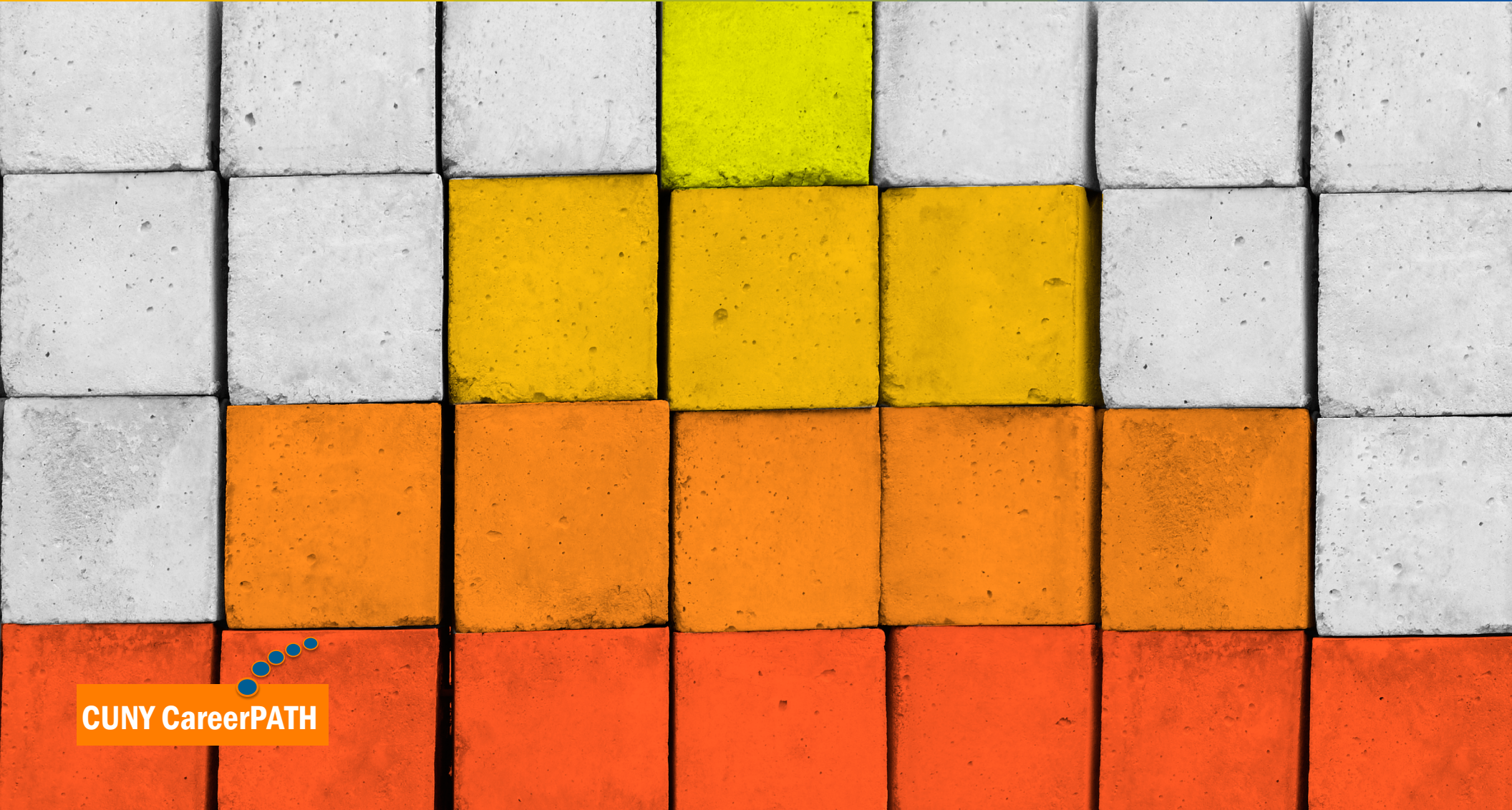


CUNY CareerPATH: Leadership Skills for College and Career



A graphic consisting of five blue circles of increasing size, arranged in a diagonal line from the bottom left towards the top right, positioned above the text.
CUNY CareerPATH

CUNY CareerPATH: Leadership Skills for College and Career

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www.cuny.edu

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Introduction

Using strategies and lessons learned from across the national workforce development field, Career Preparation for Adults through Training and Higher Education (CareerPATH) provided occupational training to adult students and responded to the workforce needs of five local industries. The largest occupational training college consortium in CUNY's history, CareerPATH substantially expanded CUNY's capacity to serve adult workers.

While in CUNY CareerPATH, students trained for new jobs and prepared to advance in their careers and enter college. Eight CUNY colleges¹ were part of the consortium, which was co-managed by Kingsborough Community College and the University's Office of Academic Affairs Continuing Education and Workforce Programs Unit. The initiative was funded through a \$19.86M award from the United States Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program.

CareerPATH incorporated four proven workforce development strategies: employer partnership and responsiveness to industry; demonstrated classroom instruction techniques; robust student support; and the creation of career pathways which combine both access to jobs and access to college for program participants.

A key part of CareerPATH was the PATH Seminar: a set of introductory workshops that prepared students for occupational training, provided resources for career and college exploration, and helped build skills for school, work and life. In addition, every unit provided opportunities for students to strengthen their academic skills. Seminar was created to include several activities and deliverables outlined in CareerPATH's U.S. Department of Labor Grantee Statement of Work.

All eight PATH colleges offered the CareerPATH Seminar. Each based their version loosely on a single curricular framework (see attached), but implementation and curricula differed. Each college modified Seminar for its student participant profile and occupational training/s. Therefore, when offered, the Seminar varied in length, intensity, and content. In addition, throughout the consortium, staff with various professional backgrounds facilitated the workshops, which also contributed to the variation among colleges.

Although some customization of Seminar was appropriate, CareerPATH students throughout the program did not have a consistent experience. In order to ensure consistency and quality, the curricula and implementation should have been more similar among sites.

Another weakness of Seminar was an insufficient focus on job and college readiness. Job search tools and college and career planning were introduced in Seminar, but, in most cases, there was not enough time for the topics to be explored sufficiently. Consortium colleges did provide additional job search and college success workshops while students participated in training. However, in surveys and focus groups, some students reported they did not feel prepared to succeed in college courses and job searches.

With the knowledge that the PATH Seminar needed to be more uniform and include more job and college readiness resources and practice time, Kingsborough Community College and Central Office created a new version of the CareerPATH Seminar called Leadership Skills for College and Career.

This new iteration enables students to practice the habits and skills consistent with success both in college and in the workplace like the CareerPATH Seminar before it. It provides students with time and guidance to identify career and education goals, allows reflection on potential barriers and ways to address them, and helps them identify resources and sources of support.

Leadership Skills for College and Career goes further than the CareerPATH Seminar by adding additional modules, activities, and targeted skills and habits to be practiced. Leadership Skills is not designed to “cover” a variety of topics, but rather to give students time to explore and work on the skills they need in college and at work, as well as to reflect on potential obstacles, both internal and external. In addition, Leadership Skills provides more guidance on implementation. It is taught using a student-centered instructional approach, which encourages students to take more ownership over their learning and to develop a community of peers learning from each other.

Session 1: Self-Assessment and SMART Goals

Skills practiced:

- active listening
- public speaking
- teamwork
- critical thinking
- time management and personal organization

Activity/Time	Notes for facilitation	Materials and prep
Community building 15 minutes	<p>Welcome students to the Leadership Skills for College and Career Success seminar series. Tell them that throughout the series they will be learning a lot about themselves, their classmates, and the academic and professional options that are available to them. They will articulate their academic and professional goals and create concrete SMART goals, with measurable benchmarks. Let them know that they will create a portfolio at the end of the seminar, so everything they write should be saved for possible use in their portfolios.</p> <p>Distribute Handout 1.a and ask students to stand up. Tell them that they're going to have a chance to learn about who else is in the room. In this activity, their goal is to collect signatures from two people for each of the statements listed on the handout. They can have up to two of the same signatures in total.</p> <p>Ask for a few volunteers to share what they learned about each other.</p>	Handout 1.a
Seminar introduction 10 minutes	<p>Talk with the students about the seminar series. Discuss the goals, the types of activities, and ground rules.</p> <p>Be explicit about why we are doing these kinds of activities and practicing specific skills. Ask for volunteers to define what “transferrable skills” means. Tell them that skills such as group work, active listening, and problem solving will help them be successful in high school, in college, and in the workplace.</p> <p>Tell them that we hope this will also be a fun and interesting experience!</p>	Materials and prep

Activity/Time	Notes for facilitation	Materials and prep
<p>Building the tallest tower: self-assessment of skills and habits</p> <p>30 minutes</p>	<p>Have students count off into groups of five. Each group will work together to create the tallest tower using only the materials provided to them.</p> <p>Hand out materials and tell students they are not yet allowed to touch them. They will have two minutes to plan and two minutes to build the tallest tower.</p> <p>Stop. Students must take their hands off the tower. Tell them they have another two minutes to assess their tower without touching it and plan for improving it. Then give them two minutes to improve their towers.</p> <p>Stop. Students must take their hands off the tower. Tell students they have a final two minutes to assess their tower without touching it and plan for improving it. Give them two minutes to improve their towers.</p> <p>Determine which team won based on the height of the tower.</p> <p>Follow-up discussion:</p> <p>Tell them that the process they just went through is a form of self-assessment, where they looked at their work and revised it to be stronger. Self-assessment is important for growth and improvement. In this seminar, we'll be assessing our current skills and habits in order to identify areas for growth and improvement. This process helps us expand our self-awareness.</p> <p>Ask a couple of volunteers to share some of the feelings or reactions that came up for them during the tower activity. Connect the tower activity to life situations that may trigger the same behaviors. Segue into the importance of being self-aware and knowing what our strengths and areas of growth are.</p> <p>Ask them to think about which personal habits get in the way of achieving their goals and to write them down in their notebooks. They should then write the habits that they would like to create that would make them successful.</p>	<p>Tower Materials:</p> <ul style="list-style-type: none"> 20 sticks of spaghetti one yard of masking tape one yard of string one marshmallow <p>(per group)</p>

Activity/Time	Notes for facilitation	Materials and prep
Future self: a free write 10 minutes	Students will have a few minutes to free write. Tell them to imagine their lives in three years. What are they doing? Are they working? Going to school? Where are they living? What are they doing? This should be a realistic description of what they hope their lives will look like. They should give as much detail as possible. Encourage them to look at the habits they hope to adopt and to think about how having those habits could positively affect where they find themselves in three years.	
Active reading: “The Golden Rules of Goal Setting” 20 minutes	Distribute Handout 1.b and tell students that they are going to review four rules of goal-setting. Ask students to read through the handout with a pen in hand, making sure to underline words or phrases that seem important, and to circle statements where they need more clarity. Once all students have finished reading, discuss the information using students’ annotations as jumping-off points for a group discussion. Questions: <ul style="list-style-type: none"> • Who can give me an example of a SMART goal? • What makes it SMART? • What are some examples of goals that aren’t SMART? Why aren’t these goals useful? • If my goal is to get into an EMT program, what are some action steps? • If my goal is to get a raise at work, what are some action steps? 	Handout 1.b
SMART Goals 15 minutes	Tell students that now they’re going to set some goals for themselves. “You’ve done some self-assessment about who you are, what you’re good at, and where you want to be. Take time to put a few short-term and long-term goals into writing.” (Distribute Handout 1.c) Walk around the room and help students in setting SMART goals. Identify some students with strong SMART goals.	Handout 1.c

Activity/Time**Notes for facilitation****Materials and prep**

Presentations

20 minutes

Have some students that you've identified share a goal and the action steps. Ask the class:

What makes this a **SMART** goal?

