains three important decades in Washington State History. Include details about government, economics and world events that impacted Washington State.</p> | <p>3. List 5 different powers held by the state government and 5 held by the federal government, such as controlling the military or running schools. Make a 2-column chart, one for each level of government. List the powers of each along with details about what each does.</p> |
| <p>5. Choose any Washington State Governor. Research facts about him/her, his/her accomplishments, disappointments and the era in which he lived. Write a journal this Governor might have written telling about his time in office. Your journal must have at least 6 entries with dates and historical details.</p> <p><i>17/20</i></p> | <p>4. On the Internet, find pictures and information about the geography of Washington State. Create a power point that explains the five regions and the cities and landforms that exist in these three regions.</p> | <p>6. Student Choice: Create your own learning activity that you believe follows the Common Core Standards above. Prior to starting the activity, get permission from your teacher.</p> |
| <p>7. Explain the history of how Washington became a state. Create a timeline of key events in the first 50 years of the states history.</p> <p><i>see feedback</i></p> | <p>8. Write and perform a poem or rap or a short skit describing an event integral to Washington State History. Present to the class.</p> | <p>9. Make a dictionary of 20 terms pertinent to our Washington State Lessons.</p> <p><i>* look at the rubric, you need to include parts of speech into your definitions.</i></p> <p><i>18/20</i></p> |

I/we chose activities # *1*, # *5*, and # *9*.

Monitoring Extension Activities

- Handouts:
 - “How to work Independently on Extension Activities”
 - “The Essential Rules for Independent Work”
- Just for gifted?
 - It is beneficial for all students





How to Work Independently on Extension Activities

- ✓ Listen to the teacher's lesson if you are required to do so.
- ✓ Ask any questions you have about the lesson while it is being taught.
- ✓ Do the problems or activities you are asked to do.
- ✓ When you are allowed to, select an extension activity.
- ✓ Work on the extension activity for the rest of this period.
- ✓ Working with a partner is okay; if you need help, ask your partner for help first.
- ✓ Follow the Essential Rules for Independent Work at all times.
- ✓ Check the answers if they are available.
- ✓ If you need to talk to the teacher, let her or him know in an agreed upon way so that you do not interrupt instruction.
- ✓ If you finish early, either select another activity or make a more difficult version of the one on which you have been working.
- ✓ If you are working in math, make up some more difficult problems just like the ones the class is working on, or create some word problems for others to solve.
- ✓ Complete the necessary record keeping.
- ✓ File your extension work in the required location.



The Essential Rules for Independent Work

1. Do your work without bothering anyone.
2. Work on your extension activity without calling attention to yourself; please don't talk while the teacher is teaching.
3. Refrain from asking the teacher questions while he or she is working with other students.
4. Do the extension activity you have agreed to complete. If you finish it before the class is finished working, choose another extension activity.
5. Keep records of the tasks you are working on in the way your teacher has explained.

Grading Extension Work

- You don't – Most of the Time
- Grades entered are the ones that document student mastery
 - Add comments to the gradebook about extension work
 - Monitor all curriculum modifications on the Compacting Form
- Compacting Form
 - Created by Joseph Renzulli and Linda Smith
 - Use a separate one for each student
 - Store them in a specific place
 - I keep them in electronic folders

THE COMPACTOR

Joseph Renzulli and Linda Smith

Student's Name: Aditi Prabhala

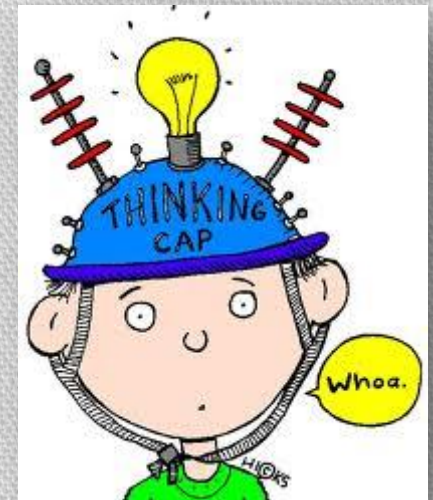
| Areas of Strength | How Mastery Was Documented | Alternate Activities |
|---|--|--|
| Identifying Primary and Secondary Sources | Completed the Five Most Difficult First | Optional question about bias is mandatory |
| Mesopotamia Geography | Study Guide Method 3.1 Grade Cam Quiz – 10/10 | Game Board (Standard #1) Poem (Standard #2) |
| [Type here] | [Type here] | [Type here] |
| [Type here] | [Type here] | [Type here] |

Work Time!

