

CDA: ART IN THE WORLD OF TECHNOLOGY

RESOURCES/MATERIALS:

1. Art works representing several different media

ACTIVITY:

- Have students study different arenas of design (i.e. architecture, sculpture, book illustration, clothing design, or mechanics).
- Have students compare hand-drawn designs with computer-aided designs and discuss differences in flexibility, expression of materials, how the design might match the vision and ability of design to be translated into 3D form.

Audience:

- Grades 7

EXTENSION:

- If possible, have students take a field trip to a design studio to see the different materials used to create designs.



- Have students hand-draw or use their hands to sculpt a subject, then have them create the same subject using graphics software.

CLOSURE:

- Initiate a class discussion that focuses on the positives and negatives of using computers and other technology in art and design.

TIME REQUIRED:

1-2 class periods

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CAREER DEVELOPMENT ACTIVITY: BE YOUR OWN BOSS

RESOURCES/MATERIALS:

1. Internet and print reference on types of self-employment, including ISEEK (www.iseek.org/careers/selfemployment.html)
2. Catalogs or sales brochures for pricing information
3. Internet and print resources for teen entrepreneurs

ACTIVITY:

- Have students examine the trend of self-employment. Discuss the types of self-employment (self-employed, consulting, contracting, brokering, etc.)
- Explain benefits, commissions, taxes, and social security (especially as relates to the self-employed).
- Have students select an entrepreneurial experience. They are to develop a business plan for providing a service or selling a product. The plan should include any supplies or equipment needed, the amount of time involved and the cost of the service or product based on that information. Once all factors have been considered, students should estimate their net earnings for one week, one month or one year.

Audience:

- Grades 7

EXTENSION:

- Have students interview a person who is self-employed. During the interview have that person discuss the benefits and drawbacks to self-employment. Or, as an alternative, a guest speaker who is self-employed could be invited to speak to the whole class.
- Have students present their business plans to "financers". The best business plans win a prize.
- Host a Business Day where students put their business plans into action and sell their products or services. Students must track inventory, sales, labor costs, etc.

CLOSURE:

- Have students list the people in their communities that are self-employed. Look at the variety of jobs. Discuss with students what measures success for the self-employed?

TIME REQUIRED:

1-2 class periods, longer if business plans are to be developed for presentation or implementation

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CDA: IF I WERE A WORKER IN ...

RESOURCES/MATERIALS:

1. Country and culture reference books
2. Interview or in-person class visits from people who grew up in culture that class is studying

ACTIVITY:

- Following lessons about economics in South American, African and Asian countries, students will need to describe skills usually learned by the children in one region or culture.
- Have students describe the kind of jobs available to the adults of the country/culture who have learned the common skills (i.e. If I were a worker in Taiwan, I would have learned how to ride a bike as a child. I would also have learned cooking skills, fishing skills and status-appropriate etiquette. As an adult, I might start a catering business where I would cook food and deliver it to tourists in their hotel rooms.)
- Have students develop a comparative list of job possibilities (based on typically learned skills) between the country/culture studied and the United States.

Audience:

- Grades 7

EXTENSION:

- Together, have students compare another country/culture's skills typically learned in childhood with the United States and the country/culture previously chosen. From this comparison, they could speculate on the kinds of jobs found in that country/culture.
- Have students from immigrant families or a guest speaker talk about the work culture and job types in their country.

CLOSURE:

- Have the class discuss the difficulties that might be faced by someone attempting to go to that country to create a new business or break into an occupation.
- Discuss the skills and aptitudes that are similar between other countries and the U.S.

TIME REQUIRED:

2 class periods

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CDA: MAY I BE OF SERVICE?

RESOURCES/MATERIALS:

1. Career information resources (*MnCareers*, **CareerOneStop.org**; **ISEEK.org**)
2. Biographies of famous people in Human Services, Education, Health Sciences or other "helping" professions

ACTIVITY:

- As students learn about developing good communication skills, especially good listening skills, explain to them that there are several jobs that involve providing services to others.

Audience:

- Grades 7



- Have students select a biography of a person whose work involves helping others. Then, have students develop a poster or multimedia project that tells what kind of service the person in the biography provided, and how that service helped others.