Once a few students have shared goals, give time for everyone to review their own goals and revise as they see fit. Encourage students to share a stated goal with someone sitting near them.

Find two people for each category:	1	2
Has a brother		
Loves spicy food		
Was born the same month as you		
Went to the movies in the last month		
Is an only child		
Favorite subject is history		
Likes to read		
Has lived in another city		
Knows how to swim		
Speaks another language		
Has family in another country		
Plans to go to college		

Four Rules to Set Yourself Up for Success

Have you thought about what you want to be doing in one year, two years, three years or five years? Do you know what you want to have achieved by the end of today?

If you want to succeed, you need to set goals. Without goals you lack focus and direction. Setting goals allows you to take control of your life's direction and measure how you are doing.

To accomplish your goals, however, you need to know how to set them. You can't simply say, "I want" and expect it to happen. Setting goals is a process that starts with careful consideration of what you want to achieve, and ends with a lot of hard work to actually get there. The four golden rules of setting goals will help you make goals and reach them.

Rule Number 1:

Set Goals that Motivate You

When you set goals for yourself, it is important that they motivate you. Set goals that relate to the high priorities in your life. Goal achievement requires commitment, so you need to feel a sense of urgency and have an "I must do this" attitude.

Don't set too many goals for yourself. Having too many goals can be overwhelming. Set a few short-term goals and a few long-term goals. Once you accomplish your goals, you can always set more.

Rule Number 2:

Set **SMART** Goals

For goals to be powerful, they should be designed to be **SMART**. Goals should:

Be Specific: Clear, well-defined goals will help guide you in life. Make it easier to get where you want to go by defining precisely where you want to end up. Example: I will get at least a B in chemistry.

Be Measurable: Include amounts, dates, etc. in your goals so you can measure your degree of success. Example: I will fill out my CUNY college application by January 15.

Be Attainable: If you set a goal that you have no hope of achieving, you will only demoralize yourself and erode your confidence. However, resist the urge to set goals that are too easy. Accomplishing a goal that you didn't have to work hard for can be unsatisfying; try for "raise the bar" goals that are challenging, but doable.

Consider Resources: What resources (people, books, websites, etc.) do you need to help you stay on track towards your goal? Be as thorough and specific as possible.

Establish a Timeline: Your goals must have a timeline. When you are working on a deadline, your sense of urgency increases, and achievement will come that much quicker.

Rule Number 3:

Set Goals in Writing

The physical act of writing down a goal makes it real and tangible. So you have no excuse for forgetting about it. As you write, use the word "will" instead of "would like to" or "might".

Tip 1: Frame your goal statement positively. For example, say, “I will get a job this summer.”

Tip 2: Post your goals in visible places to remind yourself every day of what it is you intend to do. Put them on your walls, desk, computer monitor, bathroom mirror or refrigerator as a constant reminder.

Rule Number 4:

Make an Action Plan

This step is often missed in the process of goal setting. You get so focused on the outcome that you forget to plan all of the steps that are needed along the way. By writing out the individual steps, and then crossing each one off as you complete it, you'll realize that you are making progress towards your ultimate goal. This is especially important if your goal is big and demanding, or long-term.

	Two Short-Term Goals things to accomplish this year 1. 2.	Two Long-Term Goals things to accomplish within 3 years 1. 2.
Are your goals SPECIFIC ? Yes/No If no, restate them to be SPECIFIC . This year I will....		
How can you MEASURE your goals? I will know I met my goal if...	1. 2.	1. 2.

<p>How will you ATTAIN your goals? What steps do you have to take to reach these goals?</p>	<ol style="list-style-type: none">1.2.3.	<ol style="list-style-type: none">1.2.3.
<p>What RESOURCES will help you achieve your goals (people, organizations, websites, etc.)?</p>	<ol style="list-style-type: none">1.2.3.4.	<ol style="list-style-type: none">1.2.3.4.
<p>What is the TIMELINE for your goals? Give an approximate date for when you will reach your goals:</p>	<ol style="list-style-type: none">1.2.	<ol style="list-style-type: none">1.2.

Session 2: Exploring Career Pathways

Skills practiced:

- active listening
- emotional intelligence
- critical thinking
- public speaking
- problem solving

Activity/Time	Notes for facilitation	Materials and prep
Partner interviews 20 minutes	<p>Welcome students to the session. Tell them that they are going to be exploring career options and thinking about what their own career pathways might look like. Tell them that any career choice begins with exploration and awareness, and that they're going to do some of that work in the next two sessions.</p> <p>Pair students up with people they usually don't work with. Have them interview each other using the career questions posted on the board. Tell them they will have about five minutes for each interview, for ten minutes total. They do not have to ask all the questions; these are just a guide.</p> <p>Have them sit down. Ask for a few volunteers to share what they learned about their partner, and if they noticed anything in common. If there is time, make a list of the more common job/career choices expressed by the group.</p>	<p>Career questions on the board:</p> <ul style="list-style-type: none"> • Who do you know that has an interesting job? Tell me about the person and the job. • What are some of your passions? Is there a job that incorporates those activities? • What job would you never want to do? Why? • What kind of degree are you planning for? An associate's degree? A bachelor's degree? Master's degree? Higher? Why?

Activity/Time	Notes for facilitation	Materials and prep
Introduction to career pathways 25 minutes	<p>Give students an introduction to the idea of career pathways.</p> <p><i>Sample Prompt: Let's talk about the difference between a job and a career. A job helps you with your basic survival needs, like paying your bills, housing, etc. A job may not be aligned with your long-term goals. A career can be one job or many jobs associated with a specific industry/occupation.</i></p> <p><i>You can work for one company or many companies throughout your career. Many people work in entry level jobs in their field of interest while they gain more experience and education. In most cases, a career starts with an education.</i></p> <p><i>While many people have jobs that aren't connected to their career of choice, these can certainly turn into careers. Careers are about building on experience and advancing your job skills and knowledge.</i></p> <p><i>You have a lot of jobs during your career. Hopefully, each one gets you a little closer to your goal. Hopefully, each job gets you to practice and master some new skills. A career pathway is all of your jobs linked together. There are many different jobs and many different career paths.</i></p> <p>Give the example of Barack Obama's career path.</p> <p><i>Does anyone know what Barack Obama's career path was? What were all the jobs that eventually lead him to become President?</i></p> <p>Draw 5 circles on the board. Starting with the last circle, write <i>President</i>.</p> <p>In the circle before that, write <i>US senator representing Illinois</i>.</p> <p>In the circle before that, write <i>State senator representing Chicago</i>.</p> <p>In the circle before that, write <i>Professor at the University of Chicago</i>.</p> <p>In the circle before that, write <i>Community organizer at the Altgeld Gardens Housing Project</i>.</p> <p><i>Ask for volunteers to share their own career paths thus far. Encourage them to look for connections among the jobs they've had to find patterns and similarities. These patterns and similarities among jobs are the beginnings of identifying a career pathway.</i></p>	

Activity/Time	Notes for facilitation	Materials and prep
Career map prep: What I Know About... 10 minutes	<p>Tell students that although everyone’s path looks different, there are some defined paths to follow in order to move up career ladders. As an example, they will be reviewing career maps focused on three different occupations to get a general sense of each career path. These career maps show different kinds of career paths that an HHA, cook, or medical assistant could have.</p> <p>Ask each student to write for 2-3 minutes on each of the careers. They should write everything they know about the career: the different jobs, people they know who work in the field, etc. They can also write any questions they have about the career field.</p>	Career maps: HHA, cooks and chefs, medical assistant
Activity/Time	Notes for facilitation	Materials and prep
Career map: first views 10 minutes	Get students into three groups, one for each career map type. Give them about ten minutes to discuss the map. Ask for volunteers to share some observations from the map—things that surprised them, things they want to know more about, etc...	
Activity/Time	Notes for facilitation	Materials and prep
Career map: presentations 25 minutes	<p>Tell each group that they will have five minutes to present the information on their map in a summarized way. They should plan a way to present it and choose a team member to lead the presentation. They will have five minutes to plan the presentations.</p> <p>All presentations should include:</p> <ul style="list-style-type: none"> • the kind of information found on the career map • two examples of career paths on the map • at least two examples of additional information that would be useful to have on the map 	Handout 2.a
Activity/Time	Notes for facilitation	Materials and prep
Creating career maps 30 minutes	Distribute handout 2.a . Tell students that they are going to create the first draft of their own career path maps. Remind them that these paths will change many times along the way, and that today is just a way to start thinking about it.	

Ask students to consider some career paths they may be interested in pursuing. Remind them that some career paths could be as short as two jobs. Some could be different paths that end at the same job. Some paths start at the same place and end in different places. Tell students that today they should create three possible career path maps that would interest them. The circles should be filled with jobs that are increasingly advanced or higher level. The triangles in between are for student estimations of any additional academic degrees required for the position.

