Elementary Career Cluster Activities Guidance

Elementary Career Awareness

Grades 1-5

Revision 1
Revision History

December, 2012—Initial Release
Introduction

HB 713 mandates a minimum course of study in career education in grades K-12. To support teachers in fulfilling these requirements, the grade specific career awareness activities listed as an indicator on the College and Career Ready Performance Index have been developed to assist students with career awareness. Making successful transitions into satisfying college and career ready options are fundamental tasks for school counselors, teachers, administrators, and advisors. Social skills and the development of workforce readiness behaviors are crucial in career development.

The Georgia Department of Education has developed seventeen (17) elementary career awareness activities for local school systems to use as a guide to assist with the implementation of the College and Career Readiness Performance Indicators appropriate for the career awareness and career development indices. Some activities may contain more than one activity to allow for more opportunities to facilitate awareness of the cluster.

These activities will assist elementary students with:

- developing sense of self and areas of interest
- developing and acquiring positive attitudes
- developing a sense of career awareness and the relationship with academics and personal interests.

The Georgia General Assembly legislation:

- **2011-HB 186** mandates that the Georgia curriculum be aligned with the national career clusters;
- **2012-HB 713** mandates a comprehensive K-5 career development program.

The service delivery component can be comprised of a counselor, classroom teacher, Teachers As Advisors (TAA) Program participant, media specialist, or external guest speakers. An example of an external guest speaker would be someone from the Farm Bureau who can assist with the teaching and understanding of the Agriculture career cluster. Another example could be the school social worker, who can assist with the Human Services career cluster.

Georgia’s Career Development Model

Today’s technology advances and global competition have changed the way we work. Careers of the future will require a higher level of knowledge and the ability to do something with that knowledge. Career clusters will provide students with the knowledge and skills needed for future success in both college work and a career. When Georgia’s curriculum is coupled with career planning, students graduate with a vision that will lead them successfully into the next step.
National Career Clusters are defined as a grouping of occupations according to common knowledge and skills. These clusters are further broken down into pathways representing a sequence of courses at the secondary level aligned with postsecondary programs. The College and Career Ready Performance Index requires systems to report the percent of students in grades 1-5 who complete the identified number of grade specific career awareness lessons aligned to Georgia’s 17 Career Clusters (operational in 2012-2013). Georgia will utilize the list below as common names for each cluster. (Students in the middle grades learn about and explore aligned pathways prior to completing the individual graduation plan (IGP) in grade 8).

1. Agriculture, Food & Natural Resources
2. Architecture & Construction
3. Arts, A/V Technology & Communications
4. Business Management & Administration
5. Education & Training
6. Energy
7. Finance
8. Government & Public Administration
9. Health Science
10. Hospitality & Tourism
11. Human Services
12. Information Technology
13. Law, Public Safety, Corrections & Security
14. Manufacturing
15. Marketing
17. Transportation, Distribution & Logistics

Georgia’s Education and Career Planning is a process whereby students define and re-define career-related information to make informed decisions about their future. The process is based on the National Career Development Guidelines (NCDG) and is also found in the Professional School Counselors National Standards. The NCDG are divided into three major domains: Personal/Social, Educational Achievement, and Lifelong Learning and Career Management with aligned goals and indicators at each level of learning (knowledge, application and reflection).

The following activities either directly or indirectly align with the NCDG standards. The activities are designed to assist students and their families with answers to the following questions (comprehensive career development):

- **Who am I?** By answering this question, students learn about themselves and become aware of the world of work. During the earlier grades, students begin to think about the concept of work/vocation and the numerous work opportunities available in their future. Students take required career-related assessments during the middle grades to assist with identifying personal strengths and weaknesses as well as likes and dislikes. At the elementary level, it is important that students are exposed to all career options, especially those considered to be nontraditional.
• **Where am I going?** By answering this question, students will explore and investigate the world of work to discover which career, based on previous assessments and experiences, would best “fit” them as an individual. Much of the exploration takes place during the middle grades resulting in an individual graduation plan (IGP) by the end of the 8th grade. This plan guides the student in grades 9-12 and leads to a high school diploma. All students are encouraged to continue their education after high school by exploring all levels of educational options related to their selected career.

