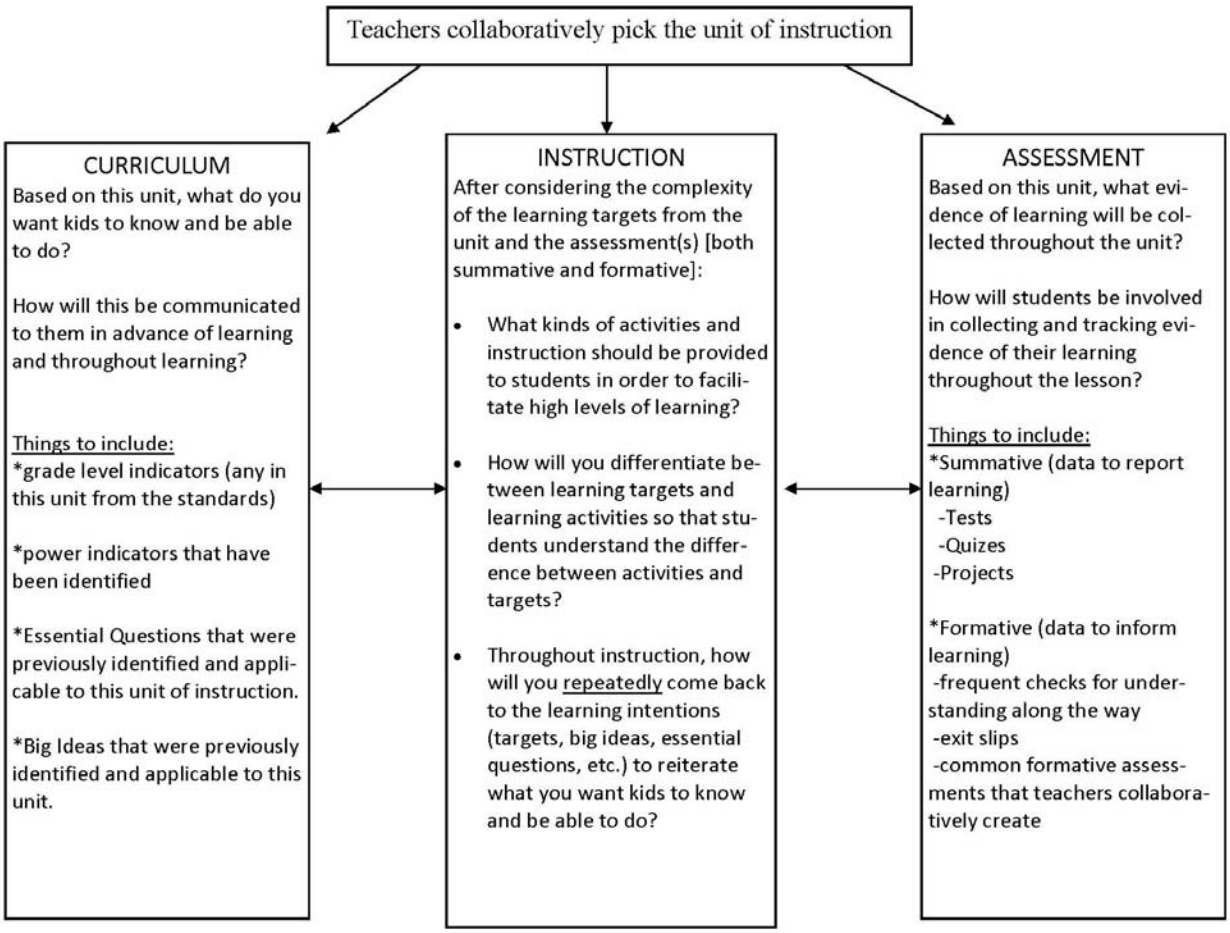
Olmsted Falls Schools: Unit Design Framework

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



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

Subject: Math - **Unit: Measurement (January)**

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.

***Measure length and volume using uniform objects in the environment. Example: Find how many paper clips long a pencil is, how many small container scoops does it take to fill a big container (use rice, beans . . .)**

What are the Big Ideas that go with this unit?

To measure accurately, it is important to use the right tool and unit.

What are the Essential Questions that go with this unit?

How do we measure length?

How do we measure capacity?

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?

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.

Everyday Math Center Cards
#1, #15, #13, #38

Popcorn Kernel Comparison

Andrea's Measurement Paper

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

Andrea's Measurement Assessment Worksheet

Andrea's Scoop Measurement Assessment

How Can I Close the Gap?

What will we do AFTER the students have completed the formative assessment to differentiate instruction?

What interventions will we provide for students who do not do well on the formative assessment?

What will we do for the students who are on track?

What will we do for the students who excel? What extension activities will we provide?

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.

Unifix cubes

Scales (which weighs more/less than 10 kernels of corn activity sheet

Links, paperclips, connecting cubes

Volume scoops of rice beans, beads

Comparing containers of water – which container holds more/less

Everyday Math Manual

Measurement with Children's Feet pages 246-247 (non-standard) – My First Math Book page 2 ("Marking Off") ("Heel to Toe")

Standard & Nonstandard Feet, pages 356-257 (My First Math Book, page 5)
(line up tool at "0") ("End to end")

How Long is a Minute, page 134 (Time)

Lauri's Measurement Paper

Measurement Math Center Kits
***Hands-on math center measuring (small green box)**
***How long is it? measuring center (blue box)**

Everyday Math Center Cards
#1, #13, #14, #15, #24, #38

Enrichment Activities:
- **Activity Card #24**
- **Tape Measures**
- **Rulers**
- **Meter Sticks**

Literature:
- **How Big is a Foot?**
- **Inch by Inch**
- **Whose Tracks are These?**