

WMS 1st Quarter Differentiation Report



Equity, access, and high levels of learning for all.

English 1st Quarter

6th Grade English

Students were pre-assessed on their writing skills at the beginning of the year. From this data, appropriate groupings were established within the classroom. These groups worked together to analyze mentor texts, as well as to peer edit and discuss one another's writing pieces. Students also conferenced with their teachers for individualized feedback and guidance on writing skills. Each student in the 6th grade published a narrative piece of writing this quarter. In addition, students were provided with differentiation through a variety of activities including a writing Bingo chart, strategies to generate writing ideas, tiered projects, and self-paced assignments such as NoRedInk.

6th Grade Reading

The 6th grade reading curriculum is standard based with differentiated instruction driven by formal and authentic assessments. Learning differences are acknowledged by providing conceptual practice at varying levels of difficulty. Formative assessments such as reading logs and exit tickets drive instruction, and summative assessments are given to show mastery of concepts. Activities address multiple intelligences and learning styles through graphic organizers, Socratic seminars, kinesthetic and multi-sensory activities, Kahoots, and Quizlets. Twenty-first century skills are developed by providing higher-order thinking opportunities such as choice boards. Self-regulation and time management are fostered by providing deadlines and written instructions. Flexible learning groups are determined by interest, performance, and choice. Tiered and parallel assignments respond to learning needs and provide a learning environment that is interesting, challenging, and choice-filled for all students.

7th Grade English

In 7th grade English this quarter, students had several opportunities to experience voice and choice as we explored the classic coming of age text, *The Outsiders* by S.E. Hinton. Students were given multiple choices for their final project on *The Outsiders*. All project options provided the students with the opportunity to creatively, critically, and symbolically explore the novel. Some students chose mind-mapping as their project choice, which is a critical and creative thinking strategy which encourages higher level thinking skills and connections. The project gallery gave students the opportunity to showcase their own hard work and see the work of their peers. In an effort to develop self-monitoring behaviors, students were encouraged to self-assess and reflect on the quality of their work using rubrics and exemplars to ensure they have met the criteria of the assignment. Flexible groupings for interest and/or ability were also used throughout the quarter as teachers differentiated the access, engagement, and expression for individual lessons and activities. Last, all students were given choice in their independent reading book.

8th Grade English

The 8th grade English classes focused on student memoirs during the first quarter. Students were asked to write and present a personal memoir reflecting a personal life experience. Differentiation included one-on-one conferencing, individualized digital feedback, and strategies to improve writing quality. Techniques and writing strategies addressed the lead, closure, voice, figurative language, and advanced vocabulary. Students all had the opportunity to peer-edit with students of similar writing levels.

Social Studies 1st Quarter

6th Grade Social Studies

Students were introduced to the DBQ (*Document Based Questions*) Writing Process and received differentiated instruction in analyzing documents, writing thesis statements, and providing primary and secondary source support to write a persuasive essay. More differentiation will be coming in future DBQ work. Students use different resources, assignment handouts, and are given different product choices in class. Summative assessments are differentiated by student ability, and students were given "voice and choice" in designing their own colonies, which is an example of Problem Solving Based Learning.

7th Grade Social Studies

In 7th grade Social Studies this quarter, students have had several opportunities to experience voice and choice as we explored the foundations of our government and how our government works today. Students were presented with a variety of paths to learning based on pre-assessment and interest. Throughout the quarter, students had access to leveled readings and a choice of homework products. For example, when studying the Preamble to the Constitution, students reinforced their learning through the choice of a traditional written homework assignment or by choosing to illustrate a section of the Preamble to demonstrate their understanding of the purposes of government. Students participated in class discussions and Socratic seminars using leveled questions. Some students participated in geography extension activities like creating a continent and writing slogans for the regions. Current events assignments offered students the opportunity to explore current government-related topics of interest and make connections to standards-based content.