When students have finished, ask them to hang their career path maps on the walls. Have students walk around and look at all the maps. Once students have spent some time looking at each other's work, ask them to take their maps and go back to their desks, where they should make any changes to their own maps that others' work may have inspired them to think about.

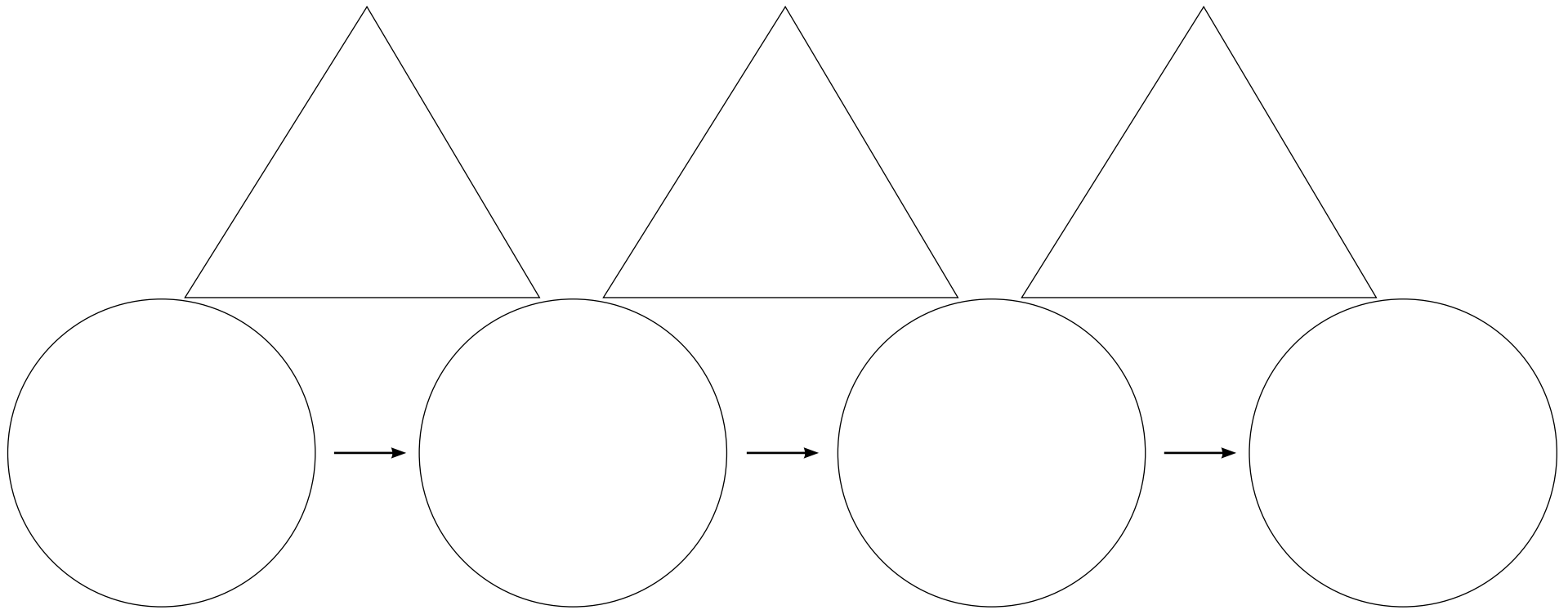
Activity/Time**Notes for facilitation****Materials and prep**

Reflective writing
10 minutes

Ask students to take 2-3 minutes to respond in writing to the following prompt:

After looking at career maps and your classmates' career pathways ideas, what are you thinking about now in terms of your own career prospects?

After everyone has finished writing, ask for volunteers to share what they wrote.



Session 3: Researching Career Pathways

Skills practiced:

- active listening
- emotional intelligence
- critical thinking

Activity/Time	Notes for facilitation	Materials and prep
Skills assessment icebreaker 10 minutes	<p>Welcome students to the session. Tell them that today they're going to do some more specific college and career pathways exploration.</p> <p>Tell students that as a warm up, they will be asked to assess themselves on a variety of skills. As they hear the skill named, they should quickly gather in groups: those “thriving” at the skill should go to the front of the room, those “developing” the skill should go to the left side of the room, and those “emerging” into the skill should go to the right side of the room.</p> <p>Skills groupings:</p> <ol style="list-style-type: none"> 1. Cooking 2. Technology (computer literacy, smart phones, etc...) 3. Collaborating with others (at work or in school) 4. Sports 5. Writing 6. Personal time management 7. Keeping a financial budget 8. Organizing and planning (events, parties, meetings, etc.) 	
Identifying skills and interests 15 minutes	<p>Have students sit down. Talk about skills—that they can be natural talents or things we learn to do. Ask students about ways to determine our skills and what we do well.</p> <p>Tell students that they are going to do some exercises that will help them assess their learning</p>	

style and their skills and interests, as another step in the education/career planning process. These activities will help them create a list of jobs they might be good at and would enjoy doing. Once they have a list, they can start to research different career clusters associated with that list.

Ask students to use their notebooks or provide them with sheets of paper. Put three columns on the board with the headings: **Work**, **Family**, and **Community**. Ask students to suggest some examples of roles for each of the categories and write these on the board. Have students turn to someone near them to work with. Both of them should write the same columns at the top of their papers.

With their partner, students should create a list of roles they have played in their lives either from being employed, being a student, as a family member, or by being involved in groups or activities. Each student will create an individual list, but they can share as they go to give each other additional ideas.

Encourage students to list as many roles as possible in each category: for example, the family category might have cook, caregiver, teacher, driver, organizer, etc.

Activity/Time	Notes for facilitation	Materials and prep
Identifying values 40 minutes	<p>Distribute Handout 3.a. Ask students to complete section I—self-discovery. As students work, float around to offer clarification, guidance, and probing questions.</p> <p>Once students have completed, ask for volunteers to share. Ask them to think about how these questions are related to careers and career pathways.</p> <p>Ask students to complete section II—values exploration. As students work, float around to offer clarification, guidance, and probing questions.</p> <p>Once students have completed, ask for a volunteer to share. List the values he/she has chosen on the board. Ask the group to brainstorm possible jobs and careers that would reflect the values chosen by the student.</p>	Handout 3.a

Activity/Time	Notes for facilitation	Materials and prep
<p>Career Clusters 25 minutes</p>	<p>Ask students to get in groups of three and to do the same with their own top 10 values. Each student should end up with a list of possible jobs and careers that reflect their top 10 values.</p> <p>Ask students to group themselves according to the following career clusters, based on their skills, values, and other things they've learned about themselves through the day's activities. Tell them that if they don't see their first choice of career listed, to go with one from the list that interests them as well.</p> <p>Career cluster groups: Education and Childcare Health Care Law and Public Safety Tourism and Hospitality Finance Technology</p> <p>Give each group copies of their corresponding handout. Tell students they will have 20 minutes to prepare a five minute presentation for the others about the career described in the handout.</p> <p>(Let students know that the information, called labor market data, is just an introduction to the occupation. Refer them to the website and encourage them to spend time reviewing it. Let them know there are videos, interviews, and many other resources on the website. Tell them that the url of the website is at the bottom of the handout.)</p> <p>Tell the groups they can present the information in whatever way they choose—as a question and answer session, as a round robin with each student giving some information, as a poster that they show and discuss, etc...</p> <p>As students work, float around to offer clarification, guidance, and probing questions.</p>	<p>Handouts 3.b, 3.c, 3.d, 3.e, 3.f, 3.g</p>
<p>Presentation 30 minutes</p>	<p>As each group presents, other students should write down questions they have about the cluster. If there is time after the presentations, encourage students to ask questions of the other groups.</p>	

I. Self-Discovery Questions

1. What are you currently doing to explore your interests?

2. When do you feel most fulfilled?

3. What are three of your best qualities?

4. What did you enjoy doing as a child before others began to direct your path?

5. What have you always wanted to try but have never done?

II. Values Exploration

1. Choose your top five values from each box.
2. Once you have done so, circle ten values in total, from all boxes. You can choose as many as you want from each box, but the total must not exceed ten.

Work Environment

- Flexibility
- Work under tight deadlines
- Stability & security
- High earnings/salary
- Action-oriented
- Relaxed work pace
- Quiet environment
- Excitement
- Predictability & structure
- Specific location
- High volume of public contact
- Work outdoors
- Aesthetically pleasant surroundings

Work Content

- Challenging work
- Serve as a leader
- Ability to see tangible results
- Work on cutting edge of knowledge
- Detail-oriented
- Social activism focus
- Intellectual stimulation
- Opportunity for creativity & self-expression
- Change & variety
- Growth opportunity
- Adventurous work
- Helping others
- Initiative-driven

Intrinsic & Personal Values

- Status/prestige
- Respect from others
- High levels of responsibility
- Power
- Influence people
- Appreciation
- Belonging and sense of community
- Independence
- Focus on service/contribution
- Commitment
- Work-life balance
- Directly help others
- Justice & fairness
- Connection to religion/spirituality

Work Relationships

- Teamwork focus
- Cultural diversity
- Competitive environment
- Cooperation & collaboration
- Humor & fun
- Harmony – low levels of conflict
- Autonomy
- Recognition for accomplishments
- Open communication
- Work independently
- Coworkers considered friends
- Shared values
- Colleagues provide intellectual challenge

My top ten work values are:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Medical and Clinical Laboratory Technicians: New York

Occupation Description

Perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease. May work under the supervision of a medical technologist

State and National Wages

Location	Pay Period	2014				
		10%	25%	Median	75%	90%
United States	Hourly	\$12.26	\$14.84	\$18.45	\$23.30	\$28.73
	Yearly	\$25,500	\$30,900	\$38,400	\$48,500	\$59,800
New York	Hourly	\$13.93	\$17.64	\$21.91	\$27.27	\$32.67
	Yearly	\$29,000	\$36,700	\$45,600	\$56,700	\$68,000

State and National Trends

United States	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Medical and Clinical Laboratory Technicians	161,500	209,400	+30%	9,020
New York	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Medical and Clinical Laboratory Technicians	7,480	9,180	+23%	370

¹Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Knowledge, Skills, and Abilities

The most important knowledge, skills, and abilities (KSAs) are listed for medical and clinical laboratory technicians.

