

Build-A-House: An Education Analogy

The processes of curriculum, instruction, and assessment that schools should use to assure student learning might be compared to the steps of building a house. Let's look at those steps and compare them to best practices in education... from what is established at the district-level, through all the stages of curriculum, instruction, and assessment, to what is mandated of schools by the state or other accrediting agencies.

1. You wouldn't hand over your hard-earned money to a contractor and simply say, "Go build me a house." You would decide ahead of time what kind of house you wanted, and, in general, what the finished house would be like. In other words, you would have a plan or blueprint that describes the overall building project.

Equivalent: The initial blueprint is like a district mission statement with student exit outcomes.

2. The next thing to be decided is all the elements of the plan and who will execute them, such as a plumber to do the plumbing, carpenters to do the carpentry, electricians for electricity and so forth.

Equivalent: The subjects for which there will be established curriculum need to be decided upon and are often listed in a district mission statement. Qualified teachers are needed to teach those subjects.

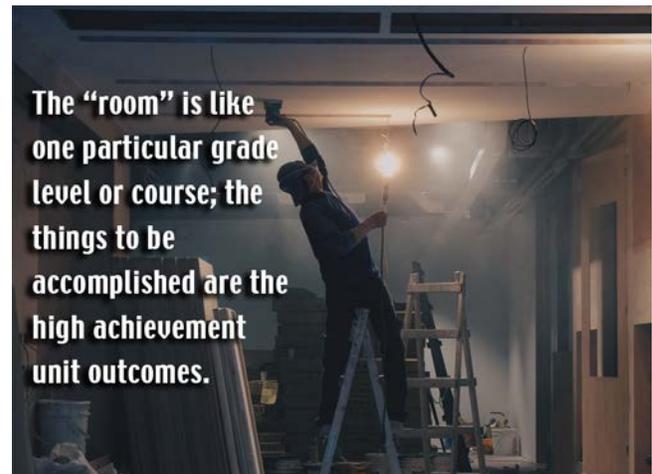
3. Let's select one element of the house-building project (like one subject area) to use as our example. Let's take plumbing and follow it all

the way through. The plumber would have to know, before beginning any actual work, specifically what the overall plumbing requirements are for this particular house.

Equivalent: The plumbing is like one subject – let's use math as our example; the overall requirements are the Subject Mission Statement for math.

4. The plumbing job then would be divided into specific projects: the master bath, the half bath, the kitchen, and so forth. The plumber looks at the purpose of each room to determine its specific plumbing needs, and how each is related to the whole project.

Equivalent: Specific courses (algebra, geometry) and grade levels (3rd grade math, 4th grade math) of the subject are identified, and purposes (or focus areas) are determined for each, so that it's clear where each fits in accomplishing the mission of the whole K-12 math subject area.



5. Before beginning work on a particular room, the plumber decides what must be accomplished to meet the plumbing needs for that room's purpose. If working on a master bath, the things to be accomplished include putting pipes in the walls, a drain for the shower, installing fixtures, and so forth.

Equivalent: The "room" is like one particular grade level or course; the things to be accomplished are the high achievement unit outcomes for that grade level or course.

6. Now the plumber looks at each one of those things to be accomplished and decides the details of actually doing it – the specific tasks or steps that need to be done. To put pipes in the walls, the workers will have to measure, drill holes, fit brackets, and so forth.

Equivalent: These are like the components – or smaller "steps" – of a high achievement unit outcome.

7. The plumber must decide how to approach the work. In what order will he do the steps? What techniques will he use for each task, and what tools will he need?

Equivalent: The teacher must plan instruction, including the order in which things will be done, strategies to use, and materials that will be needed.

8. The plumber must know ahead of time what his criteria are for quality. As each task is finished, he checks to see that it has been done properly before proceeding to the next step. Errors are corrected along the way – alternative parts or procedures are used where necessary, or work is redone for better quality. When all of the steps are successfully completed, the plumber checks to see that the plumbing does indeed work as it should.

Equivalent: Teachers set criteria for quality student work. Formative assessments are given throughout instruction. Students not succeeding receive corrective assistance; others participate in enrichments when appropriate. A summative assessment then tells whether the whole outcome has been met; again, correctives and enrichments are used as necessary.

9. The plumber also adheres to building and environmental codes, keeps informed about quality materials and procedures, and provides owners with instruction on care and use of plumbing.

Equivalents: Standards and other mandates are met; staff development is pertinent and on-going.