Olmsted Falls Schools: Unit Design Framework

The purpose of the lesson planning framework is to act as a guide for Olmsted Falls Educators as they collaboratively plan units of instruction. The framework attempts to incorporate best practices from the research and couple these with the professional development concepts that Olmsted Falls Educators have taken part in.

Academic content standards and the learning targets that comprise the standards come to life for teachers and students when they are incorporated into a unit of instruction. Teachers work in teams to ensure the learning intentions are the same in corresponding grade levels and subject areas. Teaching the same targets creates the opportunity to collaboratively design common formative assessments that can be collaboratively discussed throughout the instructional unit with fellow teachers. In addition, it allows teachers to design reliable and valid summative assessments that can be used to measure learning at the end of the instructional unit and use the results for future planning.

Ultimately the unit design framework should be used by teachers for the purpose of instructional alignment. The learning targets should be clear to students before and during instruction and they should be aligned with the assessments students will experience. The last step in the alignment process occurs when the learning targets and assessments are consciously aligned with the instruction and classroom activities.

Unit Planning Graphic Linking Prof. Dev. Concepts in Olmsted Falls City Schools

Teachers collaboratively pick the unit of instruction

CURRICULUM

Based on this unit, what do you want kids to know and be able to do?

How will this be communicated to them in advance of learning and throughout learning?

Things to include:
*grade level indicators (any in this unit from the standards)

*power indicators that have been identified

*Essential Questions that were previously identified and applicable to this unit of instruction.

*Big Ideas that were previously identified and applicable to this unit.

INSTRUCTION

After considering the complexity of the learning targets from the unit and the assessment(s) [both summative and formative]:

- What kinds of activities and instruction should be provided to students in order to facilitate high levels of learning?

- How will you differentiate between learning targets and learning activities so that students understand the difference between activities and targets?

- Throughout instruction, how will you repeatedly come back to the learning intentions (targets, big ideas, essential questions, etc.) to reiterate what you want kids to know and be able to do?

ASSESSMENT

Based on this unit, what evidence of learning will be collected throughout the unit?

How will students be involved in collecting and tracking evidence of their learning throughout the lesson?

Things to include:
*Summative (data to report learning)
 -Tests
 -Quizes
 -Projects

*Formative (data to inform learning)
 -frequent checks for understanding along the way
 -exit slips
 -common formative assessments that teachers collaboratively create

Graphic created by Jim Lloyd and used by Olmsted Falls City Schools' Teachers

Subject: 6th Grade Math   **Unit: Chapter 2**

Part I: Clarity of Learning Targets

What are the grade level indicators that go with this unit? Place a star next to the grade level indicators that are Power Indicators. Are the indicators in student friendly language? Place the level of Bloom's Taxonomy next to each Power Indicator.   **Patterns, Functions and algebra**   ***Power Indicators**   4. Solve simple linear equations and inequalities using physical models, paper and pencil, tables and graphs.   **Student Friendly – I can find the value of a given variable. (*put on color paper)**   6. Evaluate simple expressions by replacing variables with given values, and use formulas in problem-solving situations.   **Student Friendly – I can write simple expressions (ex. 34 times W is equal to 34W) based on a story problem. I can solve simple expressions replacing the variable with numbers. (*put on color paper)**
What are the Big Ideas that go with this unit?   1 PFA) Graphing and solving equations inequalities are ways to find and represent solutions to problems.   2 PFA) Variables have a variety of uses representing unknown quantities.

What are the Essential Questions that go with this unit?

Question 1 PFA) How can we solve equations and inequalities?

Daily Objective: I can find the value of a given variable.

Covered in lessons: 2-4, 2-5, 2-6, 2-7, 2-8, and extension

Question 2 PFA) How can we use a variable to represent situations?

Daily Objective: I can write simple expressions (ex. 34 times W is equal to 34W) based on a story problem. I can solve simple expressions replacing the variable with numbers.

Covered in lessons: 2-1, 2-2, and 2-3

What strategies will we use in order to make learning targets clearer for all students, before, during and after instruction? How will you communicate the learning indicators to students?

The teacher will post and state the essential questions and I can statements:
- Large Poster – Essential Questions (with lesson)
- I can posters (power indicators) – mounted on color
- Use of strong and weak student work examples

Part II: Feedback and Assessments (Formative and Summative)

How will we provide students with feedback throughout the unit?

What formative assessments will we use? (Non-graded assignments that check for understanding and provide feedback to the students) Incorporate the 7 Strategies of Assessment for Learning here.

- Formative Assessment #1 "Scoring Camp for Kids" before 2A Quiz: I can solve simple expressions replacing the variable with numbers. See SMARTBOARD presentation for the full lesson and problems (problems taken from the math problem solving worksheet).

1st – Complete problem #1 – The teacher will show the question and ask the students to help create the scoring guide. The class will solve the problem together. The students will look at examples of strong and weak student work and score the class response a 2, 1, or 0 point answer.

2nd – Complete problem #2 – The teacher will pass out the rubric (from step 1). The students will complete question 29 on their own. Then the students will get into a small group and will score the student answers (from their own group). Once the groups have completed scoring the answers, the teacher will show the correct answer. The students double check their scoring and make any necessary corrections to their answer.

3rd – Complete problem #3 individually – The students will complete the problem, score it themselves, and turn in to the teacher for checking.

- Formative Assessment #2 (pg. 717 in student book-20, 21, 22, 24, 25, 26, 28, 29, 33, and 35) before 2B Quiz: I can find the value of a given variable.

"Fix it up" strategy – The students will complete 10 problems and receive feedback on whether or not their problems are correct. The students will correct their answers and explain the reason why they missed the problem.

How will students be involved with keeping track of their own learning progress (note—this is different than tracking points for a grade)?

- The "fix it up" strategy allows the students to keep track of their understandings and misunderstandings.
- The students use a rubric to assess student examples and their own work.
- The students "rate themselves" on the learning targets throughout the unit. The teacher conducts small group reviews.

What summative assessments will we use? (Graded, evaluative assessments)

- 2A Quiz – I can write simple expressions (ex. 34 times W is equal to 34W) based on a story problem. I can solve simple expressions replacing the variable with numbers.

- 2B Quiz – I can find the value of a given variable.

- Chapter test – All indicators

Part III: Instruction and Student Activities

What instructional and student activities will we use for this unit? These activities should directly align with the indicators and assessments.

1. Hands on equations – math manipulative
2. Power point presentations
3. Lesson videos
4. Brain pop
5. Practice worksheets
6. Assigned practice for homework
7. Interactive activities on-line (Holt Book)

Name: _____ Class: _____ Date: _____

Formative Assessment Chapter 2B (pg. 717)

I can find the value of a given variable

	My Answer	**Correct Answer**	**Mistake I made and Why**

1. $r + 13 = 36$

_____

2. $52 = 24 + n$

_____

3. $6 + s = 10$

_____

4. $z - 9 = 5$

_____

5. $v - 17 = 14$

_____

6. $24 = w - 6$

_____

7. $4y = 20$

_____

8. $21 = 3\,t$

_____

9. $n/4 = 6$

_____

10. $a/8 = 12$