Knowledge:

- Biology - Knowledge of plant and animal organisms, including their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- Chemistry - Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
- English Language - Knowledge of the structure and content of the English language including the meanings and spellings of words, rules of composition, and grammar.
- Mathematics - Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Customer and Personal Service - Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Skills:

- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Reading Comprehension - Understanding written sentences and paragraphs in work-related documents.
- Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- Speaking - Talking to others to convey information effectively.
- Science - Using scientific rules and methods to solve problems.

Abilities:

- Near Vision - The ability to see details at close range (within a few feet of the observer).
- Information Ordering - The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- Oral Expression - The ability to communicate information and ideas in speaking so others will understand.
- Problem Sensitivity - The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.

Tasks and Activities

Occupation-specific tasks and the most important generalized work activities are listed for medical and clinical laboratory technicians.

Occupation-Specific Tasks:

- Conduct chemical analyses of body fluids, such as blood or urine, using a microscope or automatic analyzer to detect abnormalities or diseases and enter findings into computer.
- Analyze the results of tests or experiments to ensure conformity to specifications, using special mechanical or electrical devices.
- Set up, maintain, calibrate, clean, and test sterility of medical laboratory equipment.
- Prepare standard volumetric solutions or reagents to be combined with samples, following standardized formulas or experimental procedures.
- Collect blood or tissue samples from patients, observing principles of asepsis to obtain blood sample.
- Supervise or instruct other technicians or laboratory assistants.
- Conduct blood tests for transfusion purposes and perform blood counts.
- Inoculate fertilized eggs, broths, or other bacteriological media with organisms.
- Obtain specimens by cultivating, isolating, and identifying microorganisms for analysis.
- Examine cells stained with dye to locate abnormalities.
- Consult with a pathologist to determine a final diagnosis when abnormal cells are found.
- Cut, stain, and mount tissue samples for examination by pathologists.
- Perform medical research to further control or cure disease.
- Test raw materials, processes, or finished products to determine quality or quantity of materials or characteristics of a substance.
- Analyze and record test data to issue reports that use charts, graphs, or narratives.

Generalized Work Activities:

- Processing Information - Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.
- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Updating and Using Relevant Knowledge - Keeping up-to-date technically and applying new knowledge to your job.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.

Detailed Work Activities:

- Analyze laboratory findings.
- Analyze laboratory specimens to detect abnormalities or other problems.
- Analyze test data or images to inform diagnosis or treatment.

- Clean medical equipment or facilities.
- Collect biological specimens from patients.
- Conduct research to increase knowledge about medical issues.
- Cultivate micro-organisms for study, testing, or medical preparations.
- Enter patient or treatment data into computers.
- Inform medical professionals regarding patient conditions and care.
- Maintain medical laboratory equipment.
- Operate laboratory equipment to analyze medical samples.
- Prepare biological specimens for laboratory analysis.
- Prepare medical supplies or equipment for use.
- Supervise technical medical personnel.
- Test biological specimens to gather information about patient conditions.
- Train medical providers.

Tools and Technology

Medical and Clinical Laboratory Technicians

Tools:

- Anaerobic jars or accessories - Anaerobic jars, candle jars
 - Capillary or hematocrit tubes - Capillary sticks, capillary tubes
 - Chemistry analyzers - Automated chemistry analyzers, automated/semi-automated dipstick analysis systems, chemistry analyzers, heterologous test systems, homologous test systems
 - Coagulation analyzers - Automated coagulation analyzers, coagulation analyzers, portable coagulation analyzers
 - Hematology analyzers - 5-part differential automated hematology analyzers, automated platelet analyzers, differential hematology analyzers with laser technology, hematology analyzers, hematology task-targeted automation TTA systems
-

Technology:

- Accounting software, such as billing software
- Database user interface and query software
- Electronic mail software
- Medical software, such as commercial plate reader software, Electronic Medical Record (EMR) software, hematology laboratory workflow management software, laboratory information system LIS software, and medical digital imaging software
- Spreadsheet software

Education and Training

Occupation: Medical and Clinical Laboratory Technicians

Typical education needed for entry: Associate's degree

Typical work experience needed for a job in this occupation: None

Typical on-the-job training once you have a job in this occupation: None

Related Instructional Programs:

- Blood Bank Technology Specialist
- Clinical/Medical Laboratory Assistant
- Clinical/Medical Laboratory Science and Allied Professions, Other
- Clinical/Medical Laboratory Technician
- Hematology Technology/Technician
- Histologic Technician

Preschool Teachers (Except Special Education): New York

Occupation Description

Instruct preschool-aged children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold state certification. Excludes childcare workers, special education teachers, and substitute teachers.

State and National Wages

Location	Pay Period	2014				
		10%	25%	Median	75%	90%
United States	Hourly	\$8.98	\$10.58	\$13.52	\$18.11	\$24.46
	Yearly	\$18,700	\$22,000	\$28,100	\$37,700	\$50,900
New York	Hourly	\$9.63	\$12.04	\$16.35	\$25.79	\$39.23
	Yearly	\$20,000	\$25,000	\$34,000	\$53,600	\$81,600

State and National Trends

United States	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Preschool Teachers, Except Special Education	438,200	514,600	+17%	19,940
New York	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Preschool Teachers, Except Special Education	27,390	29,990	+10%	1,030

¹Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Knowledge, Skills, and Abilities

The most important knowledge, skills, and abilities (KSAs) are listed for preschool teachers (except special education).

Knowledge:

- Customer and Personal Service - Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Education and Training - Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
- English Language - Knowledge of the structure and content of the English language, including the meanings and spellings of words, rules of composition, and grammar.
- Psychology - Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
- Public Safety and Security - Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

Skills:

- Speaking - Talking to others to convey information effectively.
- Learning Strategies - Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.
- Instructing - Teaching others how to do something.
- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Coordination - Adjusting actions in relation to others' actions.
- Social Perceptiveness - Being aware of others' reactions and understanding why they react as they do.

Abilities:

- Oral Expression - The ability to communicate information and ideas in speaking so others will understand.
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Problem Sensitivity - The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Speech Clarity - The ability to speak clearly so others can understand you.
- Originality - The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Speech Recognition - The ability to identify and understand the speech of another person.

Tasks and Activities

Occupation-specific tasks and the most important generalized work activities are listed for preschool teachers (except special education).

Occupation-Specific Tasks:

- Establish and enforce rules for behavior and procedures for maintaining order.
- Organize and lead activities designed to promote physical, mental, and social development, such as games, arts and crafts, music, storytelling, and field trips.
- Teach basic skills such as color, shape, number and letter recognition, personal hygiene, and social skills.
- Read books to entire classes or to small groups.
- Observe and evaluate children's performance, behavior, social development, and physical health.
- Attend to children's basic needs by feeding them, dressing them, and changing their diapers.
- Provide a variety of materials and resources for children to explore, manipulate, and use, both in learning activities and in imaginative play.
- Assimilate arriving children to the school environment by greeting them, helping them remove outerwear, and selecting activities of interest to them.
- Serve meals and snacks in accordance with nutritional guidelines.
- Teach proper eating habits and personal hygiene.
- Prepare materials and classrooms for class activities.
- Identify children showing signs of emotional, developmental, or health-related problems, and discuss them with supervisors, parents or guardians, and child development specialists.
- Enforce all administration policies and rules governing students.
- Establish clear objectives for all lessons, units, and projects, and communicate those objectives to children.
- Meet with parents and guardians to discuss their children's progress and needs, determine their priorities for their children, and suggest ways that they can promote learning and development.
- Adapt teaching methods and instructional materials to meet students' varying needs and interests.
- Plan and conduct activities for a balanced program of instruction, demonstration, and work time that provides students with opportunities to observe, question, and investigate.
- Arrange indoor and outdoor space to facilitate creative play, motor-skill activities, and safety.
- Maintain accurate and complete student records as required by laws, district policies, and administrative regulations.
- Demonstrate activities to children.
- Meet with other professionals to discuss individual students' needs and progress.
- Confer with other staff members to plan and schedule lessons promoting learning, following approved curricula.
- Attend professional meetings, educational conferences, and teacher training workshops to maintain and improve professional competence.
- Organize and label materials and display students' work in a manner appropriate for their ages and perceptual skills.

- Prepare reports on students and activities as required by administration.
- Collaborate with other teachers and administrators in the development, evaluation, and revision of preschool programs.
- Plan and supervise class projects, field trips, visits by guests, or other experiential activities, and guide students in learning from those activities.
- Attend staff meetings and serve on committees as required.
- Select, store, order, issue, and inventory classroom equipment, materials, and supplies.
- Provide disabled students with assistive devices, supportive technology, and assistance accessing facilities such as restrooms.
- Administer tests to help determine children's developmental levels, needs, and potential.
- Prepare and implement remedial programs for students requiring extra help.
- Perform administrative duties such as hall and cafeteria monitoring, and bus loading and unloading.
- Supervise, evaluate, and plan assignments for teacher assistants and volunteers.

Generalized Work Activities:

- Assisting and Caring for Others - Providing personal assistance, medical attention, emotional support, or other personal care to others such as coworkers, customers, or patients.
- Thinking Creatively - Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.
- Establishing and Maintaining Interpersonal Relationships - Developing constructive and cooperative working relationships with others, and maintaining them over time.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in writing, by e-mail, or in person.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.

Detailed Work Activities:

- Administer tests to assess educational needs or progress.
- Apply multiple teaching methods.
- Arrange childcare or educational settings to ensure physical safety of children.
- Assist students with special educational needs.
- Attend training sessions or professional meetings to develop or maintain professional knowledge.
- Collaborate with other teaching professionals to develop educational programs.
- Develop instructional objectives.
- Develop strategies or programs for students with special needs.
- Discuss problems or issues with supervisors.

- Discuss student progress with parents or guardians.
- Display student work.
- Distribute instructional or library materials.
- Establish rules or policies governing student behavior.
- Enforce rules or policies governing student behavior.
- Evaluate performance of educational staff.
- Evaluate student work.
- Maintain inventories of materials, equipment, or products.
- Maintain student records.
- Modify teaching methods or materials to accommodate student needs.
- Monitor student behavior, social development, and health.
- Monitor student performance.
- Order instructional or library materials or equipment.
- Plan educational activities.
- Plan experiential learning activities.
- Prepare reports detailing student activities or performance.
- Provide for basic needs of children.
- Read to students.
- Serve on institutional or departmental committees.
- Set up classroom materials or equipment.
- Supervise school or student activities.
- Supervise student research or internship work.
- Teach life skills.