- Create a Tic-Tac-Toe Board
- How did work time go?
 - Problems?
 - Where do you see this working out in your classroom?

DIFFERENTIATING WITH CONTENT- BASED CONTENT

Social Studies, Science, Health,
Literature Study



Rigor = E⁴

- “Curriculum can be varied in degree of rigor by increasing any or all of the four traits...”
(Cash).
 - **E**ffective (complexity)
 - **E**ngaging (personally or emotionally challenging)
 - **E**xciting (provocative and ambiguous)
 - **E**nriching (authentic and substantive)

E4 – Effective and Engaging

- Effective Activities...
 - Go deeply into the content
 - Allow students to explore content through different learning styles
 - Expose students to new ways of thinking and doing
- Engaging Activities...
 - Are emotionally charged
 - “The more emotionally charged a topic is, or the more the student feels personally connected to it, the more rigorous and engaging that topic becomes for the student” (Cash).

Cross-Impact Matrix (CIM)

| What Impact does this → Have on this? ↓ | A The 1860 election of Abraham Lincoln | B The attack on Fort Sumter | C The emancipation Proclamation | D Lee's Surrender to Grant in 1865 |
|--|--|---------------------------------------|---|--|
| 1 Economy | | | | |
| 2 Politics | | | | |
| 3 Race Issues | | | | |
| 4 Social Structure | | | | |

E4 – Exciting

• Exciting Activities...

- Incorporate ambiguous and provocative topics
 - Stem-cell research
 - Global warming
 - Racism
- “When material, issues, or solutions are less obvious, the learner must invest greater amounts of mental energy to develop knowledge” (Cash).
- Allow students to learn....
 - How to deal with uncertainty
 - How to persevere
 - How to rationalize debates
 - How to form solid independent opinions

E4 – Enriching


• Enriching Activities...

- Allow students to practice in authentic ways
 - Project-based
 - Student-designed experiments
 - Service learning projects
 - Simulations
 - Debates
 - Making a Website



Independent Study

- “The process that you apply when you research a new topic by yourself or with others” (Johnsen and Goree).
 - Real-world Investigations
 - Opportunity to go beyond
- Most frequently recommended instructional strategy in TAG programs (Johnsen and Goree)
- Planned Research Process (Johnsen and Goree)
 - Similar to a practicing professional/authentic
 - Facilitated by the teacher
 - Focus on lifelike problems



“...investigative activities and artistic productions in which the learner assumes the role of a first-hand inquirer – thinking, feeling, and acting like a practicing professional”

(Renzulli & Reis, p. 131)

Guidelines for Independent Study

(Johnsen and Goree)

- **Don't confuse aptitude with skill**
- Identify independent study skills
- **Adapt as the student changes**
- Use different types of research
- **Make it a part of a regular program, not an addition**
- Monitor progress and products
- **Develop an appropriate evaluation**
- Believe in the students ability and be a model
- **Remember this is only ONE way to meet the needs of gifted students.**

“Gifted students who have participated in these programs feel that independent study has a **positive influence** on their **motivation and career**, their **study habits and thinking processes**, the degree of **challenge**, and the opportunity for **self-expression** in school”

(Johnsen and Goree)

