Entry 1:
Assessment of Student Learning

Entry 2:
Demonstration Lesson

Entry 3:
Fostering Teamwork

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Entry 1: Assessment of Student Learning

a. Knowledge of Students (KOS)

♦ Select only the areas below that are specific to your setting and necessary to demonstrate student impact for the lesson explained in the selected portfolio.

♦ Know the culture and special needs of your students.
  • Culture: languages spoken/written in the home, religious issues practiced or observed, gender issues.
  • Special needs: medications, 504 – IEPs, para support, emotional level, physical development level, ESL/ELL, and student life experiences (e.g., foreign /foster /migrant/mobility/military).

♦ Know students’ prior learning or experiences with technology.
  • Students’ understanding and prior use of computers, Internet, media sources, and software in the school setting and at home
  • Students’ current access at home and in the community to technology mentioned above

♦ Know students’ individual career interests.
  • Know each student’s specific career interests and future aspirations. This can be established through one-on-one conversations with each student and interest surveys.
  • Expose students to a variety of careers through professional speakers, field trips to news media organizations and production businesses, videotapes, Internet sites, etc.
  • Expose students to a range of career possibilities related to a particular skill so they may consider whether such choices are well matched with their interests and talents.

♦ Know and share the career opportunities available to students in your community and area.
  • Form relationships not only with students, but also with professionals in the community who can provide current and up-to-date technological viewpoints, career opportunities, and internship and job shadowing possibilities for specific students based on their skills and interests.
  • Know the software, technology, and hands-on experience requirements of local businesses, vocational institutions, and colleges that will help your students experience a successful transition from the world of schooling to work.

b. Goals/Connections (G/C)

♦ Determine a pretest/diagnostic hands-on tool to determine career and technical skills.
♦ Develop specific, hands-on production goals for each lesson in the unit.
♦ Know specific connection to student needs.
♦ Establish examples of what and how lessons/activities were planned based upon student strengths, weaknesses, and pre-determined interests.
♦ Explain how you determined student strengths and weaknesses.
♦ Tell what the students did or produced.
♦ Explain how the lesson met the goals (overall and individual).
♦ Explain why lessons were sequenced in a specific way. Connect this to student needs and instructional goals and how those meet career and technical goals.

### c. Assessment (ASMT)

♦ Assessment must occur on multiple levels.
  • Use informal assessment: monitor student work on a regular basis to encourage student initiative, responsibility, and ownership of a project.
  • Tailor individual projects, assignments, and instruction based on assessments.
  • Use performance-based assessment tools such as portfolios, videotapes, demonstrations, and exhibitions to illustrate students’ growing accomplishments, knowledge, skills, and interests aligned with industry standards.
  • Develop your own tools to ensure a good fit between assessment tool and the goals set for each individual student.

♦ Build assessments tools around industry standards.
  • Share with students industry and workplace standards appropriate to their area of expertise and interest. Hold students accountable for those standards.
  • Build assessment tools and methodologies around national skills standards, industry certification, and licensure standards.

♦ Mold students into self-assessors.
  • Encourage students to become self-assessors through portfolio evaluation, resume writing, and weekly journal entries, promoting self-confidence and aiding in their decision-making about further education and career choices.

### d. Rationale for Assessment (RA/ASMT)

♦ Explain why the assessment was a need for that particular student/group of students.
♦ Explain how the assessment was varied to meet the individual needs of the students based on each learning style, ability, and interest.

♦ Explain how students used the assessments based on national industry standards to improve their personal hands-on projects and display personal growth.

♦ Explain how assessment helped students in future decision making about careers.

♦ Show the relevance of the assessment through evidence that demonstrates the assessment measured what it needed to measure.

♦ Identify which part or parts of the assessment measured which goal or goals.

e. Content Knowledge (CK)

♦ Develop students who are “workplace ready.”

- Create opportunities for students to gain understanding of workplace cultures and expectations through reading career literature, meeting with experienced workers in specific industries, and work site opportunities including internships, apprenticeships, cooperative education, and entrepreneurship.

- Create class and individual activities to illustrate aspects of particular career choices.

- Design classroom activities that help students develop employability skills such as a strong work and personal ethic, the ability to take responsibility for one’s own projects, and organization.

♦ Demonstrate integration of academic, career and technical content, and goals.

