What is a “cluster” and how can it help me find what I am looking for?

Clusters - Career Families

**SUMMARY**
Students learn about the concepts of occupation clusters, occupations, jobs, and careers by creating cluster mobiles and sharing them with their class.

**OBJECTIVES**
*Students will . . .*
- Summarize the concept of Occupation Clusters through creation of a mobile.
- Explore clusters of interest to them using of the CIS Occupations file.

**PREPARATION**
Be familiar with the 22 CIS Occupation Clusters. For the activity in Step 6 most students will be able to work individually with one cluster. If you have more than 22 students you may wish to allocate the large clusters (for example, Arts and Entertainment; Healthcare Practitioner; Healthcare Support; Installation, Maintenance, and Repair; Office and Administrative Support; and Production) to pairs or small groups of students.

Review the definitions of job, occupation, cluster, career on the overhead; make overhead.

Make copies of the *Cluster Exploration* worksheets — one per student.

Option: If students are using *My Plan* in CIS for Internet’s *My Career Planning Portfolio*, the *Cluster Exploration* worksheet used in this activity can be replaced by the “*Cluster Exploration*” worksheet in the Research and Goals section.

**MATERIALS**
Hooks, string or thread, cards, for mobiles
*Cluster Exploration* worksheet
*Definitions* overhead

**COMPUTER USE**
CIS Occupations

**SUBJECT AREAS**
Social Studies, Art

**TIME REQUIRED**
Flexible, minimum 60 minutes spread over two class sessions

**GROUP SIZE**
Class, group, individual

**STEPS**

**DAY ONE**
1. On a board, chart, or overhead write the words “job,” “occupation,” “cluster,” “career.” Discuss their meaning with students. Ask for one example of a job and a related occupation from each student. Record these on the board or overhead. (For example, a job would be a character animator for ActiVision and the occupation would be Cartoonist and Animator.)

*continued*
2. Discuss with students the concept of career compared with job or occupation. (Career is the combination of learning and work that a person pursues during his/her life.) Refer to the definitions on the Definitions overhead.

3. Ask students to define “family” and “cluster.” In pairs or small groups ask students to work out ways of grouping the list of occupations made in Step 1 into families or clusters on the basis of some similarities.

4. Ask groups to share their clusters and the basis for them. Discuss.

5. Introduce students to the 22 clusters used in CIS. (Note: CIS clusters are based on similar functions or tasks done in those occupations). Hand out the Clusters Exploration worksheet. Ask students to complete pages two and three of the worksheet as a homework assignment. Optional: The Cluster Exploration worksheet is similar to the worksheet with the same title in the Research and Goals section of My Plan. You can use these worksheets interchangeably.

**DAY TWO**

6. Ask each student to make a mobile for one cluster, with the cluster heading as a dominant piece and a minimum of eight occupations on the mobile. Students can research the relevant occupations in the CIS Occupations file on computer (use the index list By Cluster, not by alphabetical title list).

7. Display the mobiles and have students share information about their mobiles. Ask students to find the ones that interest them, note the Cluster names and a minimum of six occupations for further investigation on page 4 of the worksheet.

8. Research occupations in CIS. Optional: Use the Occupation Odyssey activity and worksheet to record research into the occupations selected.

**VARIATIONS**

1. Mobiles can be made with drawings or collages from magazines.
2. Mobiles could be used as part of a display at a career event or parents evening at which careers are the focus.
3. Run a competition for the best mobile on the basis of class votes or invited judges, such as a counselor.

**ALLIED ACTIVITIES**

- Imagine
- Juggling My Career Options
- Occupation Odyssey
- Using CIS Occupation Sort
- What Happens after High School?
- Where Am I Going?
- Your Community at Work

**ASSESSMENT STRATEGIES**

Students will:
- Complete their cluster mobile and present their work.
- Select occupations to research further and complete the worksheet.

Team participation is observed (if teams are used).

continued

Clusters - Career Families

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STUDENT WORKSHEET
Cluster Exploration

OVERHEAD
Definitions

SORTING
▶ Subject: Social Science, The Arts, Advisor/Advisee, Career-Related Learning
▶ Grade Levels: 6, 7, 8, 9
▶ CIS Components: Occupations, My Plan

STANDARDS
Career-Related Learning Standards:
- Career Development, Employment Foundations, Teamwork

SCANS:
- Information, Systems

NCDG:
- Skills to locate, understand, and use career information

ASCA Standards:
- Career Development

EDUCATIONAL GOALS
Bloom’s Taxonomy: Synthesis
Intellectual Operation: Summarization, Application

Clusters - Career Families
Definitions

**JOB**
A unique work situation or position, paid or unpaid.

**OCCUPATION**
A group of related jobs that have similar duties, levels of responsibility, skills, knowledge, and physical demands. CIS uses 530 occupational titles to describe the labor market.

**CLUSTER**
A way to group occupations by some common feature. CIS has 22 clusters that group occupations by function (what people in the occupations do or perform).

**CAREER**
The combination of learning and work that a person pursues during his or her life.
Cluster Exploration

In this activity, you will learn about occupations by researching clusters of occupations and the occupations themselves. To begin, let’s define some terms that we use in career planning:

**JOB**
A unique work situation or position, paid or unpaid.

**OCCUPATION**
A group of related jobs that have similar duties, levels of responsibility, skills, knowledge, and physical demands. CIS uses 530 occupational titles to describe the labor market.