Levels of Self-Direction

| Decisions to Be Made | Self-Directed: Level 1 | Self-Directed: Level 2 | Self-Directed: Level 3 |
|---------------------------------------|--|--|--|
| Goals and Objectives | Teacher provides choices or options for students | Teacher involves learner in creating options | Learner controls choices; teacher provides resources and materials. |
| Assessments of Entry Behaviors | Teacher diagnoses, then provides several options | Teacher and learner hold diagnostic conferences; tests employed individually if needed | Learner controls diagnosis; consults teacher for assistance when unclear about some need |

| Decisions to Be Made | Self-Directed: Level 1 | Self-Directed: Level 2 | Self-Directed: Level 3 |
|----------------------------------|--|---|---|
| Instructional Procedures | Teacher provides options for student to employ independently at his or her own pace | Teacher provides resources and options, uses contracts that involve learner in scope, sequence, and pace decisions. | Learner defines project and activities, identifies resources needed, makes scope, sequence, and pace decisions. |
| Assessment of Performance | Teacher relates evaluation to objectives and gives student opportunity to react or respond | Peer partners used to provide feedback; teacher and learner conferences used for evaluation | Learner does self-evaluation |

Adapted from “Teaching for Self-Directed Learning: A Priority for the Gifted and Talented,” by D.J. Treffinger, *Gifted Child Quarterly*, 19, p. 47. Copyright 1975 by the National Association for Gifted Children.

Steps in Independent Study (IS)

1. Prepare the IS for Students
2. Introduce IS to Students
3. Hold an IS Meeting
4. Selecting a Topic
5. Asking Questions
6. Research/Gather Information
7. Develop a Product
8. Share Information
9. Evaluate the Study



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Adapted from:

Winebrenner, S., Brulles, D., & Winebrenner, S. (2012). *Teaching gifted kids in today's classroom: Strategies and techniques every teacher can use*. Minneapolis, MN: Free Spirit Publishing.

Johnsen, S. K., & Goree, K. K. (2009). Teaching gifted students through independent study. In F. Karnes & S. Bean (Eds.) *Strategies for teaching gifted students* (pp. 415-445). Waco, TX: Prufrock Press.

Step #1: Preparing the Independent Study

Self-Directed: Level 1

1. Decide on the unit/topic of study
2. Choose **10-20 standards** (depending on the length of the unit) and list them in order on the study guide
 - Make sure to create a **task description** for each that tells students what they must learn about it or what skills they must demonstrate mastery
 - **Insert checkpoints and dates:** Students will take the assessments at the same time the rest of the class does
 - Make sure the first checkpoint is soon after the start of the unit; students who find they are struggling with the study guide method will have time to **return to the rest of the class.**



American Wars Study Guide

Be prepared to:

1. Discuss the political, social, and economic causes of the war.
2. Explain the basis of the economy for both sides before the war began.

* CHECKPOINT: _____ : Assessment for 1-2 *

DATE

3. Give the meanings of all designated vocabulary words.
4. Show on a map the disputed territory before the war began, at its midpoint, and at its end.
5. Recite from memory an important speech from this particular war period on a war-related topic. Be able to explain its background and significance.

* CHECKPOINT: _____ : Assessment for 1-5 *

DATE

6. Describe typical battle conditions experienced by soldiers and commanders. Include information about commonly used battle tactics.
7. Narrate a first-person biographical sketch of a person connected to the war effort.
8. Write an account of a non-battle event related to the war and post it on an appropriate website.
9. Describe the peace plan—its location, components, and effects.
10. Summarize the implications of this war in today's time period. Hypothesize how history would have turned out differently if the other side had won. Make predictions for the decade following the war as well as for the present time.

* CHECKPOINT: _____ : Final Assessment for 1-10 *

DATE

★ EARLY CIVILIZATIONS STUDY GUIDE ★

BE PREPARED TO:

1. Describe the geographic features of Mesopotamia and the ways in which they contributed to the spread of agriculture.
2. Summarize ways in which ancient people in Mesopotamia managed in a land with scarce resources.

* CHECKPOINT: [12 / 06 / 13]: Assessment for 1–2...*

3. Trace the factors that led to the development of the first civilization.
4. Describe the first civilization at Sumer. Analyze whether or not Sumer is a good example of a civilization.
5. Narrate a first-person biographical sketch of a person connected to either the religion or leadership of Sumer.
6. Write a press release announcing the major inventions of the Sumerians, and post it on EDMODO for all to see.
7. Explain the Sumerian role in the development of written language, and analyze the effect that writing had on the Sumerian culture.

