Welcome to
Teaching + Learning Tuesdays
November 18, 2014  I  2:30PM
DACUM Design at OCtech
www.sctechsystem.edu/tlt
SCTCS Faculty Fellow Project:
DACUM Design at OCtech

Presenter:
Debbie Gideon, Ph.D., Social Science Program Coordinator and Psychology Instructor, Orangeburg-Calhoun Technical College, and SCTCS Faculty Fellow
THE DACUM PROCESS

Developing A Curriculum

Debbie Gideon, Ph.D.
Orangeburg-Calhoun Technical College
SCTCS Faculty Fellow

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- Have you attended a DACUM training?

Use the Polling Response menu to respond to polls.
• Are you a DACUM facilitator?
• Have you participated in a DACUM job analysis?
  A. If yes, as an expert worker?
  B. If yes, as an observer?
  C. I’ve done both
  D. No
Objectives

1. Review the DACUM Process.
2. Discuss DACUM at Orangeburg-Calhoun Technical College.
3. Identify lessons learned.
What is DACUM?

An acronym for Developing A Curriculum
A 2-day job analysis workshop

Why use DACUM?

It’s a highly effective, quick, and low cost method to conduct a job, occupational, process, and functional analysis.

High quality education and training programs are needed to produce skilled workers. A job analysis is the best way to gather this information.
Who uses DACUM?

- Secondary educators
- Postsecondary educators
- Companies
- Businesses
- Federal agencies
- State agencies
- Local government agencies

Many College and skill levels: accountants, technicians, managers, etc.

Clients of DACUM

- Koyo
- Okinite
- Husqvarna
- SCE&G
- Zeus
- Albermarle
- Gulbrandsen
DACUM Philosophy

- Expert workers can describe and define their job more accurately than anyone else.

- An effective way to define a job is to precisely describe the tasks that expert workers perform.

- All tasks, in order to be performed correctly, require certain knowledge, skills, tools, and worker behaviors.
DACUM Process Advantages

1. Group Interaction
2. Brainstorming Power Energized
3. Group Synergy
4. Group Consensus
5. Future-Oriented
6. Employer/Employee & Learner Buy In
7. Superior Quality
8. Low Costs
9. Comprehensive Outcome
What do we teach?

A. What we know best?
B. What we were taught?
C. What we enjoy teaching?
D. What’s in the textbook?
E. What the student needs for successful employment?
Real World               Educational World

What should be taught?   What is taught?
Curriculum “What” Errors

Failing to teach what should be taught.
(e.g., latest equipment, skills, knowledge, methods, and processes)

Teaching what should not be taught.
(e.g., outdated equipment, skills, knowledge, methods, and processes)

DACUM reduces these errors.
THE DACUM PROCESS
Suggested Room Arrangement for a DACUM Workshop

Front Wall

NO—
- doors
- windows
- blackboards
- obstructions

DACUM WALL

Panel Section

Refreshment Table

Observer Section

Recorder

Rear Entrance (desirable)
Facilitator

1. Is an expert in the DACUM process.
2. Guides the panel participants.
3. Questions each task statement.
4. Gains group consensus on each item.
5. Doesn’t need to know about the job being analyzed.
6. Exhibits stamina, good short-term memory, and a positive attitude.
7. Persuades panel to actively participate.
8. Verifies appropriate verbs, qualifiers, and objects.
Expert Worker Selection Criteria

1. Occupational Representativeness
2. Technical Competence
3. Full-Time Employment
4. Effective Communicator
5. Team Player
6. Full-Time Commitment
7. Freedom From Bias
Panel Members/Expert Workers

1. Are content experts.
2. Decide what tasks should be taught.
3. Describe their job in detail.
4. Are knowledgeable about current professional trends.
Recorder

Writes the panel’s suggestions.