Students might include drawings or pictures of people helping others, video clips of people doing similar services, or they might list related occupations.

- If possible, provide students the opportunity to provide service to others. The class as a whole could become involved in a service project for the community and/or the school.

EXTENSION:

- Together, have students create a suitable ending for their story. Stories could be shared with the class.

CLOSURE:

- Have students conduct a class discussion to explore the variety of jobs available in Health Science, Human Services and other professions that focus on helping other people.
- Consider the number of people – assistants, nurses and physicians – encountered in even a brief hospital stay. Be sure to point out the various people who provide services at the doctor's office, the dental office or on a visit to a nursing home.

TIME Required:

1 class period

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

RESOURCES/MATERIALS:

1. U.S. Military Web Sites:
 - Army: www.army.mil
 - Air Force: www.af.mil
 - Coast Guard: www.uscg.mil
 - Navy: www.navy.mil
 - Marines: ww.usmc.mil
 - National Guard: www.ngb.army.mil
2. Print materials and videos from local recruiters
3. *MnCareers* and other career information resources

ACTIVITY:

- Have students look at different branches of the military, including the National Guard, for academic, education and career opportunity information.
- Have students use other career resources to verify the career information in the military materials.
- Have students follow a career of their choice and determine which branch(es) of the military will help them achieve their career goal.
- Have students create a flow chart of their career goal using the armed services as the way to achieve it (or part of the goal).

Audience:

- Grades 7

EXTENSION:

- Have students examine service organizations as a way of helping them achieve their career goals such as AmeriCorps and the Peace Corps. Use resources found in *MnCareers*, page 99.

CLOSURE:

- Have students discuss the tone of the literature they examined. What was the purpose and point of view of the author? What phrases helped achieve that tone?

TIME REQUIRED:

1 class period

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CDA: MY FEELING HISTOGRAM

RESOURCES/MATERIALS:

1. Sample graph
2. Graph paper

ACTIVITY:

- Have students list the classes they have taken over the last three or four years.
- Have students rate the classes by pure enjoyment with the class on a scale of 0–100, with 100 being perfect in every sense, 0 being a terrible waste of time.
- Have student's group classes together by general area and place the groups into a database where the **X-axis** is the degree of enjoyment value and the **Y-axis** is the subject area title. Cells contain the value score (0-100) overall that the subject area receives.
- Comparing the graphics produced, have students share and discuss the types of classes that they appear to have enjoyed the most.

Audience:

- Grades 7

EXTENSION:

- Have students graph the occupations held by adult family members of all the classroom students.

CLOSURE:

- Have students discuss other occupational issues that can be graphed (i.e. salaries, benefits, time spent on the job, travel miles to get to a place to work, etc.).

TIME REQUIRED:

1 class period

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CDA: NONTRADITIONAL CAREERS WRITING PROMPT

RESOURCES/MATERIALS:

1. Resources describing nontraditional careers, like page 13 in *MnCareers* or ISEEK (www.iseek.org/careers/nontraditional.html)
2. Guidelines for essay writing

ACTIVITY:

- Have students participate in a discussion of what constitutes a nontraditional career and list examples. Discussion can include nontraditional careers for men, women and different cultural groups.
- Have students choose one nontraditional career to research for background information.
- Have students write a clarification essay on which nontraditional career(s) appeals to them and why.

Audience:

- Grades 7

EXTENSION:

- Have students evaluate their work using writing guidelines.

CLOSURE:

- Have students discuss which nontraditional careers they wrote about and why it was considered nontraditional.
- Ask students if any nontraditional occupational roles exist within their family and discuss as a class.

TIME REQUIRED:

2 class periods

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CDA: SUMMARIZING CAREER INFORMATION

RESOURCES/MATERIALS:

1. Internet access to career sites: ISEEK, MCIS
2. O*NET, and the *Occupational Outlook Handbook* (www.bls.gov/oco/home.htm) or the *K-12 Occupational Handbook* (www.bls.gov/k12)

ACTIVITY:

- For this activity, students will research three occupations. For each occupation, have students complete the following:
 1. Summarize the job responsibilities.
 2. Describe:
 - What about those occupations seems to make it enjoyable?
 - What would be difficult to do on a routine basis if one worked in that occupation?
 - What is the level of education required?
 - What experiences could be helpful to someone entering that occupational area?
 - What kind of school work does one need to have to prepare for that field?
 - What would be significant stress factors to someone working in that occupation?