* CHECKPOINT: [12 / 19 / 13]: Assessment for 1–7...*

8. Give the meanings of all designated vocabulary words: Mesopotamia, floodplain, silt, semiarid, drought, surplus, civilization, Sumer, city-state, ziggurat, polytheism, king, bronze, pictograph, stylus, cuneiform, scribe, empire, emperor, Fertile Crescent, Hammurabi, code of law, justice, exile, tribute, Hanging Gardens of Babylon, Anatolia, toleration, province, satrap, Royal Road
9. Describe the need for, and impact of, codes of law in the development of civilizations.
10. Take a stand on the following statement: Laws are necessary for the protection of individuals and society. Develop a claim, support your claim with evidence, and provide explanation.

11. Trace the development of the empires in Mesopotamia, which includes the **Akkadian Empire**, Babylonian Empire, Assyrian Empire, and Chaldean Empire.
12. Recite from memory five laws from Hammurabi's code. Be able to explain its background and significance.
13. Analyze the rise and fall of the Assyrian Empire.
14. Describe Assyrian innovations in building and ruling an empire.
15. Create an interview between you and Nebuchadnezzar. Include questions and answers about his empire and accomplishments
16. Describe the rise of the Persian Empire in Asia.
17. Analyze the accomplishments of Cyrus and Darius, two notable Persian leaders.

* CHECKPOINT: [01 / 24 / 13]: Final Assessment for 1–17...*

Step #1: Preparing the Independent Study

Self-Directed: Level 2 or 3

- Decide on the unit/topic of study
- Make decisions on:
 - Deadlines
 - How students will demonstrate their learning for their IS project
 - Skills/content students should be focusing on



Step #2: Introduce IS to Students

Self-Directed: Level 1, 2 or 3



- Make sure to...
 - Define the process/steps
 - Describe the dates that different stages are due
 - Teachers may need to help instruct kids about how to create their own due dates
 - Describe the audience who will be hearing their final presentation
 - Students are more motivated if the audience is authentic
 - Classmates, Principal, Parents/Other Adults, Expert in the Field, etc.
- Explain the process to all students
 - They can decide if it's best for them

Identifying Students

- Describe the characteristics, to students, that they need to have to be successful to use the study guide
 - Examples:
 - Be highly motivated to complete independent study and research
 - Be able to motivate yourself, without a lot of prompting and reminders from teachers or parents
 - Be interested to learn material beyond the required standards
 - Be able to think creatively, solve many of your problems independently, and be willing to ask questions
 - Be willing to work hard and search for materials independently
 - Be able to set independent goals, monitor your own progress, and meet deadlines without a lot of support from Ms. Wagner

Step #3: Hold a Independent Study Meeting

Self-Directed: Level 1, 2 or 3

- Have interested students meet privately with you, and review the process more in depth with these students.
 - Review the grading
 - *If students do not demonstrate mastery of the required standards on the formative assessments (quizzes), they will rejoin the class*
 - Review their alternate choices (hand out the Product Choices Chart)
 - Review how they will share their learning with the class
 - Review the Work Log
 - Review the Independent Study Agreement
 - Give them 1-2 days to make their final decision
 - Get parent and student signatures on the Agreement



★ **INDEPENDENT STUDY AGREEMENT** ★
FOR STUDY GUIDE ONLY

Read each condition as your teacher reads it aloud. Write your initials beside it to show that you understand it and agree to abide by it.

Learning Conditions

- _____ I will learn independently all the required standards described on the Study Guide. I will not have to complete the actual classroom assigned activities as long as I am doing work related to what the class is learning.
- _____ I will demonstrate competency with the assessments for the Study Guide content at the same time as the rest of the class. This includes class quizzes and the final exam.
- _____ I will participate in designated whole-class activities as the teacher indicates them—without arguing. This may include discussions and simulations.
- _____ I will keep a Daily Log of my progress.
- _____ At the end of the unit, I will share what I have learned about my independent study with the class in an interesting way. My report will not exceed five minutes and will include a visual aid. I will prepare a question about my report to ask the class when my report ends.

Working Conditions

- _____ I will be present in the classroom at the beginning and end of each class period.
- _____ I will not bother anyone or call attention to the fact that I am doing different work than others in the class.
- _____ I will work on my chosen topic for the entire class period on designated days.
- _____ I will carry this paper with me to any room in which I am working on my chosen topic, and I will return it to my classroom at the end of each session.

