

Lesson 1: What is Integrated Instruction?

In this first lesson, participants will identify what is meant by "Integrated Instruction" and explore model examples within CTE Online.

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Introduction

In this lesson, participants (in this case grades 7-12 academic and CTE teachers in teams of 2-4) will be identifying what we mean by "integrated instruction" and connect it with what we want students to learn. Participants will then explore an integrated project within CTE Online and identify the four key elements of integrated instruction within that project. This will help them in their planning of their own project in the next lesson.

These six lessons are designed to be delivered to teams of teachers in groups of three. Teams should have one Career and Technical Education (CTE) teacher and two academic core teachers.

It is suggested that three additional teachers experienced in the created of integrated instruction support the instruction as well. These "Team Leads" typically work best with groups of 9-12 teachers, or 3-4 Teams.

- Teams of teachers will need to work together to create their projects and determine the scope of their individual lesson plans. Teachers are encouraged to collaborate with colleagues they already know.
- Ideally, up to thirty teachers in ten teams will be convened together over the course of two days to participate in the six face-to-face lessons.
- The completion of the four individual lesson plans can then be completed remotely and evaluated by the assigned Team Lead using an online Google Forms rubric.

Resources and Materials

- Internet access
- Account in CTE Online (www.cteonline.org)
- Laptop computer
- Google Slides presentation: **Creating Integrated Instruction**
- Quick Guide handout: **Planning an Integrated Project**
- **Skateboard School** video
- Presentation screen
- Adhesive notes

Lesson Times

2 hours: 120 minutes

Standards and Objectives

Standards

California's 2013 CTE Standards

- **CTE.ECDFS.C.11.4** Analyze a variety of individual and group teaching strategies and learning theories that promote effective learning
- **CTE.ECDFS.C.7.6** Practice using teaching strategies that promote student learning, critical thinking, and problem solving

Related Instructional Objectives (SWBAT...)

- Consider what teachers, parents, the community want students to "learn" in school.
- Determine what is meant by "integrated instruction" and identify the four key elements of integrated instruction.
- Locate an integrated project already in the site.
- Explore the key elements that make up an integrated project: the overview, the standards, and the lessons.

- Identify each of the elements within that project.

Activities in this Lesson

What do we want students to learn?

Hooks / Set

Lesson Preparation

- Have the first slide of the Google Slides presentation **Creating Integrated Instruction** up on the screen.
- Provide printed copies of the Quick Guide handout: **Planning an Integrated Project** for each participant.
- Have adhesive notes at each table (enough for each participant to have about 10).

Procedure

After introductions, show participants the objectives for this series of lessons using the presentation slides. Then ask participants the following question, shown on slide 4:

What do you think teachers like yourself, parents, students and members of your community might say when asked the question, "What do we want our students to learn?"

- What do we want students to learn?
- What is the point of school, of our class?
- What do we want our students to enter the "real world" knowing?
- What do we want for our educated citizenry?

Give participants about 3 minutes to write down their thoughts on the handout. Then, ask for 3-4 participants to share out. Answers often include the following:

- be critical thinkers
- connect what they learn to the "real world"
- identify a career
- solve problems
- make connections
- see the "big picture"

The responses from our question leads directly into our study of integrated instruction. It is an attempt to help our students SEE and MAKE connections, critically analyze a problem, and identify careers that real people have in the "real" world."

Next, say: So what exactly do we mean when we say "Integrated Instruction"? For our purposes, we define integrated instruction in this way: **Students explore an authentic problem or issue by using content and skills from multiple subject areas.** (Slides 6-7)

- There are links to careers and the "real world"
- Lessons involve critical thinking, collaboration, & creativity
- A culminating project ties it all together and provides a way for students to show the skills they've learned

Then say: Let's take a look at a school that is using integrated instruction to engage students and keep them in school.

- Show the video **Skateboard School** about a school in Canada that has integrated all of its classes to wrap around the creation of skateboards. (This is also found on slide 8.)

Resources and Materials

- [Skateboard School: An Integrated Unit](#)
- [Creating Integrated Instruction](#)
- [Planning an Integrated Project](#)

Examples of Integrated Instruction

Brainstorming a Project Idea

Show Slide 9. Then say: To come up with an integrated project that truly ties in Problem-Based Learning, it is best to follow these steps:

Step 1. What content does each teacher cover in their course?