Tools and Technology

Tools:

- Balance or gross motor equipment, such as play structures
 - Games, such as educational board games
 - Toy block sets
 - Cognitive and educational toys
 - Sand or water tables or activity centers
-

Technology:

- Computer based training software, such as children's educational software
- Database user interface and query software, such as data entry software
- E-mail software
- Spreadsheet software, such as Microsoft Excel
- Word processing software, such as Microsoft Word

Education and Training

Occupation: Preschool Teachers, Except Special Education

Typical education needed for entry: Associate's degree

Typical work experience needed for a job in this occupation: None

Typical on-the-job training once you have a job in this occupation: None

Related Instructional Programs:

- Child Care and Support Services Management
- Early Childhood Education and Teaching
- Kindergarten/Preschool Education and Teaching

Lawyers: New York

Occupation Description

Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, or manage or advise clients on legal transactions. May specialize in a single area, or may practice broadly in many areas of law.

State and National Wages

Location	Pay Period	2014				
		10%	25%	Median	75%	90%
United States	Hourly	\$26.64	\$36.36	\$55.27	\$82.95	\$90.00+
	Yearly	\$55,400	\$75,600	\$115,000	\$172,500	\$187,200+
New York	Hourly	\$31.02	\$41.78	\$65.28	\$90.00+	\$90.00+
	Yearly	\$64,500	\$86,900	\$135,800	\$187,200+	\$187,200+

State and National Trends

United States	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Lawyers	759,800	834,700	+10%	19,650
New York	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Lawyers	82,220	88,680	+8%	1,960

¹Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Knowledge, Skills, and Abilities

The most important knowledge, skills, and abilities (KSAs) are listed for lawyers.

Knowledge:

- Law and Government - Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.
- English Language - Knowledge of the structure and content of the English language, including the meanings and spellings of words, rules of composition, and grammar.
- Customer and Personal Service - Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Administration and Management - Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- Clerical - Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.
- Computers and Electronics - Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

Skills:

- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Speaking - Talking to others to convey information effectively.
- Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Reading Comprehension - Understanding written sentences and paragraphs in work related documents.
- Complex Problem Solving - Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Judgment and Decision Making - Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Writing - Communicating effectively in writing as appropriate for the needs of the audience.

Abilities:

- Oral Expression - The ability to communicate information and ideas in speaking so others will understand.
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Speech Clarity - The ability to speak clearly so others can understand you.
- Written Comprehension - The ability to read and understand information and ideas presented in writing.
- Written Expression - The ability to communicate information and ideas in writing so others will understand.

Tasks and Activities

Occupation-specific tasks and the most important generalized work activities are listed for lawyers.

Occupation-Specific Tasks:

- Represent clients in court or before government agencies.
- Present evidence to defend clients or prosecute defendants in criminal or civil litigation.
- Select jurors, argue motions, meet with judges, and question witnesses during the course of a trial.
- Interpret laws, rulings and regulations for individuals and businesses.
- Study Constitution, statutes, decisions, regulations, and ordinances of quasi-judicial bodies to determine ramifications for cases.
- Present and summarize cases to judges and juries.
- Prepare legal briefs and opinions, and file appeals in state and federal courts of appeal.
- Analyze the probable outcomes of cases, using knowledge of legal precedents.
- Examine legal data to determine advisability of defending or prosecuting lawsuit.
- Evaluate findings and develop strategies and arguments in preparation for presentation of cases.
- Advise clients concerning business transactions, claim liability, advisability of prosecuting or defending lawsuits, or legal rights and obligations.
- Gather evidence to formulate defense or to initiate legal actions, by such means as interviewing clients and witnesses to ascertain the facts of a case.
- Negotiate settlements of civil disputes.
- Prepare and draft legal documents, such as wills, deeds, patent applications, mortgages, leases, and contracts.
- Confer with colleagues with specialties in appropriate areas of legal issue to establish and verify bases for legal proceedings.
- Supervise legal assistants.
- Perform administrative and management functions related to the practice of law.
- Probate wills and represent and advise executors and administrators of estates.
- Search for and examine public and other legal records to write opinions or establish ownership.
- Act as agent, trustee, guardian, or executor for businesses or individuals.
- Help develop federal and state programs, draft and interpret laws and legislation, and establish enforcement procedures.
- Work in environmental law, representing public interest groups, waste disposal companies, or construction firms in their dealings with state and federal agencies.

Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solutions and solve problems.
- Resolving Conflicts and Negotiating with Others - Handling complaints, settling disputes, and resolving grievances and conflicts, or otherwise negotiating with others.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, by telephone, or e-mail.

Detailed Work Activities:

- Arbitrate disputes between parties to resolve legal conflicts.
- Draft legislation or regulations.
- Evaluate information related to legal matters in public or personal records.
- Identify implications for cases from legal precedents or other legal information.
- Interview claimants to get information related to legal proceedings.
- Meet with individuals involved in legal processes to provide information and clarify issues.
- Prepare documentation of legal proceedings.
- Prepare legal documents.
- Provide legal advice to clients.
- Represent the interests of clients in legal proceedings.
- Research relevant legal materials to aid decision making.
- Supervise activities of other legal personnel

Tools and Technology

Tools:

- Compact Disc (CD) players or recorders
 - Desktop computers
 - Digital Video Disc (DVD) players or recorders
 - High-capacity removable media drives
 - Liquid Crystal Display (LCD) projector
-

Technology:

- Accounting software - BQE Software BillQuick, ESI Software ESILAW, Genlex CaseAce, LexisNexis Lexis Back Office, LexisNexis PCLaw
- Database user interface and query software - ADC Legal Systems Perfect Practice, ADERANT Expert Matter Center, Abacus Data Systems AbacusLaw, Advanced Technologies Class Act, AdvantageLaw WinVantage
- Document management software - Adobe Systems Adobe Acrobat software, Anacomp CaseLogistix, Best Case Solutions Best Case Bankruptcy, CT Summation iBlaze, CT hCue
- Information retrieval or search software - Fastcase, LexisNexis Shepard's Citations Service, LexisNexis software, Thomson West WestlawPRO, Wolters Kluwer Loislaw
- Presentation software - IDEA TrialPro, Microsoft PowerPoint, Verdict Systems Sanction, Visionary Legal Technologies Visionary Professional, inData TrialDirector

Education and Training

Occupation: Lawyers

Typical education needed for entry: Doctoral or professional degree

Typical work experience needed for a job in this occupation: None

Typical on-the-job training once you have a job in this occupation: None

Related Instructional Programs:

- Advanced Legal Research/Studies, General
- American/U.S. Law/Legal Studies/Jurisprudence
- Banking, Corporate, Finance, and Securities Law
- Canadian Law/Legal Studies/Jurisprudence
- Comparative Law
- Energy, Environment, and Natural Resources Law
- Health Law
- Intellectual Property Law
- International Business, Trade, and Tax Law
- International Law and Legal Studies
- Law
- Legal Research and Advanced Professional Studies, Other
- Programs for Foreign Lawyers
- Tax Law/Taxation

Hosts And Hostesses, Restaurant, Lounge, and Coffee Shop: New York

Occupation Description

Welcome patrons, seat them at tables or in lounge, and help ensure quality of facilities and service.

State and National Wages

Location	Pay Period	2014				
		10%	25%	Median	75%	90%
United States	Hourly	\$7.88	\$8.36	\$9.00	\$10.32	\$12.65
	Yearly	\$16,400	\$17,400	\$18,700	\$21,500	\$26,300
New York	Hourly	\$8.30	\$8.75	\$9.73	\$12.18	\$15.36
	Yearly	\$17,300	\$18,200	\$20,200	\$25,300	\$31,900

State and National Trends

United States	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	347,300	366,400	+6%	28,040
New York	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	16,010	19,330	+21%	1,540

¹Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Knowledge, Skills, and Abilities

The most important knowledge, skills, and abilities (KSAs) are listed for Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop.

Knowledge:

- Customer and Personal Service - Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- English Language - Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Sales and Marketing - Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.
- Mathematics - Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Education and Training - Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Skills:

- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Speaking - Talking to others to convey information effectively.
- Service Orientation - Actively looking for ways to help people.
- Social Perceptiveness - Being aware of others' reactions and understanding why they react as they do.
- Coordination - Adjusting actions in relation to others' actions.
- Persuasion - Persuading others to change their minds or behavior.

Abilities:

- Oral Expression - The ability to communicate information and ideas in speaking so others will understand.
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Speech Recognition - The ability to identify and understand the speech of another person.
- Speech Clarity - The ability to speak clearly so others can understand you.
- Near Vision - The ability to see details at close range (within a few feet of the observer).

Tasks and Activities

Occupation specific tasks and the most important generalized work activities are listed for Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop.

Occupation Specific Tasks:

- Greet guests and seat them at tables or in waiting areas.
- Provide guests with menus.
- Assign patrons to tables suitable for their needs and according to rotation so that servers receive an appropriate number of seatings.
- Speak with patrons to ensure satisfaction with food and service, to respond to complaints, or to make conversation.
- Answer telephone calls and respond to inquiries or transfer calls.
- Maintain contact with kitchen staff, management, serving staff, and customers to ensure that dining details are handled properly and customers' concerns are addressed.
- Inspect dining and serving areas to ensure cleanliness and proper setup.
- Inform patrons of establishment specialties and features.
- Receive and record patrons' dining reservations.
- Inspect restrooms for cleanliness and availability of supplies and clean restrooms when necessary.
- Direct patrons to coatrooms and waiting areas such as lounges.
- Take and prepare to-go orders.
- Operate cash registers to accept payments for food and beverages.
- Supervise and coordinate activities of dining room staff to ensure that patrons receive prompt and courteous service.
- Order or requisition supplies and equipment for tables and serving stations.
- Assist with preparing and serving food and beverages.
- Hire, train, and supervise food and beverage service staff.
- Prepare cash receipts after establishments close, and make bank deposits.
- Prepare staff work schedules.
- Confer with other staff to help plan establishments' menus.
- Plan parties or other special events and services.
- Perform marketing and advertising services.
- Performing for or Working Directly with the Public - Performing for people or dealing directly with the public. This includes

Generalized Work Activities:

- serving customers in restaurants and stores, and receiving clients or guests.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.