Audience:

- Grades 7

EXTENSION:

- Have students create a list of related occupations to the three they researched.

CLOSURE:

- Have students share with the class their work summaries and answer questions as possible.

TIME REQUIRED:

2-3 class periods

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

[State Occupational Information Coordinating Committee]

CDA: WORK AROUND THE WORLD

RESOURCES/MATERIALS:

1. Reference materials
2. World Almanac

ACTIVITY:

- In small groups, have students brainstorm jobs found Australia or in counties in South America, Africa or Asia.
- Have students research to find out what those jobs are titled in other countries, as well as the average salary for the workers.
- Have students identify similar jobs in the United States.

Audience:

- Grades 7



- Using the Internet or print reference materials, have students make a comparison of the average salary paid in the United States with the average salary paid in foreign countries. Students also need make a comparison of the cost of living between United States and other countries.

EXTENSION:

- If possible, have students interview someone who has moved to the United States and has a similar type of job both here and abroad. Students' questions could center on the similarities and differences in working in the two locations. If someone from another country cannot be found, consider interviewing someone who transferred locations within the United States.

CLOSURE:

- Discuss with students what similarities and differences they found. What were the most common similarities and why do they think that? What was the most unique similarities or differences found?

TIME REQUIRED:

1-2 class periods

Adapted from:

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CAREER DEVELOPMENT ACTIVITY: THE CAREER TREE

RESOURCES/MATERIALS:

1. Sample career trees
2. Parent & family interviews

ACTIVITY:

- Explain the concept of a career tree (similar to a family tree). You might want to share the career history of your own career tree or family tree. Be sure to go back several generations and include persons who married into the family.
- Have students interview their family members to find out the career history of the family going back as many generations as possible.
- Have students create their own family's career tree.
- Have students look at career trees for patterns of similar talents and abilities and will draw inferences about their own talents and abilities.
- Have students use another graphic representation to show this information.

Audience:

- Grades 7

EXTENSION:

- Have students gather information from the career trees to compile career frequencies among the students' parents.

CLOSURE:

- Have the class discuss how information can be represented by mathematics. Also consider encouraging students to share the finished career tree with their family.

TIME REQUIRED:

1 class period

Adapted from:
Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000
[State Occupational Information Coordinating Committee]

CDA: UNDERSTANDING AND EVALUATING PROGRAMS

RESOURCES/MATERIALS:

1. Several copies of various college catalogs from universities, community colleges and technical schools
2. Information packets from military branches and career training programs

ACTIVITY:

- In small groups, have students develop a criteria list for what they expect to find in the post-secondary opportunity materials.
- Have students analyze at least three different post-secondary school training programs from the literature.
- Have students write a narrative addressing the materials evaluation they just completed.

Audience:

- Grades 7

EXTENSION:

- Have students create an "opportunity" materials catalog of all the resources they reviewed, including a short description of each opportunity and a ratings chart of how the materials were evaluated.

CLOSURE:

- Have students use their list of components to brainstorm a master list and discuss the importance of each selection.

TIME REQUIRED:

2 class periods

Adapted from:

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[State Occupational Information Coordinating Committee]

CDA: BURSTING AT THE SEAMS

RESOURCES/MATERIALS:

1. Resources describing population growth and demographic changes in the U.S. or globally
2. Career resource materials
3. Newspapers, news magazines or Internet news sources

ACTIVITY:

- After studying population changes, have students brainstorm a list of careers that are affected by growth or changes.
- Look in the news sources for current events regarding population growth or demographic changes.
- Have students select a career related to population change and list the reasons how and why that job is affected by the changes.

Audience:

- Grades 8

EXTENSION:

- Have students write an essay about the career they've chosen.

CLOSURE:

- Have students list different careers related to population changes. Have them examine what skills are needed to perform the jobs, and how they think these jobs have changed and/or are changing.