• **How am I going to get there?** By answering this question, students begin to develop a plan to manage previous information and continue to gather career-related information in an educational and career planning portfolio beginning in the middle grades. Planning is the key for students and their families to reach educational and career-related goals. An important part of this process is for students to take appropriate coursework at the secondary level to prepare them for the next step after high school. In addition, students and their families need assistance in the process for postsecondary admissions and financial aid. A systemic program, coupled with the development of an educational and career portfolio, can result in higher student achievement and a more qualified workforce.

**Cluster Occupational Frameworks** accompany each career cluster to provide additional information regarding specific occupations aligned to each pathway. Elementary students will learn about the broader clusters and one or more occupations aligned to each cluster. Middle school students will continue their exploration to include pathways and occupations specific to each pathway. Currently, Georgia has not defined the new pathways. The new pathways will be completed for implementation Fall 2013. In the meantime, current pathways are still being used for career planning purposes.
The charts below represent a comprehensive and systematic career development program for elementary grades.

### Career Cluster/Guidance 1st GRADE

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Food, and Natural Resources</td>
<td>CM3.K4 (NCDG)</td>
</tr>
</tbody>
</table>

The activities below, when coupled with the cluster activities, represent a comprehensive elementary career development program. (HB 713)

- Step 1, Step 2, Step 3: ED1.K1
- Cooperating Crayons: PS1.K3; PS2.K2

### Career Cluster/Guidance 2nd GRADE

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, A/V Technology, and Communications</td>
<td>CM3.K4 (NCDG)</td>
</tr>
<tr>
<td>Health Science</td>
<td>CM3.K4 (NCDG)</td>
</tr>
<tr>
<td>Education and Training</td>
<td>CM3.K4 (NCDG)</td>
</tr>
</tbody>
</table>

The activities below, when coupled with the cluster activities, represent a comprehensive elementary career development program. (HB 713)

- Putting Your Best Foot Forward: ED1.K1; ED1.K5 (ASCA)
- Diversity Makes the World Go Round!: PS2.K4; PS2.K9 (ASCA)

### Career Cluster/Guidance 3rd GRADE

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality and Tourism</td>
<td>CM3.K4 (NCDG)</td>
</tr>
<tr>
<td>Human Services</td>
<td>CM3.K4 (NCDG)</td>
</tr>
</tbody>
</table>

The activities below, when coupled with the cluster activities, represent a comprehensive elementary career development program. (HB 713)

- Journey to Jobs: C:A1.3; C:A1.8 (ASCA)
- What Qualities Should Professional Students Have?: A:A1.5 (ASCA)
- Your Point of View or My Point of View?: PS:B1.1; PS:B1.3; PS:B1.4; PS:B1.5; PS:B1.6 (ASCA)
### Career Cluster/Guidance 4th GRADE

<table>
<thead>
<tr>
<th>Career Cluster/Guidance</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM</td>
<td>CM3.K4 (NCDG)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>CM3.K4 (NCDG)</td>
</tr>
<tr>
<td>Business Management &amp; Administration</td>
<td>CM3.K4 (NCDG)</td>
</tr>
</tbody>
</table>

The activities below, when coupled with the cluster activities, represent a comprehensive elementary career development program. (HB 713)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Cube Activity</td>
<td>C:A1.3; C:A1.7; C:A1.8; C:C1.3; C:A1.9 (ASCA)</td>
</tr>
<tr>
<td>What is Your Attitude?</td>
<td>A:A3.1; A:B2.6; C:A1.3; PS:B1.3 (ASCA)</td>
</tr>
<tr>
<td>Decision Making and Peer Pressure (The M&amp;M Activity)</td>
<td>PS:B1.8</td>
</tr>
</tbody>
</table>

### Career Cluster/Guidance 5th GRADE

<table>
<thead>
<tr>
<th>Career Cluster/Guidance</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>CM3.K4</td>
</tr>
<tr>
<td>Information Technology</td>
<td>CM3.K4</td>
</tr>
<tr>
<td>Marketing</td>
<td>CM3.K4</td>
</tr>
<tr>
<td>Government and Public Administration</td>
<td>CM3.K4</td>
</tr>
</tbody>
</table>

The activities below, when coupled with the cluster activities, represent a comprehensive elementary career development program. (HB 713)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careers and Education</td>
<td>C:C1.1; C:C1.4</td>
</tr>
<tr>
<td>Responsibility Four Corners</td>
<td>A:B1.1; C:C2.1</td>
</tr>
<tr>
<td>Auction for Your Future</td>
<td>PS:A1.2</td>
</tr>
</tbody>
</table>