Observers

1. Witness the DACUM Process.
2. Must remain silent.

Curriculum Developers

1. May participate as observers or recorders.
2. Develop instructional material based on the workshop results to enhance the curriculum.
The DACUM Process:

1. Orientation to the DACUM process
2. Job or occupational area and development of organizational chart
3. Identification of the duties (general areas of job responsibility)
4. Identification of specific tasks performed for each duty (brainstorming)
5. Identification of general knowledge and skills, tools, equipment, supplies, and materials, worker behaviors needed, and future trends/concerns of the occupation
6. Reviewing and refining the duty and task statements
7. Sequencing the duty and task statements
8. Other options, as desired
Workshop Rules

1. Rank and seniority are left at the door.
2. Everyone participates equally.
3. One person speaks at a time.
4. Be positive & optimistic.
5. Ask each person to give tasks.
6. Add to other participants ideas.
7. Observers cannot participate.
8. Consider all task statements carefully.
Brainstorm

- What do you do at work?
- What did you do last week?
- What else do you have to do?
- What do you do first each day? Last?
- How often is that task performed?
- How difficult is it to perform?
- What other duties do successful workers perform?
- Have we specified all the task appropriate to this area?
- Is that the terminology commonly used by other workers?

All responses are written on a flip chart.
Key Terms

- **Duty**  ➔  A cluster of related tasks, usually 6 – 12 per job

- **Task**  ➔  Specific meaningful units of work, usually 6 – 20 per duty and 75 – 125 per job.
Duty Statements

• Describe work in performance terms.
• Are meaningful without reference to the job.
• Are general statements of the work performed
  • (usually 6–12/job).
• Function as a title for a cluster of related tasks
  • (usually 6–20/duty).
• Consist of one verb, an object, and usually a qualifier.
• Describe a service in performance terms.
• Contain one or more qualifiers.
• Are clearly stated once.
Verb: Describes worker’s action. (e.g., maintain, change)

Object: Thing acted upon by worker. (e.g., automobile, oil)

Qualifier: Words that clarify the task statement. (e.g., personal, motor)

Maintain personal automobile.
Job, Duty, & Task Graph

Whole Job

Job divided into Duties (6-12)

Job divided into Duties & Tasks (75–125)
Job/Occupation

DUTIES

etc.

TASKS

etc.
Job: Homeowner

- **Duties**
  - Maintain yard
  - Maintain personal automobile

- **Tasks**
  - Mow lawn
  - Trim hedges
  - Rake leaves
  - Change motor Oil
  - Change windshield wipers
  - Fill gas tank
Enablers are items that empower workers to perform their duties and tasks, but are NOT duties or tasks themselves.

**General Knowledge and Skills:**
- Communication skills, Computer skills, Driving skills, Team work skills, Time management skills,

**Worker Behaviors**
- Goal oriented, Organized, Personable, Self-motivated, Ethical, Encouraging, Trainable, Professional

**Tools, Equipment, Supplies and Materials**
- Paper, Markers, Flipcharts, Policy Manuals, Handouts, PowerPoints
• Engineering Electronic Training (EET) Program
  • Electronic Instrumentation Training (EIT)

1. Job Analysis
2. EIT Competency Profile
3. Competency Course Matrix
4. Update Course Outline
5. Students after graduation
Lessons Learned

1. As an observer.
2. As a trainee.
3. As a facilitator.
4. Becoming a good facilitator.
5. Selecting expert workers.
Levels of DACUM Certification

1. Level I - Trainee successfully complete a DACUM Institute

2. Level II - Facilitator successfully complete three DACUM workshops with high quality charts.

3. Level III - Facilitators experience and expertise is sufficient to serve as a trainer.
January 26-30, 2015
Columbus, OH
Hosted by CETE/OSU

March 9-13, 2015
Columbus, OH
Hosted by CETE/OSU

Registration fee is $1,550 USD.

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Join us Tuesday, January 20, 2015 for the next TLT webinar focused on Student Services!

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