- Design projects that help students understand the complexity of tasks within a field or career and develop academic skills that are brought to a particular job or career.

- Create projects that require students to draw on knowledge and skills in many academic disciplines (e.g., school-based enterprises).

♦ Illustrate a strong grasp of current content knowledge.

- Provide inclusion of important qualities needed to function in the workplace, such as interpersonal skills, critical-thinking abilities, basic communication and mathematical skills, and familiarity with the latest technology, including computers and automation.

- Establish understanding of the process of acquiring a craft or career, the bases of different industries, and the process of exploring a career and planning for the future.

- Demonstrate understanding of career paths and occupational structures that are promising and those which are limiting and how that information
is relayed to students.

f. Analysis of Student Work (ANA)

- Describe how the student(s) achieved the goal(s) set forth in the lesson/unit/project.
- If goals were met, cite specific evidence that proves the goals were achieved.
- If goals were not met, cite evidence that leads reader to decide what needs to be worked on.
- Describe how the project encouraged student creativity and problem solving.
- Cite any modifications made during the sequence.
- Cite evidence using content and details from student responses for making the modifications (rationale for change).
- Tie to other aspects (KOS, environment, goals/connections).
- Explain input/comments and rationale.
- Explain how learning was enhanced by analysis.
- Provide rationale for everything you did or did not do.

g. Feedback (FB)

- Provide constructive feedback that fosters an effective learning environment: regard for students, a genuine desire to help them do well, and a collaborative spirit of teamwork.
- Demonstrate how the role of teacher and employer feedback initiates students’ self-reflection, setting a course of action for improvement, and documenting progress for parents and other interested stakeholders.
- Work collaboratively with employers to ensure quality experiences for students, with teacher educating the employer on how to assess students and offer constructive feedback.
- Provide feedback throughout an entire project—not just at the end—in order to foster continued student learning.
- Research current industry feedback techniques to practice and tailor classroom feedback to reflect them.

h. Reflection (R)

- Identify and provide evidence from the student work/growth that dictates the next step(s) in this instructional sequence (re-teaching specific information, providing clarification of concepts, and modifying pacing—accelerating or slowing down instruction).
- Identify possible alternative approaches that could impact student learning of this particular group of students (more hands-on involvement, change in
technology used, collaborative learning, individualizing projects, etc.).

♦ Reflect on your teaching practice, identifying the strengths and activities that did/did not impact students learning throughout the instructional sequence (point to specific parts that were successful/impacting AND explain why; point out specific parts that were not as successful/impacting as hoped or anticipated AND explain why).

♦ Explain how you could move this lesson from good to great.

♦ Identify what you learned (good and/or bad) from this lesson that can be transferred to future lessons.

♦ Illustrate how you equip yourself, and your students, for the evolving future of technology and its constant changes through interacting with other professionals, exploring new resources, attending professional conferences and workshops, studying the professional literature, returning to business and industry, and participating in advanced education programs.

♦ Analyze input received from formal and informal conferences with professionals, families, students, and other teachers.

♦ Provide rationale for lessons/activities that go well by thinking about WHY it succeeded and how to adapt the lessons/activities.

♦ Provide rationale for lessons/activities that go poorly and reflect on how to avoid such results in the future.

♦ Seek advice from colleagues through discussions, in-class observations of your own teaching, and observations of others’ practice about how your instruction could be changed or modified for future success.

♦ Demonstrate that you have considered your own cultural background, biases, values and personal experiences when you teach, assign, assess, provide feedback, etc.

♦ Show how you plan to explore topics in which you have limited expertise and how you can experiment with alternative materials, approaches, and instructional strategies.
Entry 2: Demonstration Lesson

a. Knowledge Of Students (KOS)
   ♦ Refer to suggestions provided in Entry 1.

b. Goals (G)
   ♦ Refer to suggestions provided in Entry 1.
   ♦ Develop specific, hands-on production goals for the students as they perform the demonstrated skill, including the skills, concepts, attitudes, and processes you want students to develop.
   ♦ Note the relevant features of your students, the pre-requisite skills they possess that demonstrate they are ready to take on these new goals, and the goals they will transition to next after these initial goals are accomplished.
   ♦ Explain how the demonstration met the goals (overall and individual) and that the goals were important and linked to career and technical learning, justifying them as challenging and appropriate for students and specific teaching context.