Below are suggested value-added activities for all grade levels:
- Field trips to local cluster-related business/industry
- Local cluster-related speakers
- Elementary Career Fair to highlight clusters
- Poster/Poetry contest (National Career Development Association)
- Celebrate the 5th grade aligned career clusters during the month of November (Career Month)
- Media Specialist selects a cluster-related book for media lesson; creates a bulletin board from cluster-related books (see Elementary Cluster Reading List)
- GAcollege411 Motivational Modules (student and parent presentations/Volunteer Resources)
- Career Interviews
- Career Planning Family Involvement
- Elementary Transition Activities
- Postsecondary Education Awareness
- Career Cluster Door Decoration
Reporting Data

Georgia’s College and Career Ready Performance Index (CCRPI) requires that all students in grades 1 through 5 complete grade specific career awareness activities. Local schools will report the number of activities each student completes per grade level through student record data collection (e.g. Infinite Campus, Powerschool, etc.). The Georgia Department of Education IT department is working with the various vendors of management information systems to provide guidance and support, data entry, and collection. For reporting purposes, local schools should maintain rolls per grade level (1-5) of those students who have participated in these career awareness activities.

Note: Please remember that appropriate documentation should be maintained as a reporting requirement of the College and Career Readiness Performance Index (CCRPI).

DISCLAIMER
The sources and web links listed in the activities may be of help to you as you consider the career awareness activities. While these sources are provided to assist you in your search, it is your responsibility to investigate them to determine their value and appropriateness for your situation and needs. These sources are provided as a sample of available resources and are for informational purposes only. THE GEORGIA DEPARTMENT OF EDUCATION DOES NOT MONITOR, EVALUATE, OR ENDORSE THE CONTENT OR INFORMATION OF THESE RESOURCES. NONE OF THESE RESOURCES SHOULD BE CONSIDERED THE ADVICE OR GUIDANCE OF THE GEORGIA DEPARTMENT OF EDUCATION.
Fast Forward is a series of fast-paced STEM-related videos created at Georgia Public Broadcasting in Atlanta. The videos are approximately 6 minutes and cover a variety of topics related to multiple occupations that require some level of math and science. An introduction to these 16 videos is located at “Ready Set Go” [http://www.gpb.org/blogs/fast-forward/2012/10/24/ready-set-go](http://www.gpb.org/blogs/fast-forward/2012/10/24/ready-set-go). In addition to these videos, GPB has created mini videos on each science/math topic referred to as a “Teachable Moment.” Go to: [http://www.gpb.org/fast-forward/teachable-moment](http://www.gpb.org/fast-forward/teachable-moment) to view the aligned career “teachable moment” videos.

The Georgia Department of Education has aligned these videos to Georgia’s 17 Career Clusters:

- **Atlanta Motorsports**-STEM; Transportation, Distribution & Logistics; Hospitality & Tourism; Architecture & Construction
  - Teachable Moments: Newton's Second Law of Motion and Sound Basics

- **Callaway Gardens**-STEM; Hospitality & Tourism; Agriculture, Food & Natural Resources
  - Teachable Moments: Butterfly vs. Moth, Zoology, Entomology, and Frass

- **Centers for Disease Control and Prevention**-STEM; Health Science;
  - Teachable Moments: Epidemiology, Mutation, and Antibiotic Resistance

- **Career Fair**-STEM; (Engineering); Energy
  - Teachable Moments: States of Matter

- **Coliseum Health System**-STEM; Health Science
  - Teachable Moments: Jobs in Healthcare and Why Urine is Tested

- **Federal Reserve Bank of Atlanta**-STEM; Finance; Business Management & Administration
  - Teachable Moments: Who is Salmon P. Chase?, The Role of the Federal Reserve, Why Money Has Value, and Gold Standard

- **Georgia Bureau of Investigation**-STEM; Law, Public Safety, Corrections & Security
  - Teachable Moments: DNA and Latent Print

- **Georgia Mountain Research and Education Center**-STEM; Agriculture, Food & Natural Resources; Education & Training
  - Teachable Moments: Nitrogen and Photosynthesis and Hypothesis