Student's Signature: _____

Teacher's Signature: _____

Date: _____



PRODUCT CHOICES CHART



| Auditory | Visual | Tactile-Kinesthetic | Technology |
|---|---|---|--|
| Audio recording Autobiography Book Classifying Commentary Crossword puzzle Debate or panel talk Dialogue Documentary Editorial Essay Experiment Family tree Finding patterns Glossary Interview Journal or diary Learning Center task Letter to editor/author Limerick or riddle Mystery Newspaper Oral report Pattern and instructions Petition Position paper Press conference Reading Scavenger hunt Simulation game Song lyrics Speech Story or poem Survey Teaching a lesson Trip itinerary Written report (Auditory because people write thoughts they "hear" in their minds) | Advertisement Art gallery Brochure Coat of arms Collage Coloring page Comic book or strip Costume Decoration Design Diagram Diorama Drawing or painting Flow chart Graphic organizer Greeting card Hidden pictures Multimedia presentation program Illustrated manual Illustrations Learning Center visuals Magazine Map Mural Pamphlet with pictures or icons Photo album Photo essay Picture dictionary Political cartoon Portfolio Poster Rebus story Scrapbook Slide show Travelogue TV program Video Website | Acting things out Activity plan for trip Collection Composing music Dance Demonstration Diorama Dramatization Exhibit Experiment Field experience Flip book or chart Game Game show How-to book Invention Jigsaw puzzle Learning Center—hands-on tasks <u>Manipulatives</u> Mobile Model Museum exhibit Patter creation/demonstration Papier-mâché Photograph Play or skit Pop-up book Project cube Puppet show Rap or rhyme Reader's Theater Rhythmic pattern Role-play Scale drawing Sculpture Simulation game Survey | Animation App Blog Broadcast over TV, radio, or the Internet Competition <u>Cyberhunt</u> Digital game Forum <u>iMovie</u> Multidimensional video (e.g., 3D) Online quiz Podcast Presentation Research Song or jingle Virtual site visit <u>Webquest</u> |



Step #4: Selecting a Topic

Self-Directed: Level 2 or 3

- **Options:**

- **Problem they want to solve/Question they want to answer**

- *In ancient Greece, how does chaos create change? (Social Studies)*
- *How do advertisers persuade people to buy their products/support a cause? (English)*
- *What is the difference between the historical and current beliefs about space exploration? (Science)*

- **An issue they want to research and debate**

- *Censorship and Banning Books (English)*
- *Global Warming (science)*

- **An opinion or hypothesis they want to prove**

- *Different environmental factors impact plant growth (Science)*
- *A democracy is a more effective form of government than other types (social studies)*

- **Something they want to know more about**

- *Egyptian Pharaohs (Social Studies)*
- *Physics (science)*
- *Coding (technology)*

Help students consider...

- Which topic is most interesting to them
- Which topic do they know least about
- Which topic do they know the most about
- Which topic will be easy to find information on
- Which topic is the most unusual
- Which topic will be the most useful
- Which topic will be the most interesting to the audience

Step #5: Asking Questions

Self-Directed: Level 2 or 3

- Good questions lead to quality IS

- Ineffective Questions

- If it has a simple yes or no answer

- “Little Thinking” Questions

- Examples:

- *Is global warming happening?*
- *Does the moon have phases?*

- Effective Questions

- Multiple “right” answers

- Different researchers will pursue it differently

- Useful or beneficial to the student

- Examples:

- *How is global warming effecting ocean life?*
- *Why is there a disagreement among countries over the hunting of seals?*



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Step #6: Research/Gathering Information

Self-Directed: Level 1, 2 or 3

- Multiple forms of information
 - Primary Sources
 - Interviews
 - Experts in the Field
 - Visit to a museum

- Multiple ways to gather information
 - Note Taking
 - Recording Interviews
 - Observing
 - Reading
 - Listening



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Step #7: Developing a Product

Self-Directed: Level 1, 2 or 3

- Make it authentic to the field of study

Step #8: Sharing Information

Self-Directed: Level 1, 2 or 3

- For *living* products, they need to be shared and illicit discussion
 - Oral Report
 - Display



Step #9: Evaluation

Self-Directed: Level 1, 2 or 3

- Should focus on what the student has learned and/or how they can improve the next IS project
- Evaluations will vary depending on the criteria focused on
 - Ideas:
 - Was it well-planned?
 - Did they use their time efficiently?
 - Was their research extensive?
 - Did they develop a fine product?
 - Was their class presentation effective?