TIME REQUIRED:

1 class period

Adapted from:

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[State Occupational Information Coordinating Committee]

CAREER DEVELOPMENT ACTIVITY: CAREER PORTFOLIO

RESOURCES/MATERIALS:

1. MnCareers
2. Blank job application form
3. Resume and cover letter writing sources, such as the *Creative Job Search Guide*, CareerOneStop, MCIS, ISEEK)
4. e-Folio MN (www.efoliominnesota.com)

ACTIVITY:

- Have students consider career interests and connections to choices.
- Discuss with students the purpose of a resume and tips for writing an effective resume. Have students choose a job and create a resume.
- Discuss with students how to write a cover letter. Have students type a job application and follow-up letter.
- Discuss with students how to fill out a job application. Be sure to review terms that most likely will be on an application that students might not be familiar with. Students will fill out a job application in ink.

Audience:

- Grades 8

EXTENSION:

- Have students look over different types of resumes and reformat their resume in different styles.
- Have students develop other materials to include in their portfolio.

CLOSURE:

- Discuss with students what potential employers think when looking at a career portfolio. Show sample portfolios from eFolio Minnesota. Students may get a better idea for what potential employers are looking for simply by exchanging portfolios among classmates and critiquing them.

TIME REQUIRED:

5 class periods

Adapted from:

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CDA: CAREERS ON A RAFT

RESOURCES/MATERIALS:

1. Career resource materials
2. Resume and cover letter writing sources, such as the *Creative Job Search Guide*, CareerOneStop, MCIS, ISEEK)

ACTIVITY:

- Have students choose the role of a perspective employee looking for a job in a chosen career. (**Role**)
*Students need to research a career for background info.
- Have students choose an employer to convince to hire them. (**Audience**)
- Have students prepare a resume (**Format**) to persuade the potential employer to hire them. (**Topic + strong verb**)

Audience:

- Grades 8

EXTENSION:

- Have students write a cover letter to accompany the resume.
- Have students choose internship or volunteer locations to send the resume.

CLOSURE:

- Have students discuss what advice they would give a person looking for a job.

TIME REQUIRED:

2 class periods

Adapted from:

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CDA: HATS OFF TO CAREERS!

RESOURCES/MATERIALS:

1. Art supplies
2. Large index cards
3. Career resources, like *MnCareers*

ACTIVITY:

- Using *MnCareers*, have students select a career.
- Have students make a hat that represents a specific career or a hat that could be worn by a worker in that career. It might be easier for students to make a template of the hat first. A template could serve as a prototype for actual hats.
- Have students make a large index card describing the occupation and why the hat represents that occupation.
- Have students make a display of the hats, including the cards.

Audience:

- Grades 8

EXTENSION:

- Have students create tools or equipment used on the job.

CLOSURE:

- Have students discuss why the hats were designed the way they were – including the history of the hats.

TIME REQUIRED:

2-3 class periods

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000

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CDA: INTERVIEWING FOR A JOB

RESOURCES/MATERIALS:

1. Video recording equipment
2. Sample interview questions

ACTIVITY:

- Discuss job interviews with students. Include the following information:
 - a. What are job interviews?
 - b. When might you have a formal interview for things other than a job (internships, college interview)?
 - c. What's included in a typical interview?
 - d. What questions might be asked?
- Divide students into pairs and have them practice interviewing for a job.
- After an initial practice, divide students into triads identifying one as an employer, one as an interviewer and one as an observer.
- Videotape students conducting the interview sessions.
- Have students analyze their own behavior during the interview and provide feedback on areas of strengths and weaknesses.

Audience:

- Grades 8

EXTENSION:

- Use staff members or volunteers from the community to conduct mock job interviews with students. Have students dress appropriately for the interview. Have students write a follow-up letter.

CLOSURE:

- Discuss with the class which questions they thought were the hardest to answer.
- Have students choose internship or volunteer opportunity to interview for.