- **Georgia Sea Turtle Center**-STEM; Agriculture, Food & Natural Resources
  - Teachable Moments: Honey as an Antibiotic and Ecosystems

- **Gulfstream Aerospace**-STEM; Manufacturing; Transportation, Distribution & Logistics
  - Teachable Moments: Bernoulli’s Principle and Supersonic
• **Jittery Joe’s**-STEM; Hospitality & Tourism; Marketing; Health Science, Agriculture, Food & Natural Resources
  ✓ Teachable Moments: Caffeine, The Coffee Business, and Coffee Growing

• **North Georgia Canopy Tours**-STEM; Agriculture, Food & Natural Resources; Marketing
  ✓ Teachable Moments: Watershed, Newton’s First Law, and Friction

• **Southwire**-STEM; Manufacturing; Energy; Marketing; Architecture & Construction
  ✓ Teachable Moments: Southwire Engineering Academy, Root Cause Analysis, and Electricity

• **The Weather Channel**-STEM; Arts, A/V Technology & Communications
  ✓ Teachable Moments: Types of Clouds and What is Lightning?

• **Turner Adult/Swim**-STEM; Arts, A/V Technology & Communications; Information Technology; Fine Arts
  ✓ Teachable Moments: Gravity and Metadata

• **White Oak Pastures**-STEM; Agriculture, Food & Natural Resources; Marketing
  ✓ Teachable Moments: Monocultural vs. Polycultural, Serengeti Rotational Grazing Model, and Sustainable Agriculture

**Other career-related websites:**

• **Learning That Works for America, CTE** [http://www.careertech.org/career-clusters/glance/at-a-glance.html](http://www.careertech.org/career-clusters/glance/at-a-glance.html) This website provides information regarding the national cluster model. Georgia will align with the national clusters by fall of 2013. Georgia will create pathways that are specific to Georgia and will add Energy to the clusters. Career cluster resources are located on this site including each cluster occupational frame.


• **Bureau of Labor Statistics**, “What Do You Like?” [http://www.bls.gov/k12/index.htm](http://www.bls.gov/k12/index.htm) This website provides information on a variety of possible occupations based on what one likes to do. The primary site also provides high-level labor market information.

• **Georgia Department of Labor** [www.dol.state.ga.us](http://www.dol.state.ga.us) This website provides multiple resources specific to Georgia. Go to “get Labor Market Information.”

• **GAcollege411.org** [www.GAcollege411.org](http://www.GAcollege411.org) This website provides comprehensive career information for students in grades 6-12.
• **O*Net Online**  [http://www.onetonline.org/](http://www.onetonline.org/)  This website has detailed descriptions of the world of work for use by job seekers, workforce development and HR professionals, students, researchers, and more.

• **“JA student center” on the Junior Achievement**  [http://studentcenter.ja.org/Careers/Pages/default.aspx](http://studentcenter.ja.org/Careers/Pages/default.aspx)  This website provides career-related assessments and exploration opportunities as well as video games.

• **Career Aisle**  South Carolina video series for elementary students. Lesson plans are also available. Topics are varied. Searching is essential to find something that is related.

• **Career Onestop**  [http://www.acinet.org/videos/COS_videos_by_cluster.asp?id=.27&nodeid=28](http://www.acinet.org/videos/COS_videos_by_cluster.asp?id=.27&nodeid=28)  This website provides videos on each of the 16 national clusters.

• **Kids Work!**  This website allows students to explore through videos and games and learn about occupations in a community. The information can be found at [http://www.knowitall.org/kidswork/theater/workzone/index.html](http://www.knowitall.org/kidswork/theater/workzone/index.html)  In addition, the site can take kids to the “Know It All.org” which allows students to continue to explore multiple websites containing related information such as “Know It All Healthy.”  The “Know It All.org” site is focused on topics native to South Carolina.

• **GAcollege411 Motivational Modules**  [http://www.gsfc.org/main/publishing/volunteer_resource/index.cfm](http://www.gsfc.org/main/publishing/volunteer_resource/index.cfm)  These motivational modules provide age-appropriate information for K-12 grade students and their families about the importance of completing high school and planning for educational pursuits beyond high school. Each module also provides tools to help families make the right decisions along the way to make sure these goals are achieved. Each module is an all-inclusive packet with colorful slides, take-home guides, ice breakers, talking points and activity sheets. Users are welcome to modify the modules or use all or parts of the activities/material to fit the needs of the group.