What do students say?

Table 3
Repeated Words and Phrases
Denoting Positive Response

| Repeated Coded Words/Ideas | Repeated Coded Phrases |
|---|---|
| fun | I liked doing IS |
| interesting, exciting, new educational, informative | I learned, I learned how, I realized Increase in knowledge, learned to budget my time, learned about the past |
| connecting | Connecting to inventions, connecting to the past, connecting to the future |
| hard, time-consuming | A lot of research, found more or better information, had to push myself |
| challenging, stimulating, enriching, enhancing, intriguing | Made me think, in-depth knowledge. |
| readiness | Ready, did my best, I feel ready |
| fear of speaking/the audience | I don't like to talk in front of an audience, I am really shy |
| proud/pride | Respect for history, proud of my own work, did it on my own |

Table 1
Frequency of Positive Responses

| Positive Response Level: 0–5 = Low; 6–10 = Medium; 11–16 = High | Prestudy | Midstudy | Poststudy |
|---|----------|----------|-----------|
| 1. I would like to participate in an independent study (IS) so that I can be challenged. | H | H | H |
| 2. IS gives me a positive learning alternative to the regular classroom routine. | M | M | H |
| 3. IS gives me a way to make choices in my learning and an opportunity to design my own learning. | H | H | H |
| 4. I hope to learn a lot from this study. | M | M | H |
| 5. Choosing my own area of interest is important to me. | H | H | H |
| 6. Delving into my own topic and learning more about it is an added benefit to this experience. | H | H | H |
| 7. I'd like to have more experiences like this one. | H | M | H |
| 8. I value learning on my own. | H | H | H |
| 9. The historical context will make this a better study. | L | M | H |
| 10. Finding and solving a real-world problem makes this experience worthwhile. | H | H | H |
| 11. Use of the computer for research and PowerPoint makes the study interesting. | M | H | H |
| 12. Presenting the results to an audience makes the study real and important. | L | L | H |



“ Independent Study is essential for those students who are bright but refuse to accept traditional learning environments and values. They desire challenge, the opportunity to research what personally interests them, and the freedom to guide their own learning. It is a wonderful opportunity for gifted students who achieve less than their potential to shine” (Powers).



Discussion Questions

1. From the perspective of a classroom teacher, what are the positive AND negative aspects of implementing independent study as an instructional strategy for gifted learners?
2. How might the negative aspects you listed be addressed?

Tiered Lessons and Tiered Assignments

- **Tiered Lessons:**

- “A teaching strategy in which teachers assess the readiness level (interest, prerequisite knowledge, and skill level) of their students and group them accordingly for both instruction and production” (Lafferty).

- **Tiered Assignments:**

- A method for differentiating projects for multiple levels of students
- Students self-assess the challenge level for themselves
- Advanced and Most Challenging options should not simply be more work; should be a higher level of work

Example of a Tiered Lesson - Science

Enduring Understanding: People use classification to organize and structure many things. (Lafferty)

| | Group #1 Have not demonstrated mastery | Group #2 Demonstrated Mastery of basic knowledge | Group #3 Have a good sense of scientific classification | Group #4 Mastery understanding of the overall system |
|-----------------|--|---|--|--|
| In Class | <ul style="list-style-type: none"> Focus on properties of matter Read about and experiment with density and temperature Move away from the physical properties of water to the characteristics of living and non-living things | <ul style="list-style-type: none"> Describe the identifying characteristics of commonly collected objects Arrange organisms into groups and describe reasons why Develop a system that they can relate to scientific classification | <ul style="list-style-type: none"> Select a kingdom Identify characteristics of the organisms within a kingdom Delve into the patterns of taxonomic classification Conceive a “new” organism and attempt to classify it scientifically | <ul style="list-style-type: none"> Look for similar patterns of classification in other disciplines (how is the structure of scientific taxonomy like the structure of a school) |