TIME REQUIRED:

2 class periods

Adapted from:

Elementary Grades Career Awareness Guide, Career Choices in North Carolina, Spring 2000
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CDA: NONDISCRIMINATORY RAFTING

RESOURCES/MATERIALS:

1. Career resource materials

ACTIVITY:

- Have students choose the role of an employee that they feel has been discriminated against – in either the hiring process, getting a promotion, or salary. (**Role**) (*Students need to research the legislation related to the workplace, such as the Equal Pay Act, Equal Opportunity Employment, etc.)
- Let students know they will have to convince a judge and jury that they've been treated unfairly. Students must show convincing evidence by writing about ways in which they have been discriminated against. (**Audience**)
- Have students prepare a closing argument (**Format**) to persuade the judge and jury to award them a settlement. (**Topic + strong verb**)

Audience:

- Grades 8

EXTENSION:

- Have students write a news story on the trial results.
- Hold a mock trial, with students acting as lawyers, witnesses and jury.

CLOSURE:

- In class, discuss the laws that protect employees from being treated unfairly.

TIME REQUIRED:

2 class periods

Adapted from:

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CAREER DEVELOPMENT ACTIVITY: PAY DAY

RESOURCES/MATERIALS:

1. MnCareers
2. Sample paychecks or illustrations from textbooks
3. Internet access
4. Reality Check and budgeting information (MCIS, ISEEK)

ACTIVITY:

- Review with students the terms related to a paycheck: deduction, income tax, gross pay, net pay, endorse, FICA, etc.
- Have students use a career of choice. (It's better if students choose a career based on their interests, not potential salary.)
- Demonstrate to students how a paycheck is computed.
- Using Worksheet #36 (page 173) have students develop a budget for living expenses using the net pay computed.

Audience:

- Grades 8

EXTENSION:

- Have students research Social Security to find out what it is, why it was developed, and what its benefits are. If possible, have students examine when Social Security is scheduled to run out and the potential ramifications.
- Have students research where taxes and other deductions go and what they are used for.

CLOSURE:

- Have students discuss the purpose of budgets that households and businesses use.

TIME REQUIRED:

1-2 class periods

Adapted from:

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CDA: SCIENCE AROUND TOWN

RESOURCES/MATERIALS:

1. Career resource materials

ACTIVITY:

- Introduce students to the idea that science is used in various careers in some form or another.
- Have students select a career and examine the job duties.
- Have students use a local telephone directory and locate job sites within their community for this career.
- Have students contact people in jobs where they think science is used on the job, and write a paper on how science is used on that job.

Audience:

- Grades 8

EXTENSION:

- Have students write a letter to some of the companies asking how scientific math is used on the job and explain their class project. Students may request that the company provide additional information. These companies can be asked to form an ongoing learning partnership and help classrooms in a variety of ways.

CLOSURE:

- Have students compile their science information into a booklet titled "Science Around Town" complete with company locations and contributions.

TIME REQUIRED:

1 class period to introduce (but could be ongoing)

Adapted from:

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CDA: SHADOWING A MATH CAREER

RESOURCES/MATERIALS:

1. Varies by job site

ACTIVITY:

- Have students select an occupation to job shadow.
- As students shadow their career person, have them look for opportunities and conditions where math is used on the job.
- Have students write down a problem they observed in the workplace and how it was solved, as well as tools used to solve the problem.

Audience:

- Grades 8

EXTENSION:

- See if there are any career videos that deal with Measurement and Control. (Career and industry videos can be viewed on CareerOneStop.org or ISEEK.org)

CLOSURE:

- Upon returning to the classroom, have students share their job shadowing experience with the class along with its math problems and solutions.

TIME REQUIRED:

1 class period

Adapted from:

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CDA: THE PYTHAGOREAN THEOREM

RESOURCES/MATERIALS:

1. Calculator
2. *When Are We Ever Gonna Have to Use This?* by Hal Saunders

ACTIVITY:

- Have the teacher instruct about the Pythagorean theorem.
- Afterwards, have students solve a variety of job-related problems applying the Pythagorean theorem.
- Have students write other job-related problems using the Pythagorean theorem.

Audience:

- Grades 8

EXTENSION:

- Invite a guest speaker to the class that uses the Pythagorean theorem on their job (for example: Forestry Land Management Planner, Industrial Engineer, Meteorologist, Airplane Pilot, Photographer, Plumber, etc.).

CLOSURE:

- Have students find out more about the careers that these math problems came from.

TIME Required:

1-2 class periods

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