8th Grade Social Studies

In World Geography this quarter, we began the new DBQ On-line process with the students. This was in the physical geography unit and allowed all students to access the material at their own pace and level. DBQ on-line uses a step by step process to make sure students are following the instructor's directions correctly. The final product is a written essay, but the prewriting exercises allow all to effectively formulate ideas and use verbal communication as well. Other differentiated highlights include pre-assessments for both the course and individual units, mental maps (of the world and neighborhood), Google Earth exploration of assigned and student chosen locales, and extensive use of the iPad for both classwork and homework. Creative projects involving cartography, research, and self-expression were also utilized.

At the end of the Physical Geography unit, students were provided the opportunity to choose a topic of interest. They were directed to use the library databases and other sites that would provide answers to their question. This was performed in the library with the assistance of the library staff.

During Wolf Time, World Geography students had the opportunity to choose topics they found interesting to explore further by researching and presenting them. Students were given a "menu" by the teachers and told to pick one appetizer, entree, and desert from the list to complete. These "menu" items were different ideas on what they could do, and ways to present the information they found. If none of the ideas given by the teachers resonated with a student, they could come up with their own idea for what to do and get it approved by the teacher. If executed well, there is the possibility of the new idea a student came up with to be added to a "student menu" that future students will be able to work from as well. These projects allowed students the

opportunity to create something they were passionate about while analyzing information, doing critical thinking, and making higher level connections to what is happening in the world around them. Students were also able to use technology to complete the projects.

This year we want to help students go beyond the assigned work to feed their interests. After the first interim report each quarter, students who have completed all assignments may raise their grades by proposing extra credit ideas. During first quarter, one student interested in climate made climographs from different regions of the world. Another student with an interest in sports, explored the regions that professional football teams in the United States claim for their fans. This opportunity gave students a chance to explore areas of their own interests in ways that they wanted. We also explored documents based questions. DBQ units provide a snippet from primary source documents for students to analyze to create persuasive arguments. Anticipating that some students would want to know more, we found the complete documents and made them available for those who hungered for greater knowledge. The international news story also gave students an opportunity to find and feed their interests. Some students used long and detailed articles from very highly regarded sources.

Science 1st Quarter

6th Grade Science

In 6th grade science this quarter, students had opportunities to experience voice and choice as we explored energy. Students were provided a variety of resources to explore the sources of energy and were given the choice to enhance their understanding and critical thinking skills. These resources included the National Energy Development Project and Explore Learning's online simulations called "Gizmos," providing opportunities for deeper conceptual understanding. Students were given the opportunity to investigate and analyze the advantages and disadvantages of each energy source and encouraged to use self-monitoring and self-reflection strategies throughout the quarter. Students were provided with a variety of tools to choose from when preparing for assessments, including some student-generated resources shared in class. When students were finished with work in class, they could choose from a variety of teacher-provided activities, called anchors, as an opportunity to enhance their understanding and investigation of energy.

7th Grade Science

Students in seventh grade science are experiencing voice and choice by creating an independent science project addressing a real-world problem or a question relevant to their lives. Through this student designed project, students are increasing their critical thinking and problem solving

skills, data analysis, writing, research, and communication skills. All students are also encouraged to sign up to participate in the WMS Science Fair to further develop skills in communicating their ideas and conclusions based on their projects with members of the community. Though much of the first quarter has been devoted to supporting students in creating their science projects, students have participated in many other diverse learning opportunities. For example, the Characteristics of Life Inquiry Lab provided an opportunity for students to collaborate in small groups to construct a list of seven characteristics that define life. Students then examined a variety of objects to challenge and refine their definition.

8th Grade Science

In 8th grade science, based on pre-assessment scores, classwork, and participation level, students were given the opportunity to complete different types of assignments and practice to appropriately challenge everyone. Examples of this differentiated work included: leveled homework, choice on projects, introduction to the mole and Avogadro's number, introduction to cubic dimensions to other cubic dimensions, differentiated labs, including kinetic and potential energy changes in phase changes, creation and design of density bottles, creating their own lab/ experiment using probeware, station differentiation, leveled online computer simulations, open-ended small projects, and performance- based assessment and application of science skills of learning.

Math 1st Quarter

6th Grade Math

During first quarter, Math 6 students participated in personalized learning experiences while exploring grade-level content. First quarter content exploration included the following: number sense topics (powers and order of operations), properties of real numbers, and fraction/mixed number operations (including visual modeling).