Example of a Tiered Lesson – Social Studies

Enduring Understanding: People stopped nomading and settled down.

| | Group #1 Have not demonstrated mastery | Group #2 Demonstrated Mastery of basic knowledge | Group #3 Mastery understanding of the overall system |
|-----------------|--|--|--|
| In Class | <ul style="list-style-type: none">• Focus on the reasons why people stopped nomading• Read about the end of nomading and how early villages developed• Create a mural or timeline to demonstrate understanding | <ul style="list-style-type: none">• Create a skit that illustrates a timeline of how and why people stopped nomading and settled down• Focus on cause and effects | <ul style="list-style-type: none">• Create a modern dance that illustrates the factors that led to humans settling down into early villages• Demonstrate mastery through movement and drama• Focus on cause and effect; and relationships between the past and the present |

| Required Standard | Entry-Level Activities | Advanced Activities | Most Challenging Activities |
|--|---|--|--|
| <p>Subject: Informational Reading</p> <p>Concept: Finding Evidence</p> <p>Standard: Draw evidence from informational texts to support analysis, reflection, and research (WHST.6-8.9)</p> | <p>1. Create a Venn diagram to illustrate the comparison between the <u>Mesopotamian religion</u> and another religion of your choice (does not need to be your own religion).</p> <ol style="list-style-type: none"> Use at least 2 sources Record at least 5 facts in each section of the Venn diagram. Cannot get higher than a 3.7 if this project is chosen. | <p>1. Create a large poster drawing of a <u>ziggurat</u> detailing major components of the religious building and labeling key parts of the ziggurat. Include a written piece that explores the importance of the ziggurat and the role it played in Sumerian city-life.</p> <ol style="list-style-type: none"> Use at least 3 sources | <p>1. Research and discuss in detail three examples of societies, besides Sumer, that also believed in <u>polytheism</u>. These societies can be from the past or the present. Also, discuss how polytheism in different from monotheism, and how it might impact a society.</p> <ol style="list-style-type: none"> Use at least 3 sources Present in a format of your choice |

NAGC – Common Core Ideas Tiered Assignments Related to Standards

| Grade and Standard | Typical Learner Activity | Advanced Learners |
|--|---|---|
| <p data-bbox="285 475 448 515">Grade 8</p> <p data-bbox="117 591 620 976">RI.8.6.: Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.</p> | <p data-bbox="691 475 1222 862">Students will review opinions from a Supreme Court case, determine each author's point of view, and summarize how he or she responds to the other viewpoints.</p> <p data-bbox="691 876 1222 1090">Students will create a graphic organizer comparing the two points of view.</p> | <p data-bbox="1280 475 1831 976">Advanced students will review opinions from a Supreme Court case, determine each author's point of view, summarize other viewpoints, and then prepare a written rebuttal to the author's point of view in the same format.</p> |

NAGC – Common Core Ideas Tiered Assignments Related to Standards

| Grade and Standard | Typical Learner Activity | Advanced Learners |
|--|--|---|
| <p data-bbox="285 475 448 515">Grade 8</p> <p data-bbox="92 591 643 915">SL.8.5.: Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.</p> | <p data-bbox="681 475 1232 858">Students are presented with textual information on a current event with the task of developing a presentation to teach their classmates about the topic.</p> | <p data-bbox="1300 475 1802 972">Advanced students are presented with textual information on a current event with the task of developing a multimedia presentation with interactive elements to teach their classmates about the topic.</p> |

DDM – Digging Deeper Matrix

- Provides a tiered system for creating activities at all levels of Bloom's
- Could be used...
 - Homework provided to all students; small groupings
 - Extension Work (the Advanced Options)
 - For individuals or small groups

Digging Deeper Matrix (DDM)

Unit:

Standards

Students will know:

Students will be able to:

Students will understand:



| | RECALL (R) | UNDERSTAND (U) | APPLY (A) | ANALYZE (Z) | EVALUATE (E) | CREATE (C) |
|-----------------------|---|------------------|---|--|---------------------------|-----------------|
| LEVEL 1 FACTUAL | FOR ALL STUDENTS Specific/Concrete (1R) | Translate (1U) | Original Way (1A) | Individual Elements (1Z) | Check Clarity (1E) | Reorganize (1C) |
| LEVEL 2 PROCEDURAL | Tools/Skills (2R) | Interpret (2U) | FOR SOME STUDENTS Practical Way (2A) | Relationship Among Ideas (2Z) | Judge Accuracy (2E) | Formulate (2C) |
| LEVEL 3 CONCEPTUAL | Abstract Information (3R) | Extrapolate (3U) | FOR ADVANCED STUDENTS Creative Way (3A) | Principles Governing Elements (3Z) | Critique Validity (3E) | Innovate (3C) |
| ASSESSMENTS | | | | | | |

Based on Anderson, Lajoie, W., and David N. Gaskins, eds. *Assessing for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Addison Wesley Longman, 2001.
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Digging Deeper Matrix (DDM)



Unit: Revolution and the New Nation 1763-1820

Standards: The student will demonstrate knowledge of how the principles of the American Revolution became the foundation of a new nation.

Students will be able to:

- **analyze** economic, political, and philosophical conflicts leading to the American Revolution.
- Explain how and why the American colonists won the war against the more superior British resources
- Interpret the impact the Revolutionary War had on groups within American society
- Infer the impact of revolution on nations and groups of citizens within those boundaries

Students will understand:

- The causes, effects, and consequences of revolution

Students will know:

- Important vocabulary, dates, and events (such as treaties, battles, political writings, and relations with foreign nations and Native Americans) related to the American Revolution
- Important political, economic, military, and cultural figures related to the American Revolution (such as George Washington, Samuel Adams, John Adams, Paul Revere, Thomas Jefferson, Charles Cornwallis, Marquis de Lafayette, Thomas Paine, Patrick Henry, John Locke, and Baron de Montcalm)
- Important debates and facts over slavery; status of free blacks, women, and Native Americans; migration to Canada; and the westward movement of white settlers



| | RECALL (R) | UNDERSTAND (U) | APPLY (A) | ANALYZE (Z) | EVALUATE (E) | CREATE (C) |
|-----------------------|---|---|---|--|---|---|
| LEVEL 1 FACTUAL | Specific/Concrete (1R) List important dates of the Revolutionary War | Translate (1U) WHAT? What led to the colonists' revolt against Britain? | Original Way (1A) How did the Treaty of Paris change the mapping of territories of North America? | Individual Elements (1Z) What were the basic disagreements among the Native Americans, colonists, British and French? | Check Clarity (1E) Why did the Native Americans, colonists, British and French have their disagreements? | Reorganize (1C) Put yourself in the role of a colonial ambassador. What message would you send to Britain or France? |
| LEVEL 2 PROCEDURAL | Tools/Skills (2R) Describe how the Red Coats attacked Boston. | Interpret (2U) SO WHAT? Why was this revolt important? | Practical Way (2A) How did the change of territories after the Treaty of Paris affect the colonists? | Relationship Among Ideas (2Z) How did these disagreements relate to each other? | Judge Accuracy (2E) In what ways might any or all of the disagreements have been avoided? | Formulate (2C) Put yourself in the role of a British ambassador. What plans would you make to settle disputes in the colonies? |
| LEVEL 3 CONCEPTUAL | Abstract Information (3R) Define a revolution. | Extrapolate (3U) NOW WHAT? What effect has the American Revolution had on our nation and Britain? | Creative Way (3A) Describe a modern day conflict where map boundaries were redrawn. | Principles Governing Elements (3Z) Why did each group seek control? | Critique Validity (3E) What made one group's claim more valid than the other group's claims? | Innovate (3C) Create a position statement that would either support or oppose colonization. |
| Assessment Examples | Paper/Pencil Test | Essay | Performance | Graphic Representation | Essay Persuasive Speech Role Play | Speech/Debate Research Proposal Graphic Representation |

Based on Anderson, Lois W., and David R. Krupar, eds. *Assessing for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Addison Wesley Longman, 2001.
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Work Time!

- Create a DDM, Tiered Assignment or Tiered Lesson
- How did work time go?
 - Problems?
 - Where do you see this working out in your classroom?

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