Detailed Work Activities:

- Assist chefs or caterers with food or drink preparation.
- Assist customers with seating arrangements.
- Communicate dining or order details to kitchen personnel.
- Communicate with customers to resolve complaints or ensure satisfaction.
- Coordinate activities of food service staff.
- Inspect facilities, equipment or supplies to ensure conformance to standards.
- Manage food service operations or parts of operations.
- Operate cash registers.
- Order materials, supplies, or equipment.
- Package food or supplies.
- Perform human resources activities.
- Plan menu options.
- Plan special events.
- Present food or beverage information or menus to customers.
- Process customer bills or payments.
- Provide customers with general information or assistance.
- Record operational or production data.
- Schedule dining reservations.
- Take customer orders.
- Train food preparation or food service personnel.

Tools and Technology

Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop

- Tools:**
- Carbonated beverage dispenser - Carbonated beverage dispensers
 - Cash registers - Cash registers
 - Commercial use coffee or iced tea makers - Commercial coffeemakers
 - Desktop computers - Desktop computers
 - Ice dispensers - Ice-making machines
-
- Technology:**
- Calendar and scheduling software - iMagic Restaurant Reservation
 - Data base user interface and query software - Avenista software, Data entry software, GuestBridge Reserve, OpenTable software, Reservation software
 - Point of sale POS software - Hospitality Control Solutions Aloha Point-of-Sale software, Point of sale POS software

Education and Training

Occupation: Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop

Typical education needed for entry: Less than high school

Typical work experience needed for a job in this occupation: None

Typical on-the-job training once you have a job in this occupation: None

Accountants and Auditors: New York

Occupation Description

Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data. Excludes “Tax Examiners and Collectors, and Revenue Agents”.

State and National Wages

Location	Pay Period	2014				
		10%	25%	Median	75%	90%
United States	Hourly	\$19.64	\$24.58	\$31.70	\$42.08	\$55.75
	Yearly	\$40,900	\$51,100	\$65,900	\$87,500	\$116,000
New York	Hourly	\$22.23	\$28.32	\$37.52	\$51.20	\$71.80
	Yearly	\$46,200	\$58,900	\$78,000	\$106,500	\$149,300

State and National Trends

United States	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Accountants and Auditors	1,275,400	1,442,200	+13%	54,420
New York	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Accountants and Auditors	105,530	122,410	+16%	4,810

¹Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Knowledge, Skills, and Abilities

Accountants and Auditors are grouped into the following occupations for which the most important knowledge, skills, and abilities (KSAs) are listed.

Accountants

Knowledge:

- Economics and Accounting - Knowledge of economic and accounting principles and practices, the financial markets, banking and the analysis and reporting of financial data.
- Mathematics - Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- English Language - Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Computers and Electronics - Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- Clerical - Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.

Skills:

- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Mathematics - Using mathematics to solve problems.
- Reading Comprehension - Understanding written sentences and paragraphs in work related documents.
- Writing - Communicating effectively in writing as appropriate for the needs of the audience.
- Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Speaking - Talking to others to convey information effectively.

Abilities:

- Mathematical Reasoning - The ability to choose the right mathematical methods or formulas to solve a problem.
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Written Comprehension - The ability to read and understand information and ideas presented in writing.
- Number Facility - The ability to add, subtract, multiply, or divide quickly and correctly.
- Deductive Reasoning - The ability to apply general rules to specific problems to produce answers that make sense.
- Near Vision - The ability to see details at close range (within a few feet of the observer).
- Oral Expression - The ability to communicate information and ideas in speaking so others will understand.

Auditors

Knowledge:

- Economics and Accounting - Knowledge of economic and accounting principles and practices, the financial markets, banking and the analysis and reporting of financial data.
 - English Language - Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
 - Administration and Management - Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
 - Computers and Electronics - Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
 - Mathematics - Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
-

Skills:

- Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
 - Reading Comprehension - Understanding written sentences and paragraphs in work related documents.
 - Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
 - Speaking - Talking to others to convey information effectively.
 - Active Learning - Understanding the implications of new information for both current and future problem-solving and decision-making.
 - Complex Problem Solving - Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
 - Judgment and Decision Making - Considering the relative costs and benefits of potential actions to choose the most appropriate one.
 - Writing - Communicating effectively in writing as appropriate for the needs of the audience.
-

Abilities:

- Problem Sensitivity - The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Oral Expression - The ability to communicate information and ideas in speaking so others will understand.
- Written Comprehension - The ability to read and understand information and ideas presented in writing.
- Inductive Reasoning - The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- Deductive Reasoning - The ability to apply general rules to specific problems to produce answers that make sense.
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Speech Clarity - The ability to speak clearly so others can understand you.

Tasks and Activities

Accountants and Auditors are grouped into the following occupations for which occupation specific tasks, the most important generalized work activities, and detailed work activities are listed.

Accountants

Occupation Specific Tasks:

- Prepare, examine, or analyze accounting records, financial statements, or other financial reports to assess accuracy, completeness, and conformance to reporting and procedural standards.
- Report to management regarding the finances of establishment.
- Establish tables of accounts and assign entries to proper accounts.
- Develop, implement, modify, and document recordkeeping and accounting systems, making use of current computer technology.
- Compute taxes owed and prepare tax returns, ensuring compliance with payment, reporting or other tax requirements.
- Maintain or examine the records of government agencies.
- Advise clients in areas such as compensation, employee health care benefits, the design of accounting or data processing systems, or long-range tax or estate plans.
- Provide internal and external auditing services for businesses or individuals.
- Develop, maintain, and analyze budgets, preparing periodic reports that compare budgeted costs to actual costs.
- Analyze business operations, trends, costs, revenues, financial commitments, and obligations, to project future revenues and expenses or to provide advice.
- Advise management about issues such as resource utilization, tax strategies, and the assumptions underlying budget forecasts.
- Represent clients before taxing authorities and provide support during litigation involving financial issues.
- Prepare forms and manuals for accounting and bookkeeping personnel, and direct their work activities.
- Appraise, evaluate, and inventory real property and equipment, recording information such as the description, value and location of property.
- Survey operations to ascertain accounting needs and to recommend, develop, or maintain solutions to business and financial problems.
- Serve as bankruptcy trustees or business valuers.

Generalized Work Activities:

- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Processing Information - Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.

Detailed Work Activities:

- Advise others on financial matters.
- Advise others on human resources topics.
- Analyze budgetary or accounting data.
- Analyze business or financial data.
- Appraise property values.
- Calculate tax information.
- Develop business or financial information systems.
- Evaluate condition of properties.
- Examine financial records or processes.
- Examine financial records.
- Identify opportunities to improve operational efficiency.
- Maintain data in information systems or databases.
- Monitor inventories of products or materials.
- Prepare financial documents, reports, or budgets.
- Prepare financial documents.
- Report information to managers or other personnel.
- Supervise employees.

Auditors**Occupation Specific Tasks:**

- Collect and analyze data to detect deficient controls, duplicated effort, extravagance, fraud, or non-compliance with laws, regulations, and management policies.
- Prepare detailed reports on audit findings.
- Supervise auditing of establishments, and determine scope of investigation required.
- Report to management about asset utilization and audit results, and recommend changes in operations and financial activities.
- Inspect account books and accounting systems for efficiency, effectiveness, and use of accepted accounting procedures to record transactions.
- Examine records and interview workers to ensure recording of transactions and compliance with laws and regulations.
- Examine and evaluate financial and information systems, recommending controls to ensure system reliability and data integrity.
- Review data about material assets, net worth, liabilities, capital stock, surplus, income, and expenditures.
- Confer with company officials about financial and regulatory matters.
- Examine whether the organization's objectives are reflected in its management activities, and whether employees understand the objectives.

- Prepare, analyze, and verify annual reports, financial statements, and other records, using accepted accounting and statistical procedures to assess financial condition and facilitate financial planning.
- Inspect cash on hand, notes receivable and payable, negotiable securities, and canceled checks to confirm records are accurate.
- Examine inventory to verify journal and ledger entries.
- Direct activities of personnel engaged in filing, recording, compiling and transmitting financial records.
- Conduct pre-implementation audits to determine if systems and programs under development will work as planned.
- Audit payroll and personnel records to determine unemployment insurance premiums, workers' compensation coverage, liabilities, and compliance with tax laws.
- Evaluate taxpayer finances to determine tax liability, using knowledge of interest and discount rates, annuities, valuation of stocks and bonds, and amortization valuation of depletable assets.
- Review taxpayer accounts, and conduct audits on-site, by correspondence, or by summoning taxpayer to office.
- Produce up-to-the-minute information, using internal computer systems, to allow management to base decisions on actual, not historical, data.
- Examine records, tax returns, and related documents pertaining to settlement of decedent's estate.

Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Updating and Using Relevant Knowledge - Keeping up-to-date technically and applying new knowledge to your job.
- Analyzing Data or Information - Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.
- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Processing Information - Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.

Detailed Work Activities:

- Advise others on business or operational matters.
- Advise others on financial matters.
- Assess financial status of clients.
- Calculate data to inform organizational operations.
- Collect evidence for legal proceedings.
- Coordinate regulatory documentation activities.

- Discuss business strategies, practices, or policies with managers.
- Evaluate effectiveness of personnel policies or practices.
- Examine financial records or processes.
- Examine financial records.
- Investigate legal issues.
- Oversee business processes.
- Prepare financial documents, reports, or budgets.
- Report information to managers or other personnel.
- Verify accuracy of financial information.
- Verify accuracy of records.

Tools and Technology

Accountants and Auditors are grouped into the following occupations for which Tools and Technology information is available.