c. Instructional Strategies (IS)
   ♦ Explain why the use of demonstration is an appropriate form of instruction for teaching this skill.
   ♦ Foster performance-based student learning of career and technical education subject matter by creating important, engaging activities for students to demonstrate, supporting critical thinking and problem-solving skills as they conceptualize and come to understand the skill.
   ♦ Design instruction to engage students in gaining command of important ideas, theories, facts, and skills as opposed to just memorizing facts and procedures.
   ♦ Utilize a broad assortment of teaching aids, focusing on current high-quality technologies in order to ensure students are adequately prepared for the changing job market.
   ♦ Create demonstration activities that have embedded within them the process, quality methods, tools, expectations, standards, and practices demanded in the workplace.
   ♦ Make all instructional resources relevant and current to students.
   ♦ Develop students’ ability to engage meaningfully in the process of skill exploration and acquisition.

d. Content Knowledge (CK)
   ♦ Refer to suggestions provided in Entry 1.
   ♦ Design demonstration projects that help students understand the complexity
of tasks within a field or career and develop academic skills that are brought to a particular job or career.

♦ Create demonstration projects that require students to draw on knowledge and skills in many academic disciplines (e.g., school-based enterprises).

e. Connections (CON)

♦ Develop students who are “workplace ready.”

♦ Create opportunities for students to gain understanding of workplace cultures and expectations through reading career literature, meeting with experienced workers in specific industries, and work site opportunities including internships, apprenticeships, cooperative education, and entrepreneurship.

♦ Create demonstrations to illustrate aspects of particular career choices.

♦ Design demonstrations that help students develop employability skills such as a strong work and personal ethic, the ability to take responsibility for one’s own projects, and organization.

♦ Know and use specific connections to help meet student needs.

♦ Explain why lessons were sequenced in a specific way. Connect this to student needs and instructional goals and how those meet career and technical goals.

f. Learning Environment (LE)

♦ Create a highly collaborative and cooperative classroom culture centered on problem-solving and investigation, addressing authentic workplace dilemmas.

♦ Promote and foster an environment of intellectual and physical safety where students feel respected and valued.

♦ Establish and maintain a productive learning environment by carefully blending attention to individual needs while focusing on the goals of the entire class.

♦ Create an environment that values fairness, recognizes and rewards quality work, and offers constructive criticism, which directs students toward growth and improvement of skills.

♦ Create an environment where equal treatment, fairness, and respect for diversity are modeled, taught, and practiced by all.

♦ Conduct classes in a manner that encourages respect for individual differences related to skills, culture, gender, ethnicity, language, diversity, physical exceptions, etc.

♦ Build positive and caring relationships with and among students and thereby model the kind of communities students will soon become a part of and perpetuate.
Encourage students to recognize that successes and setbacks are both part of the processes of invention, discovery, and creation.

Create an environment where students can demonstrate mastery of new skills and knowledge through classroom simulations, labs, on-the-job training, apprenticeships, clinical internships, or service-learning opportunities.

Create a classroom environment that mirrors those found in high-performance workplaces.

Involves students in the negotiation of classroom rules, routines, and behaviors, as is done in high-performance workplaces.

Select projects that evolve and unfold, beginning with student interest and eventually taking on student direction.

Instill in students character traits such as punctuality, honesty, fairness, tolerance, and the ability to make ethical decisions that will serve them well in the workplace and in life.

g. Assessment (ASMT)

- Refer to suggestions provided in Entry 1.
- Bring students into a given skill, process, or technique gradually and judge student achievement and readiness for next steps through assessing students in the context of work.

h. Analysis (ANA)

- Refer to suggestions provided in Entry 1.
- Explain how you modeled and explained relevant standards of practice during the demonstration.
- Explain how you supported students’ understanding and conceptualization of the important concepts and rationales associated with the skill and their understanding of the significance of the skill.
- Explain how you supported students by identifying misunderstandings or inappropriate implementation of the skill.
- Describe how the student(s) achieved the goal(s) set forth in the demonstration.
- Describe how the demonstration encouraged student creativity and problem-solving.
- Explain input/comments, or silence/lack of comments, during demonstration and rationale.
- Explain why you made certain comments during the demonstration.
- Describe how learning was enhanced by your actions during the demonstration.
♦ Explain why certain students may not have participated in the demonstration.
♦ Identify positive aspects of the demonstration.
♦ Cite the verbal and nonverbal engagement and communication during the demonstrations, including feedback between teacher–student, student–student, and student–teacher.

