A Look at Curriculum Alignment with State Standards
A Transition in Instruction Strategies

Connecticut's Common Core of Learning
CT State Board of Education 1998

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Introduction

"The Common Core" has been developed with an understanding that students begin their schooling at different levels of readiness and some have developmental handicaps as well. It is also acknowledged that students have different interests and aspirations. Recognizing these differences, however, does not justify that development of a different Common Core for each student. To the contrary, the goal of each student developing to his or her fullest potential argues for the creation of one Common Core that has the highest expectations for each child.

Connecticut's Common Core of Learning is organized under three major headings with subheadings that reflect significant groups of skills, knowledge and attitudes:

Attributes and Attitudes
Skills and Competencies
Understandings and Applications

The Common Core of Learning should not be misconstrued as a set of isolated skills and understandings. To the contrary, it should be viewed as an integrated and interdependent set of learning outcomes. Users of the Common Core of Learning should continually look for cross disciplinary and multi disciplinary approaches and for the transfer of skills and knowledge form one domain to another and one subject area to another. Many items listed under a particular subheading could easily have been included under others."

Teacher Centered Fixed Curriculums

(Teachers Delivers Instruction)

In the 1950's and 1960's curriculums were content based sequential units almost entirely designed around the assembly line method of teaching - The content/theory models tend to be fixed and have shown to inhibit critical thinking, problem solving, and experimentation. Gone (hopefully) are the days where students were "empty vessels into which your pour knowledge." Such lessons were heavily scripted and deviation from "delivered instruction" were rare. Assessment was easiest and dependent upon the primary instruction method of lecture.

Student Interest Curriculums

(Teacher Facilitates Instruction)

Vo Ag often differentiates the instruction but not the skill based activities - applications. However, vocational agriculture education can incorporate "higher order" thinking skills in the program of study. Vocational educators often facilitate the "trouble shooting" process to illustrate deductive/inductive reasoning/problem solving especially regarding protocols and operations. Academic educators can structure similar "situations" by way of a writing prompt. Connecticut's Common Core of Learning has an entire section devoted to problem solving, reasoning and creative thinking. One of the standards in the Common Core is detailed below.

Problem Solving, Reasoning and Creative Thinking - State of Connecticut - Common Core of Learning

Students explore information and arguments from various points of view to think critically and creatively and to solve problems.

As a result of education in Grades K-12, students will:

- apply prior knowledge, abstract thinking, curiosity, imagination and creativity to solve problems;
- use inductive reasoning to make, defend and evaluate conjectures and arguments, and deductive reasoning to justify assertions and verify tentative conclusions;
- use problem-solving skills to formulate problems, identify patterns and trends, and make and justify decisions and predictions;
- examine, define and redefine ideas and problems from a variety of perspectives;
- create, imagine and explore new ideas to generate alternative strategies, consider advantages and disadvantages, and select among alternative possibilities;
- assess the results of selected actions and respond constructively to unanticipated events or outcomes; and
- apply defensible criteria to make aesthetic and other qualitative judgments.

Opportunities That Incorporate High Order Thinking Skills - A Review of Scope and Sequence

This process is directly related to the Vo Ag selection of activities and applications. "In order for my students to be able to do this they should have this" etc. Vertical mapping (unit outlines) prevent "stranded" activities and applications on the unit
level. These stranded activities don't relate to the unit objective (outcome) in addition such mapping can show applications with the little supporting skill based activities. In other instances this process identifies skill based activities that (which could be excellent) are not linked to industrial applications (academic models are looking at content theory without linkage to practical applications) and employment needs (input from working groups). Horizontal mapping (scope and sequence) assist the integration of all four years of Vo Ag instruction. This is the foundation of Vo Ag instructional practice as students in the exploratory program build the skills necessary to perform industrial applications in the advanced junior/senior years. Opposite to the vertical mapping effort that locates non essential curricular elements, horizontal mapping identifies what elements are missing. It is the process that teachers can ask the "sending" teacher what elements/activities need to be reflected for transition to the "receiving" teacher.

What Happens in the Classroom

There is nothing more frustrating to a student that finds "I haven't done that" then to say "I have done that four times" or having a teacher spend time on what they feel is review anticipating that foundation content material had been previously covered. Some of the discussion around horizontal mapping is currently taking place "I thought you covered that" or "why are you covering this, I do that" etc. These discussions will involve the vertical mapping when district standards and
NOCTI performance measures are included. Aqua Tech II and Aqua Biology/Hatchery Systems sections have the toughest spot in our scope and sequence. They have to provide the "core topics" for all of the remaining scope and sequences. In order to accomplish the above it is critical that horizontal curriculum maps be shown and discussed. Open and frank discussion of the curriculum maps are essential to the success of Dept meetings.

New assessment instruments reflect new instructional practices

In the recent curriculum alignment efforts within the CT CAPT evaluation the State Department of Education encourages the use of an inquiry based/experience based

science program. It explains the need to identify skills and "appropriate applications of scientific principles." (I hope this sounds familiar). The State

Department also encourages the development of an appropriate "scope and sequence" the foundation of Vo Ag instructional practice. On page 23 of the report states more **specially "Determining the scope and sequence of the science program is of critical importance to curriculum developers and teachers. Defining curriculum expectations is not enough to ensure that students have opportunities to become specifically literate and well-prepared for the CAPT. Teachers need opportunities to talk and share with teachers at other levels. Setting up a process where teachers at different levels can share what they are doing can improve the efficiency of the educational system and help to eliminate redundancies that often occur."**