Accountants

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- Tools:**
- Desktop calculator - 10-key calculators
 - Desktop computers - Desktop computers
 - Laser fax machine - Laser facsimile machines
 - Notebook computers - Notebook computers
 - Personal computers - Personal computers
-
- Technology:**
- Accounting software - ATX Total Accounting Office, ATX Total Engagement Office, Accounts payable software, Accounts receivable software, Accurate NXG
 - Compliance software - ACCUCert software, Accounting compliance software, FLS eDP PAYROLLtax, Intrax ProcedureNet, Paisley Cardmap
 - Enterprise resource planning ERP software - Accountants Templates JAZZ-It!, AcornSystems Corporate Performance Management, Cartesis ES Magnitude, Exact Software Macola ES, Hyperion Solutions System 9
 - Financial analysis software - Accounting fraud detection software, AuditWare software, Brentmark Estate Planning Quickview, Cammack Computations Inter-Est, Cartesis Magnitude iAnalysis
 - Tax preparation software - 1099 ProsSoftware, ATX Total Tax Office, Abacus Tax Software, Advanced Micro Systems 1099-Etc, American Riviera Magtax

Auditors

-
- Tools:**
- Desktop calculator - 10-key calculators
 - Desktop computers - Desktop computers
 - Laser fax machine - Laser facsimile machines
 - Notebook computers - Notebook computers
 - Personal computers - Personal computers

Technology:

- Analytical or scientific software - SAS software
- Compliance software - Accounting compliance software, Bi3 Audit Intelligence, Corporate Responsibility System Technologies Limited Compliance Positioning System, FLS eDP PAYROLLtax, Intrax ProcedureNet
- Data base user interface and query software - Microsoft Access
- Financial analysis software - ACL Business Assurance Analytics, Accounting fraud detection software, Audit management software, Audit planning and control environment software, AuditTracker software
- Spreadsheet software - Microsoft Excel, Spreadsheet software

Education and Training

Occupation: Accountants and Auditors

Typical education needed for entry: Bachelor's degree

Typical work experience needed for a job in this occupation: None

Typical on-the-job training once you have a job in this occupation: None

Related Instructional Programs:

- Accounting
- Accounting and Business/Management
- Accounting and Computer Science
- Accounting and Finance
- Auditing
- Financial Forensics and Fraud Investigation
- Taxation

Web Developers: New York

Occupation Description

Design, create, and modify Web sites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content. Excludes “Multimedia Artists and Animators”.

State and National Wages

Location	Pay Period	2014				
		10%	25%	Median	75%	90%
United States	Hourly	\$16.25	\$21.80	\$30.52	\$41.69	\$54.17
	Yearly	\$33,800	\$45,300	\$63,500	\$86,700	\$112,700
New York	Hourly	\$17.76	\$24.42	\$33.08	\$44.46	\$60.03
	Yearly	\$36,900	\$50,800	\$68,800	\$92,500	\$124,900

State and National Trends

United States	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Web Developers	141,400	169,900	+20%	5,070
New York	Employment		Percent Change	Projected Annual Job Openings ¹
	2012	2022		
Web Developers	9,700	12,230	+26%	410

¹Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Knowledge, Skills, and Abilities

The most important knowledge, skills, and abilities (KSAs) are listed for Web Developers.

Knowledge:

- Computers and Electronics - Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- English Language - Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Customer and Personal Service - Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Design - Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- Communications and Media - Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.

Skills:

- Programming - Writing computer programs for various purposes.
- Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Operations Analysis - Analyzing needs and product requirements to create a design.
- Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Complex Problem Solving - Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Reading Comprehension - Understanding written sentences and paragraphs in work related documents.

Abilities:

- Deductive Reasoning - The ability to apply general rules to specific problems to produce answers that make sense.
- Problem Sensitivity - The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Category Flexibility - The ability to generate or use different sets of rules for combining or grouping things in different ways.
- Information Ordering - The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- Near Vision - The ability to see details at close range (within a few feet of the observer).
- Oral Comprehension - The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Speech Recognition - The ability to identify and understand the speech of another person.
- Written Comprehension - The ability to read and understand information and ideas presented in writing.

Tasks and Activities

Occupation specific tasks and the most important generalized work activities are listed for Web Developers.

Occupation Specific Tasks:

- Design, build, or maintain web sites, using authoring or scripting languages, content creation tools, management tools, and digital media.
- Perform or direct web site updates.
- Write, design, or edit web page content, or direct others producing content.
- Confer with management or development teams to prioritize needs, resolve conflicts, develop content criteria, or choose solutions.
- Back up files from web sites to local directories for instant recovery in case of problems.
- Identify problems uncovered by testing or customer feedback, and correct problems or refer problems to appropriate personnel for correction.
- Evaluate code to ensure that it is valid, is properly structured, meets industry standards and is compatible with browsers, devices, or operating systems.
- Maintain understanding of current web technologies or programming practices through continuing education, reading, or participation in professional conferences, workshops, or groups.
- Analyze user needs to determine technical requirements.
- Develop or validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.
- Develop databases that support web applications and web sites.
- Renew domain name registrations.
- Collaborate with management or users to develop e-commerce strategies and to integrate these strategies with web sites.
- Write supporting code for web applications or web sites.
- Communicate with network personnel or web site hosting agencies to address hardware or software issues affecting web sites.
- Design and implement web site security measures such as firewalls or message encryption.
- Perform web site tests according to planned schedules, or after any web site or product revisions.
- Select programming languages, design tools, or applications.
- Incorporate technical considerations into web site design plans, such as budgets, equipment, performance requirements, or legal issues including accessibility and privacy.
- Respond to user email inquiries, or set up automated systems to send responses.
- Develop and document style guidelines for web site content.
- Develop or implement procedures for ongoing web site revision.
- Develop web site maps, application models, image templates, or page templates that meet project goals, user needs, or industry standards.

- Establish appropriate server directory trees.
- Identify or maintain links to and from other web sites and check links to ensure proper functioning.
- Recommend and implement performance improvements.
- Create searchable indices for web page content.
- Register web sites with search engines to increase web site traffic.
- Provide clear, detailed descriptions of web site specifications such as product features, activities, software, communication protocols, programming languages, and operating systems software and hardware.
- Monitor security system performance logs to identify problems and notify security specialists when problems occur.
- Create web models or prototypes that include physical, interface, logical, or data models.
- Evaluate or recommend server hardware or software.
- Document test plans, testing procedures, or test results.
- Research, document, rate, or select alternatives for web architecture or technologies.
- Document technical factors such as server load, bandwidth, database performance, and browser and device types.
- Install and configure hypertext transfer protocol (HTTP) servers and associated operating systems.
- Develop system interaction or sequence diagrams.

Generalized Work Activities:

- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Updating and Using Relevant Knowledge - Keeping up-to-date technically and applying new knowledge to your job.
- Thinking Creatively - Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.
- Processing Information - Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.

Detailed Work Activities:

- Analyze project data to determine specifications or requirements.
- Collaborate with others to develop or implement marketing strategies.
- Collaborate with others to resolve information technology issues.
- Conduct research to gain information about products or processes.
- Configure computer networks.
- Create databases to store electronic data.
- Create electronic data backup to prevent loss of information.
- Design websites or web applications.
- Develop computer or information security policies or procedures.

- Develop diagrams or flow charts of system operation.
- Develop models of information or communications systems.
- Develop specifications or procedures for website development or maintenance.
- Develop testing routines or procedures.
- Document design or development procedures.
- Document network-related activities or tasks.
- Evaluate utility of software or hardware technologies.
- Implement security measures for computer or information systems.
- Install computer hardware.
- Monitor the security of digital information.
- Prepare graphics or other visual representations of information.
- Provide customer service to clients or users.
- Provide recommendations to others about computer hardware.
- Provide technical support for computer network issues.
- Recommend changes to improve computer or information systems.
- Resolve computer software problems.
- Test software performance.
- Troubleshoot issues with computer applications or systems.
- Update knowledge about emerging industry or technology trends.
- Update website content.
- Write computer programming code.

Tools and Technology

Tools:

- Computer servers - Application servers, Web servers
 - Desktop computers - Desktop computers
 - High capacity removable media drives - Universal serial bus USB flash drives
 - Notebook computers - Laptop computers
 - Personal computers - Personal computers
-

Technology:

- Development environment software - Adobe Systems Adobe ActionScript, Android, C, Eclipse software, IBM Rational Rose
- Enterprise application integration software - Common gateway interface CGI, Extensible markup language XML, Extensible stylesheet language XSL, IBM WebSphere
- Graphics or photo imaging software - Adobe Systems Adobe After Effects, Adobe Systems Adobe Fireworks, Adobe Systems Adobe Illustrator, Adobe Systems Adobe Photoshop software
- Object or component oriented development software - Apple Cocoa, C++, Microsoft ActiveX, Microsoft Visual Basic.NET, Microsoft Visual C# .NET
- Web platform development software - Adobe Systems Adobe Flex, Apache Struts, Apache Tomcat, Asynchronous JavaScript and XML AJAX, Cascading Style Sheets CSS

Education and Training

Occupation: Web Developers

Typical education needed for entry: Associate's degree

Typical work experience needed for a job in this occupation: None

Typical on-the-job training once you have a job in this occupation: None

Related Instructional Programs:

- Computer Programming/Programmer, General
- Computer Science
- Web Page, Digital/Multimedia and Information Resources Design
- Web/Multimedia Management and Webmaster

Session 4: Breaking Down the Barriers to Success

Skills practiced:

- teamwork
- critical thinking
- emotional intelligence
- problem solving
- self-advocacy

Activity/Time	Notes for facilitation	Materials and prep
Community building: “isms” 10 minutes	<p>Welcome students to the session. Tell them that today they’re going to look at some of the barriers that hold people back and work together to find ways to address them.</p> <p>Ask students to stand in a circle. Tell them that although we’re going to look at personal barriers today, there are external barriers that exist—and though we can’t fully address those here, we should name them, because they’re real and they have an impact on all of us.</p> <p>Have students throw the Koosh ball around; with each throw, the student throwing it should name an “ism” that affects people’s opportunities to succeed (ageism, racism, sexism, etc.)</p>	Koosh ball
Barrier types brainstorm 20 minutes	<p>Have students sit down. Ask them to name some other barriers to success in college or career—ones that are more individual. Brainstorm some barriers (money, time, family obligations, etc.)</p> <p>Tell students that barriers can be grouped into three types.</p> <p>Situational: no childcare; no money to pay tuition; live too far from transportation; primary caretaker for sick relative, etc.</p> <p>Institutional: registration office closes every day at 5 and you work until 6; required training at work happens only in the evenings when you are with your children, etc.</p> <p>Dispositional: feeling that you don’t belong; worried that you’re too old; past negative school or work experiences, etc.</p>	<p>Three signs, each posted on a different wall:</p> <ol style="list-style-type: none"> 1. Situational 2. Institutional 3. Dispositional <p>Three different color sticky notes: enough for every student to have ten of each color (the example uses green, yellow, and blue; actual colors don’t matter)</p>

Give students a few of each color sticky notes. Ask them to write one barrier per note: green for situational, yellow for institutional, and blue for dispositional. Once they have a few barriers for each type, they will post them under the corresponding sign.