**CLUSTER**
A way to group occupations by some common feature. CIS has 22 clusters that group occupations by function (what people in the occupations do or perform).

**CAREER**
The combination of learning and work that a person pursues during his or her life.

You are asked to select clusters of occupations that interest you. Clusters organize the world of work to help you work with all of the options – in the same way suits organize playing cards so you can work with 52 different cards.

Even if you have a very specific career goal in mind, it is important to expand your horizons for a time to learn more about the world of work. Remember, career goals can be difficult to achieve, so it is important to have alternate career paths in mind and to plan for different possibilities.

After you complete this cluster exploration, you will be reviewing all of the occupations you have found that interest you.

On the next two pages is a list of the 22 CIS Occupation Clusters. Clusters help organize the occupations in CIS. They group occupations by their function (what people do). By using clusters to explore the world of work, you may discover new possibilities.
Read each cluster title and description. Place a check by each cluster that interests you. You will select one of these for further research.

- **ARCHITECTURE AND ENGINEERING**
  People in these occupations plan machinery and buildings. They design, develop, and test electronic, mechanical, and physical tools or structures. They also develop methods for producing products. They use scientific knowledge and design skills.

- **ARTS AND ENTERTAINMENT**
  People in these occupations create, entertain, inform, or compete. They use highly developed skills in the arts, design, athletics, or communication.

- **BUSINESS AND FINANCIAL**
  People in these occupations watch over the finances of businesses and organizations. Using accounting skills they set budgets. They help managers make decisions about hiring people and buying new equipment. They also keep tax records.

- **COMPUTER AND MATH**
  People in these occupations use numerical and computer skills. They solve problems, analyze results, and make decisions. They use computers to store, manipulate, and retrieve data.

- **CONSTRUCTION AND EXTRACTION**
  People in these occupations use specialized skills to work with materials and processes. Construction workers build and maintain roads, houses, commercial buildings, and other structures. Extraction workers remove ore, coal, crude oil, natural gas, and water from the earth.

- **EDUCATION AND TRAINING**
  People in these occupations help others learn new knowledge and skills. They educate and instruct in many settings, most often in schools.

- **FARMING, FISHING, AND FORESTRY**
  People in these occupations plan, inspect, or harvest products from farms, gardens, forests, streams, and oceans.

- **FOOD PREPARATION AND SERVICE**
  People in these occupations make and distribute food and drinks to customers. They work in restaurants, cafeterias, and other eating and drinking places.

- **HEALTHCARE PRACTITIONER**
  People in these occupations use medical knowledge and skills. They assess the health of patients and correct problems through surgery, treatment, or therapy.

- **HEALTHCARE SUPPORT**
  People in these occupations assist healthcare practitioners. They carry out treatments, therapies, and tests approved by the healthcare practitioners. They also do record keeping and other support activities.

- **INSTALLATION, MAINTENANCE, AND REPAIR**
  People in these occupations install, adjust, maintain, and repair. They work on mechanical, electrical, electronic, and hydraulic systems, equipment, and devices. They also clean, maintain, and repair buildings and grounds.

continued
LEGAL SERVICES
People in these occupations use legal knowledge and skills. They help people and organizations work within the legal system. They may research, write, and record legal opinions and proceedings.

LIFE AND PHYSICAL SCIENCE
People in these occupations use an understanding of life and physical sciences. They research, manage natural resources, and solve problems.

MANAGEMENT
People in these occupations plan, make decisions, and coordinate activities. They supervise people working to produce goods or provide services.

OFFICE AND ADMINISTRATIVE SUPPORT
People in these occupations aid communication and the flow of business within and between organizations. They keep records, greet customers, and help managers.

PERSONAL CARE AND SERVICE
People in these occupations provide services to meet personal needs. They may help improve comfort, personal appearance, hygiene, and self-image.

PRODUCTION
People in these occupations plan, assemble, and process products. They may operate or monitor production machinery or use various hand or stationary tools. They work at equipment that makes or distributes electricity, chemicals, gases, or petroleum. They shape, cut, or form materials into products. They print and assemble items such as books, newspapers, and posters.

PROTECTIVE SERVICES
People in these occupations guard all types of property. They ensure the safety of people as established by public laws.

SALES
People in these occupations identify customer needs. They help customers choose products or services. Some sales workers accept payment and package products.

SOCIAL AND COMMUNITY SERVICES
People in these occupations help people by providing counseling or education. They also work in recreation and corrections.

SOCIAL SCIENCE
People in these occupations identify and study social structures, problems, and events. They may also plan and write about ways to correct, cure, or improve social problems. They address community concerns.

TRANSPORTATION AND MATERIALS MOVING
People in these occupations move passengers or freight from one place to another. They also operate transportation equipment and keep things on schedule.

continued
Select clusters and occupations of interest to you.

As you share your cluster mobiles in class, identify the clusters and at least six occupations that might interest you. Record your choices.

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<th>Cluster Title</th>
<th>Occupation Titles</th>
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