- For example, the Biology teacher might write a list that includes Cells, DNA, and Genetics.
- Important: Your project must connect to content from each teacher!

Step 2. What natural connections are there across these content areas that could support a common Project?

- Historical events / national disasters (Flooding in the East; Drought in the West)
- Current issues (Drones; Ebola; local controversial issues, look at the news today!)
- Key individuals or groups (Historical persons, local persons, groups of people)
- A product that students could design, develop, or create... (PSA, pamphlet, video, presentation)

Step 3. Using the connections from the last step, is there an authentic problem that students could be asked to solve?

- This should be a real-world problem (i.e. it naturally bridges with careers and the “real world.”)
- Problems could include statements that begin with, “How can we...”; “What role should...”; “What if...”; “Is it true that...”?
- This can also be referred to as the project's “Essential Question.”

Step 4. Consider these final thoughts as a group:

- What could be the culminating assessment that allows students to show what they learned? (It should tie back to the authentic problem students are trying to solve.)
- What skills will students to obtain? (Academic skills, 21st Century skills, etc.)
- Are there links to careers or the “real world”?

Looking at Examples

Say to participants: Let's look at some examples to show how this might work in a high school setting. Below are three examples of integrated instruction projects that unite several subjects through the study of a common problem, theme or issue.

Read the overview of each to participants and then click on the links in the slides to explore each of the projects.

- **Corporate Identity and the Power of Rhetoric:** This project takes students through a scenario where they act as “Bevron,” a corporation responsible for a massive oil spill. Students will study the persuasive techniques utilized in advertising, the science behind oil spills and other environmental disasters, and how to properly prepare an argument for your case using ethos, pathos and logos. (CTE Graphic Design, ELA, Science.)
- **Podcast Crime, Serial Style:** This is an interdisciplinary unit takes students through the science, writing, and criminal justice process to use podcasting and audio skills to produce a podcast using career skills as an audio engineer. The culminating project is a four part podcast that is posted for all to listen. (CTE Criminal Justice, Video, ELA, Science.)
- **Guppy Tank: No Business Too Small:** In this project, students will study the instrumental role of small businesses on the economy, analyze the impact of unemployment and design a small business to address a niche for an identified population. Similar to the TV series “Shark Tank,” the culminating project consists of students going into the “Guppy Tank” where their niche business proposal will be evaluated by fellow student entrepreneurs. (CTE Retail Marketing, Statistics & Data Analysis, Business Math, Economics.)

Explore the Projects

Independent Practice

Exploring the Projects Independently

Put up slide 13. Then say: Now it's time for you to find a project to explore on your own! To find a project, click the **Projects** tab in CTE Online. This will allow you to browse all of the available projects.

- Go to www.cteonline.org and sign in to your account.
- Click on the **Projects** tab to search for projects.
- To find projects in a specific area, you can filter the results by **checking** the box for a specific CTE Industry or K-12 Subject and then searching again by clicking on the magnifying lens icon.
- Select a Project you would like to explore by clicking on its **thumbnail or title** in the list. The Project will open in a new window and fill the screen.

To Do:

Say: Once you've found a project that interests you, take some time to explore how our projects are structured on the site.

- Click on **Overview** to find a description of the Project
- Click on **Standards** to identify the CTE, Common Core, and Next Generation Science Standards identified within the lessons of the Project
- Click on **Industries/Subjects/Grades** to identify the topic areas & grade levels covered in this Project
- Select **lesson plan thumbnails** to view the project's lessons in depth

Share Out

Closure

- In teams, participants will stand up and share with the group the project that they explored on the site. They will point out the four key elements of integrated instruction for that project.
- After the share-out, participants may continue to browse other published projects on the CTE Online website to continue to get ideas for a project and better understand what is required.

Summative Assessment

Assessment Types: Observations, Rubrics

Performance Objective 1: Given the four key elements of integrated instruction, participants will identify one way for each element that either supports what we want students to learn in school or one way that it benefits teachers in their instruction, and share responses out to the group with 100% accuracy.

Performance Objective 2: Given a published integrated project on the CTE Online website, participants in their teams will correctly identify each of the four key elements of integrated instruction within that project with 100% accuracy.