j. Reflection (R)

♦ Refer to suggestions provided in Entry 1.
♦ Provide rationale for demonstrations that go well by thinking about WHY it succeeded and how to adapt the demonstration.
♦ Provide rationale for demonstrations that go poorly and reflect on how to avoid such results in the future.
♦ Identify peak moments in this demonstration that raised your own personal definition of quality instruction.
Entry 3: Fostering Teamwork

a. Knowledge Of Students (KOS)
   ♦ Refer to suggestions provided in Entry 1.

b. Goals/Connections (G/C)
   ♦ Refer to suggestions provided in Entry 1.

c. Instructional Strategies (IS)
   ♦ Refer to suggestions provided in Entry 2.
   ♦ Foster performance-based student learning of career and technical education subject matter by creating important, engaging activities for students, supporting critical-thinking, problem-solving, and teamwork skills as they conceptualize and come to understand the importance of teamwork.
   ♦ Create teamwork activities that have embedded within them the process, quality methods, tools, expectations, standards, and practices demanded in the workplace.
   ♦ Design instruction that helps students develop a strong work and personal ethic.
   ♦ Design work-based learning activities that provide opportunities for students to learn about high-performance workplace standards and current industry practice.
   ♦ Design lessons/activities that foster and support productive student teamwork and collaborative student interaction.

d. Content Knowledge (CK)
   ♦ Refer to suggestions provided in Entry 1.
   ♦ Create class and individual activities to illustrate aspects of particular career choices and how teamwork plays a vital part.
   ♦ Design classroom activities that help students develop employability skills such as a strong work and personal ethic, the ability to take responsibility for one’s own projects, teamwork, and organization.

e. Learning Environment (LE)
   ♦ Refer to suggestions provided in Entry 2.

f. Diversity (DIV)
   ♦ Ensure that students leave the program understanding the attitudes and behaviors that are likely to bring them success in the world of work by modeling and promoting the behavior necessary for a multicultural society.
♦ Provide opportunities for students to work to their own strengths as well as learn from those whose strengths are different.

♦ Emphasize the importance of equality, fairness, and respect in the community and the workplace.

♦ Expose students to individuals and cultures that might be new to them and provide opportunities in their ongoing program for such exposure.

♦ Match students with a mentor of different ethnicity or gender and invite community members with different backgrounds to visit the classroom.

♦ Help students understand the attitudes and behaviors likely to bring them success, as well as those that may cause disruption or dissent in the workplace.

♦ Provide legislation and policies that are related to fairness and equity, such as laws relating to sexual harassment and affirmative action and discuss attitudes and misunderstandings about these policies.

♦ Provide all students with access to high-quality career and technical programs.

♦ Give all students equal access to curriculum and expose them to additional options as well.

♦ Adapt technical equipment to students’ special needs, seek equivalent learning opportunities at alternative sites, or help match students with more appropriate learning experiences.

g. Feedback (FB)

♦ Refer to suggestions provided in Entry 1.

h. Analysis (ANA)

♦ Refer to suggestions provided in Entry 1 and Entry 2.

♦ Explain how you modeled and explained relevant standards of practice during the teamwork lesson.

♦ Explain how you interacted with the teams of students to support their engagement with the activity and reinforced the importance of team-based activities.

♦ Explain how you guided students to work productively as a team through communicating effectively, identifying and solving problems jointly, sharing responsibility, valuing each other’s contributions, taking responsibility for their own learning and that of the other members of their team.

♦ Describe how the student(s) achieved the goal(s) set forth in the teamwork lesson.

♦ Explain why you made certain comments during the teamwork lesson.
♦ Describe how learning was enhanced by your actions during the teamwork lesson.

i. **Reflection (R)**

♦ Refer to suggestions provided in Entry 1 and Entry 2.

♦ Provide rationale for teamwork lessons that go well by thinking about WHY it succeeded and how to adapt the lesson.

♦ Provide rationale for teamwork lessons that go poorly and reflect on how to avoid such results in the future.