Skills Mapping: Aligning Curriculum in 9-14 Pathways

August 27, 2015
GOALS FOR THIS SESSION

• Describe the process of skills mapping to align to 9-14 pathways
• Participate in a skills mapping activity
• Discuss application of this type of skills mapping process in your context
• Remind us of your role and tell us one essential skill you need to do your job.
  – What did you notice about the responses?
• Background:
  – What do you already know or what have you heard about skills mapping?
  – What are you hoping to learn or what problem are you looking to solve?
WHY SKILLS MAP?

**Employer**

**Skills Documentation**
- Identify entry level jobs
- Summarize expertise to perform entry level jobs
- Develop job descriptions with defined competencies
- Build employer engagement in pathways

**Community College**

**Skills/Curriculum Map**
- Identify AS/AA degree pathways
- Order skills by complexity — Technical Skills vs. Professional Skills
- Connecting skills to courses & curricula
- Developing an integrated scope and sequence
- Providing work-based professional development for school staff

**High School**

**Skills/Curriculum Map**
- Understand AS/AA degree requirements
- Work with community college to develop course scope and sequence
- Backwards map specific work-ready/21st Century skills to 9th grade
- Determine set of academic outcomes, potential project topics and work-based learning opportunities
- Provide professional development for school staff
SKILLS CONNECTIONS

High School
- Do projects that include 21st skills such as critical thinking through problem-solving and collaborating through group work
- Design work-based learning opportunities

Community College
- Connect actual skills to curriculum
- Continue to support problem-solving through real-world troubleshooting and work-based learning
- Assess for mastery of specific skills/competencies

Employer
- Communicate requirements with colleges
- Provide employment
- Identify career pathways opportunities

Career
- Build in opportunities for entry-level workers to build skills that transfer to meaningful careers
• Let’s walk through a protocol for having these discussions with partners in the pathway
• First, let’s discuss some terminology
TERMINOLOGY

- Competency
- Task
- Skill
- Essential Duties
- Responsibilities
• Skill = ability: What can I do?
• Task = application: How do I demonstrate the skill?

Activity. We will:
• Choose a skill
• Break down the skill
• Break down the tasks
• Analyze skills and tasks to determine whether they are adequately covered in curriculum
• **Task:** Develop new products for classroom teachers
  
  – **Skills needed to perform:**
    
    • Analyze market needs
    • Write outline of proposed product
    • Vet outline with potential audience
    • Develop work plan and timeline
    • **Budget tracking**
    • Write or manage writing of product
    • Manage production process
Budget tracking

- Know your core costs
- Create an electronic budget using spreadsheet software such as Excel to document expenses
- Keep track of resources
- Keep track of scope
- Document any issues
• **Skill (must be able to):** Research discrepancies

• Let’s break down this skill. What are some the skills and expertise needed? What are some of the embedded skills?
• Must be able to figure out how to do things in the most sensible way
• Ability to improvise
• Spend a few minutes looking at the job descriptions choosing a few skills or tasks that you’d like to work through with your group.
• Decide as a group which one technical skill and one professional skill you will choose to break down.
• Break down skills on chart paper.
• Report out to the large group and discussions and questions you had on the skills.
• Share the technical skill your group chose and some of the embedded skills
• Share the professional skill your group chose and some of the embedded skills
• Share questions, comments, and/or any implications for going forward
• Remember: Skill = ability – What can I do?
• In course outlines, there is language such as: By the end of this course, students will be able to…
• In simple terms, course objectives should be aligned to required skills
• Walk through syllabus
• Focus on *Sales Presentation*
  – Does it build each week?
  – What are the embedded skills?
  – How does the project align with the skills posted in the job descriptions?
• Field observations
• Job shadows
• Internships (build up from simulations, videos to actual hands-on work)
• Projects with demonstrations or capstones
• WACA, a regional partnership in the San Joaquin Valley, includes:
  – High schools
  – Community colleges
  – Agriculture companies
  – Wonderful Education
• Three pathways: Ag Business, Ag Plant Science, Ag Mechanics
• An advisory group for each met 3 times last year
• Goal was to map skills backward from employer demand
• Advisory group members:
  – K-12 teachers and admin
  – College faculty and admin
  – Employers
  – Wonderful Education staff
  – JFF (facilitator)
Initially wanted to create skills maps, revise syllabi, and modify activities/projects

Challenges

- Skills maps: format, organization, usability, spanning 9-14
- Course syllabi: course objectives difficult to modify, teacher buy-in and willingness to modify
- Projects: talking about curriculum (projects) and instruction (how to teach skills)

Year 1 final product: Top skills for each pathway
• Build rubrics for each skill to serve as foundation for all programming
  – Possibly use rubrics to evaluate student performance
• Connecting WBL experiences to skills (job shadows in grade 10)
• Different versions of skills maps for different audiences
  – Executives
  – Parents (checklist)
  – Other?
• Use interdisciplinary project coach to coach teachers on incorporating and teaching the skills
• Coaching teachers on using the skills
• Designing PD around the skills maps
• How might you use elements of this process in your work?
• What might be some challenges of facilitating discussions like this?
• What further support or resources would you need to facilitate these types of discussions?
• Revisit what you hoped to get out of today’s session. What questions linger?