• **Kids.gov a safe place to learn and play**  [www.kids.gov](http://www.kids.gov)  This website provides age-appropriate information, games and videos on multiple topics including science, government, math, money and many other interesting topics. The site also includes information about “Jobs from A to Z.”
## Georgia Department of Education
### Career Cluster Awareness Activities Guidelines

<table>
<thead>
<tr>
<th>Grade</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td><strong>Grades K-2</strong></td>
<td></td>
</tr>
</tbody>
</table>
- Students learn about different kinds of work  
- Students learn about goal setting and decision making  
- Students learn what it means to be a good worker  
- Students learn about Georgia’s 17 Career Clusters including the Energy cluster |
| **Grades 3-5** |  
- Students use informal career inventories to identify possible occupations  
- Students use assessment tools to explore their skills  
- Students are introduced to career decision-making models  
- Students learn about occupations in the various career clusters  
- Students continue to develop good work-place skills  
- Students continue with developing awareness of Georgia’s 17 Career Clusters including the Energy cluster  
- Students begin the transition process into middle school |
| **6th Grade** |  
- Students begin career exploration activities, including identification of learning opportunities in the community  
- Students are introduced to career pathways in each Career Cluster  
- Students take a career related assessment  
- Students begin to identify jobs within career pathways requiring different levels of education  
- Students identify and explore sources of career information  
- Students identify the steps of the career decision-making process: Who am I? Where am I going? and How am I going to get there?  
- Students begin the transition process into middle school |
| **7th Grade** |  
- Students may participate in service learning, job shadowing, and mentoring  
- Students may participate in service learning, job shadowing, and mentoring  
- Students continue to develop good work-place skills  
- Students begin to identify jobs within career pathways requiring different levels of education  
- Students continue the transition process into high school |
| **8th Grade** |  
- Students choose a pathway based on assessment, exploration and investigation  
- Students meet with parents, counselors, and teacher-advisors to develop the Individual Graduation Plan to include both academic and career pathway course planning  
- Students may participate in service learning, job shadowing, and mentoring  
- Students continue with the process to transition from middle school to high school  
- Students will be made aware of College Credit Now options including AP and IB |
| **9th Grade** |  
- Students review and update their Individual Graduation Plan annually with counselor/advisor and parent  
- Students continue the transition process into high school  
- Students begin to explore financial aid opportunities through a variety of websites  
- Students participate in related Career Technical Student Organizations and other organized activities  
- Students begin to refine good work-place skills  
- Students will continue developing awareness of the College Credit Now options including AP and IB |
| **10th Grade** |  
- Students review and update their Individual Graduation Plan annually with counselor/advisor and parents or guardians  
- Students may participate in job shadowing and internships  
- Students continue to narrow career choices within the selected career pathway and prepare for end of pathway assessments  
- Students participate in related Career Technical Student Organizations and other organized activities  
- Students will begin making decisions regarding College Credit Now options, including AP and IB |
| **11th Grade** |  
- Students review and update their Individual Graduation Plan, with particular attention to postsecondary goals and meeting graduation requirements  
- Students may participate in job shadowing, internships and apprenticeships and other work-based learning opportunities in their career-related field  
- Students participate in related Career Technical Student Organizations and other organized activities  
- Students take appropriate postsecondary admissions and placement assessments i.e. PSAT, SAT, ACT, Asset, etc.  
- Students will continue making decisions regarding College Credit Now options, including AP and IB  
- Students continue in selected career pathway and take appropriate end of pathway assessments |
| **12th Grade** |  
- Students complete graduation requirements  
- Students may participate in job shadowing, internships, and apprenticeships  
- Students participate in Career Technical Student Organizations and other organized activities  
- Students take appropriate postsecondary admissions and placement assessments  
- Students complete any remaining courses for the selected career pathway and take appropriate end of pathway assessments  
- Students begin the transition process into postsecondary education, the military, apprenticeship, or work |
| **Postsecondary/Adult** |  
- Students follow aligned career pathways to a two or four year college, the military, and other postsecondary training or employment  
- Students create a resume and begin networking the market for possible job opportunities  
- Students obtain rewarding entry level employment within their chosen pathway  
- Students continue to refine career choices throughout their lifetime of learning |