- Students were offered visual, kinesthetic, and auditory modes for conceptualizing real-life fraction scenarios.
- Classrooms are organized to promote access to manipulatives accommodating various learning needs.
- Class and group discussions include math discourse (using proper math terminology)

- Specific multi-modal learning activities included: Hands-on Modeling of Fraction Operations, Scavenger Hunts, Stations/Center-based work, Circuits, Flip Books, and four- squares. These activities were designed to engage a variety of student learning styles and allow students opportunities to create multiple representations for math problems while making connections between procedural and visual math learning.
- Teachers implemented flexible Grouping (based on ability and choice) arrangements.
- Error analysis activities exercised higher level critical and analytical thinking skills

7th Grade Math

During the first quarter, Math 7 students have experienced personalized learning experiences while exploring integers, statistics, and probability. Students are offered visual, kinesthetic, and auditory modes for conceptualizing real-life probability scenarios. Classrooms are equipped to allow access to manipulatives accommodating various learning needs. Students are encouraged to discover their personal learning modes so that they can self advocate and take responsibility for mastering crucial math skills and conceptual math ideas for higher level math. Students are empowered by a high level of self confidence in math which comes from an intrinsic desire for deeper understanding. Activities are offered in many forms to encourage choice. Flexible grouping based on ability and choice encourages student collaboration using math discourse. Students participate in math centers, watch instructional videos, and create products of their choice to show understanding of the standards. Also, students receive individualized instruction and support through IXL, Dreambox, interactive iPad activities, and retake opportunities of assignments and assessments.

8th Grade Math

During the first quarter, Math 8 students have experienced personalized learning experiences while exploring evaluating expressions, order of operations, probability, scatter plots, box and whisker plots, subsets of real numbers and square roots. Students are offered visual, kinesthetic, and auditory modes for conceptualizing real-life scenarios involving the aforementioned topics. In September, students took a learning styles inventory to help them discover their personal learning modes so they can self advocate and take responsibility for mastering crucial math skills for higher level math. Recently, students brainstormed as a class to come up with activities to help cement the concepts involved with the subsets of real numbers. They then chose various stations the following day to practice classifying and sorting numbers into the correct subsets. Some of the activities included a memory matching game, creating a poster, and playing online games with a partner to practice mathematical discourse and get instant feedback. Additionally, the class did a Kahoot and played a relay race with questions about subsets. Activities are offered

in many forms to encourage choice. Flexible grouping based on ability and choice encourages student collaboration using math discourse.

Algebra

During the first quarter, Algebra students have experienced personalized learning experiences while exploring linear functions. Activities are offered in visual, kinesthetic, and auditory modes for conceptualizing real-life scenarios. Students use the program Deltamath increasing analytical problem solving ability. Students discover their personal learning modes so they can self-advocate and take responsibility for mastering crucial math skills for higher level math. During all classroom activities, students are participating in math discourse for deeper understanding which also develops a high level of self-confidence. One project explored the concept of slope using motion detectors to graph the relationship between position and time. Activities are offered in many forms to encourage choice. Another project, using the Desmos online graphing calculator provided an opportunity for students to choose how they wanted to demonstrate their understanding of writing linear equations. Each student created a unique image of a house. Flexible grouping based on ability and choice are implemented for projects and activities. Students also choose areas of interest or enrichment in DreamBox which offers math practice in all math areas.

Intensified Geometry

During the first quarter, Intensified Geometry students have had multiple personalized learning experiences while being introduced to logic, planes, lines, proofs and polygons. Investigation activities have been an opportunity for student to explore concepts and derive rules that relate to Euclidean Geometry and theorems. These activities covered theorems on parallel and perpendicular lines, angles and logic. Students have experienced a range of proofs with online activities providing instant feedback. Technology resources provide differentiation using DeltaMath and DreamBox. Students work in Deltamath to increase analytical problem solving ability and choose areas of interest or enrichment in DreamBox. Extra challenging problem sets are available to master crucial math skills for higher level learning. Daily, students are participating in math discourse for deeper understanding which also develops a high level of self-confidence.