*Adapted from: Making Career Clusters Work: A Guide for South Carolina District Administration, Principals, and Teachers*
Georgia Department of Education  
Career Cluster Awareness Activities Guidelines


Georgia’s Career Clusters:

Groupings of occupations with common knowledge and skills into large clusters of occupations

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Cluster Description</th>
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<tbody>
<tr>
<td>Agriculture, Food &amp; Natural Resources</td>
<td>Careers with common knowledge and skills related to production, processing, marketing, financing, distribution, and development of agricultural commodities and resources. These commodities include food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</td>
</tr>
<tr>
<td>Architecture &amp; Construction</td>
<td>Careers with common knowledge and skills related to the designing, planning, managing, and building of structures.</td>
</tr>
<tr>
<td>Arts, A/V Technology &amp; Communications</td>
<td>Careers with common knowledge and skills related to designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</td>
</tr>
<tr>
<td>Business, Management &amp; Administration</td>
<td>Careers with common knowledge and skills related to computer skills for future college and career plans. Cluster skills mastered include planning, organizing, directing, and evaluating as well as owning and operating a successful business.</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>Careers with common knowledge and skills related to planning, managing, and providing education and training services as well as related learning support services.</td>
</tr>
<tr>
<td>Energy</td>
<td>Careers with common knowledge and skills related to preparing individuals for careers in the design, planning, maintaining, generating, transmission, and distribution of traditional and alternative energy.</td>
</tr>
<tr>
<td>Finance</td>
<td>Careers with common knowledge and skills related to money management, including planning, investing, and spending. Students gain career development skills for the finance world with opportunities that expand beyond basic business skills into financial literacy, banking, investing, insurance, and risk management.</td>
</tr>
<tr>
<td>Government &amp; Public Administration</td>
<td>Careers with common knowledge and skills related to the planning and performing of government management and administrative functions at local, state, and federal levels. Careers are available in national security, foreign service, revenue, and regulations.</td>
</tr>
<tr>
<td>Career Cluster</td>
<td>Description</td>
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</tr>
<tr>
<td>Health Science</td>
<td>Careers with common knowledge and skills related to planning, managing, and providing services in therapeutics, diagnostics, health informatics, support areas, and biotechnology research and development.</td>
</tr>
<tr>
<td>Hospitality &amp; Tourism</td>
<td>Careers with common knowledge and skills related to the management, marketing, and operations of restaurants, and other food services, lodging, attractions, recreation events, and travel related services.</td>
</tr>
<tr>
<td>Human Services</td>
<td>Careers with common knowledge and skills related to family and human needs such as nutrition and food science, counseling and mental health services, family and community services, personal care, and consumer services.</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Careers with common knowledge and skills related to the preparation for careers that create, use, modify, and engage technology skills. Graphics, multimedia animation, web design, game and application development, networking, and computer repair are all possibilities.</td>
</tr>
<tr>
<td>Law, Public Safety, Corrections &amp; Security</td>
<td>Careers with common knowledge and skills related to employment in emergency and fire services, legal services, protective services, and homeland security.</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Careers with common knowledge and skills related to the processing of materials into intermediate or final products and related professional and technical support activities, such as production control, maintenance, and process engineering.</td>
</tr>
<tr>
<td>Marketing</td>
<td>Careers with common knowledge and skills related to the process of anticipating, managing, and satisfying consumers' demand for products, services, and ideas. The Marketing Career Cluster generates the strategy that underlies advertising and promotional techniques, business communication, and business development.</td>
</tr>
<tr>
<td>Science, Technology, Engineering &amp; Mathematics</td>
<td>Careers with common knowledge and skills related to planning, managing, and providing scientific research and professional and technical services.</td>
</tr>
<tr>
<td>Transportation, Distribution &amp; Logistics</td>
<td>Careers with common knowledge and skills related to planning, managing, and moving people, materials, and goods by road, pipeline, air, rail, and water, and also includes other related professional and technical support services.</td>
</tr>
</tbody>
</table>
The pyramid represents a narrowing process beginning at the elementary level and moving through high school and beyond. Local school programs should provide opportunities for students to learn about themselves, explore the world of work, and create an individual graduation plan (IGP) to reach their goals, including postsecondary options and admissions.