(Do some examples as a group before students begin working on their own.)

Once students have finished, ask them to walk around and look at the barriers posted on the walls to see the range of responses.

Activity/Time
Notes for facilitation
Materials and prep

Reflective writing:
guided composition
20 minutes

Sample prompt: *We're going to do some writing to explore how these barriers can get in the way of your success. Take out a piece of paper and a pen. I'm going to ask you to write in response to some questions and instructions I give you. Try to keep writing, even as I'm speaking. You don't have to answer every question I ask; just use the things I say as inspiration for your writing. You can choose to keep what you write confidential, so be as honest with yourself as you can. Okay, everyone take a deep breath, relax, and let's get started.*

First I'd like you to imagine yourself at your ideal college or job. Describe the location, the physical place, the people around you. (Give about 3 minutes in between each prompt to allow students to develop ideas)

- *Where are you?*
- *What are you doing—studying, working, meeting with others?*
- *What textbooks are in your bag, or if at work, what is on your desk?*
- *What do you like about this college or this job?*
- *How do you feel about yourself, attending this college or working at this job?*

Now write for a few minutes about how close you feel to achieving this experience.

- *Does going to this college feel realistic or seem impossible?*
- *Does having that job seem possible or impossible?*
- *Write about why it feels possible or impossible.*
- *Keep in mind the barriers we looked at earlier. How do those come into play when thinking about college or career?*

Let students write for a while. Give them a 2 minute wrap-up warning. Ask them to bring the

piece to a close and to wait quietly until everyone has finished. See if a few students want to share their pieces.

Activity/Time	Notes for facilitation	Materials and prep
Crowdsourcing: group discussion 30 minutes	<p>Tell students they are now going to work together to help each other brainstorm ways to address the barriers they wrote about. Have students count off into three groups. Each group gets a different handout: handout 4.a, handout 4.b, or handout 4.c.</p> <p>Sample prompt: <i>We're going to look at the barriers you identified on the post its and in your writing, and do some group problem-solving. Each group will get a handout with a different barrier type. As a group, choose some barriers to discuss. Use the handout to structure your discussion. You'll have about 20 minutes to work together; see how many different solutions you can come up with to these barriers.</i></p> <p>As students work, float around to offer clarification, guidance, and probing questions.</p>	Handouts 4.a, 4.b, 4.c

Activity/Time	Notes for facilitation	Materials and prep
Self-efficacy: active reading and conversation circles 30 minutes	<p>Ask students if they have heard of the term self-efficacy. Give them the definition: “Self-efficacy is the belief in your ability to complete tasks and reach goals.” Ask students what they think this means. Talk about the difference between self-esteem (the general sense of your own self-worth) and self-efficacy.</p> <p>Tell students that self-efficacy has been found to be one of the central factors of success. To explore that concept, they will read a short article about self-efficacy and discuss their reactions to it. Tell students they will have ten minutes to read the article and to underline the three points that feel most significant to them. Distribute handout 4.d.</p> <p>Once students have completed the reading, ask them to form two circles—one facing out and one facing in around it, so that each student ends up facing another student. Tell students they will have four minutes to share the first point they underlined—two minutes per partner.</p> <p>After four minutes, get students’ attention (the room will be loud and buzzing with conversation!) and ask everyone in the outer circle to step one person to the right. With their new partners, they should follow the same protocol to discuss the second point they underlined. Do one more rotation so that all students discuss their three most salient points.</p>	Handout 4.d

After the last round, ask students to sit back down and to quickly write down three concrete things they can do this week to move forward in their college and/or career plans.

Sample prompt: *While you're fresh from your conversations, write down three things you can do this week that will help to increase your self-efficacy. Can you make a small change in your habits or try something new? Can you set time every morning to visualize a successful day? Can you commit to trying to accept self-defeating thoughts as part of the process and not get stuck? Take a few minutes to write them down. You'll have a chance to share if you wish.*

Activity/Time**Notes for facilitation****Materials and prep**

Reflection
10 minutes

Ask for volunteers to share what they wrote with the class. Allow as many to share as time permits.

If You Think You Can't... Think Again: The Sway of Self-Efficacy

Adapted from an article by Angie LaVan

“I Think I Can! I Think I Can!”

Remember the children’s story *The Little Engine that Could*? Defying impossible odds, the little engine did! But did we somehow miss the message of this tale? 50 years have passed since the book was first published, and when trying to overcome hardship or pursue our dreams, many of us still think, “I can’t.” Sound familiar?

The scientific term is “self-efficacy” —the “I-think-I-can” psychological state that enhances goal achievement. Introduced by psychologist Albert Bandura in 1977, over thirty years later the power of this persists. But for many of us, we still haven’t quite gotten it. Unlike self-esteem, self-efficacy isn’t about a sense of self-worth; it’s about believing you are capable of producing a desired result—that you can achieve your goals. The truth is—there’s so much more to “I think I can” than childhood fiction or a clichéd, feel-good maxim.

The Sway of Self-Efficacy

Everyone has something they’d like to change or improve; everyone has goals. Therefore, self-efficacy is of universal appeal and widespread need. Beyond that, it offers up some really great benefits.

Research has shown that people with high levels of self-efficacy:

- Take better care of themselves
- See tasks as things to be mastered, rather than things to “get through”
- Feel more empowered
- Don’t let themselves be controlled by circumstances
- See setbacks as challenges to be overcome
- Can cope better with hardship
- Seek to learn from failure and channel it into success
- Have a greater sense of motivation and persistence

On the other hand, low self-efficacy has been linked to helplessness, anxiety, and depression. Fortunately, whether your current level is average, ample, or absent, self-efficacy can be enhanced. Here are some simple exercises that you can use to boost your sense of self-efficacy:

Take One Step at a Time

Self-efficacy is developed, in part, through success—and even small achievements can pack a powerful punch. **Pick one small change you'd like to make and go for it. Then pick another small change. Then another.** Reflect on each success before moving on to your next small goal. Like any other change, enhancing self-efficacy is best achieved one step at a time.

Draw from Your Past

Reminiscing on past successes can help drum up a greater sense of self-efficacy. Reflect on times when you succeeded at accomplishing things you didn't think you could do. What did you accomplish? How did you accomplish it? **How can past accomplishments be channeled to help you achieve future goals?** What do these accomplishments say about your ability to succeed?

See to Believe

Visualization is a powerful tool. When it comes to self-efficacy, not only is seeing believing, but believing is seeing.... results. **Visualization not only primes your brain for success and enhances self-efficacy, it also helps you to see the smaller steps you need to take to reach your end goal.**

Find a Role Model

Admire someone else's success. **When you see someone else succeed, especially someone who you identify with, you are more apt to believe that you can achieve, too.** Hence, having one or two good role models can vicariously bolster your sense of self-efficacy.

Accept Self-Doubt...but Put it in its Place

Managing your self-doubt is just one more way to keep “I can't” thoughts from derailing your success. **When self-defeating thoughts bubble up, accept them as part of the process and move on.** These types of thoughts don't necessarily reflect your true capabilities. The key is to not let them stop you from moving forward.

Get Happy

A good mood can also boost self-efficacy, while a bad mood can undermine it. **Write out all the things that uplift you (i.e. special songs, favorite quotes, etc) and use them to your advantage** as you navigate towards your goals.

Solicit Social Support

Another great way to build self-efficacy is to elicit encouragement from friends and family and to stay away from those who discourage you. **Quality social support is a key ingredient to self-efficacy, persistence, and ultimately success.** Find your best advocates and invite them to be part of your campaign for change.

Session 5: Balancing it All

Skills practiced:

- teamwork
- Public speaking
- Problem solving
- Time management
- Critical thinking
- Conflict resolution

Activity/Time	Notes for facilitation	Materials and prep
<p>Icebreaker: nonverbal birthday lineup 10 minutes</p>	<p>Welcome students to the session. Tell them that today they're going to look at the importance of setting priorities and managing expectations, as well as practicing time management and stress management strategies.</p> <p>Ask the students to line up according to the month and day of birth without talking. They are not allowed to use any materials, just their bodies. Time them to see how quickly they can do it.</p> <p>As a debrief, ask for volunteers to offer some of the strategies used to complete their task.</p>	<p>Make sure there is enough room for students to line up in order</p>
<p>Prioritizing 15 minutes</p>	<p>After students sit down, write on the board: time management. Tell students that although we all have heard this terms many times, it's useful to break it down and explore what it really means for each of us. Ask for a volunteer to define the term. Ask for another volunteer to describe how to do it—what do you have to do to keep your time well-managed?</p> <p>Students might mention using a planner, or their phones, as a way to manage their time. These are tools. Talk with students about the strategy behind the tools—the understanding that some things are prioritized over others, and how we make decisions about what has priority. Ask students why they think prioritizing is an important skill both in college and in career development.</p> <p>Have volunteers offer reasons why can be difficult to prioritize—what can get in the way? (other people's desires or needs; prior obligations that conflict with current priorities; our own patterns of behavior that make us want to do things the same old way, etc.)</p>	

Tell students that they are going to work in groups to complete a task, just like lining up by their birthdays—and in this activity, they will have to work together to prioritize while under time pressure.

Activity/Time	Notes for facilitation	Materials and prep
Stress management: air traffic control 20 minutes	<p>Get students into groups of 5-7. Tell them that for this activity, they will be working as air traffic control controllers. Each group should be assigned a letter—group A, B, C, D, etc.</p> <p>Tell students that they have recently been informed that five planes have been identified as being in a dangerous weather zone. There is only one parking spot at the airport nearby, and they only have three minutes to decide what to do. They will have to agree on which plane gets to land, write one sentence about why they chose that plane, and write a one-sentence message to give to the other four planes.</p> <p>Distribute Handout 5.a. Tell students to keep it face down until you say “go.”</p> <p>Airplane Descriptions:</p> <p>Airplane 1 carrying a heart transplant Airplane 2 carrying injured military officers Airplane 3 the plane has reported that it is low on fuel Airplane 4 Air force One, carrying the president and his family Airplane 5 carrying the cure for cancer</p> <p>Give students a 30 second warning and call time once time is up. Pens down, hands up.</p> <p>Ask the groups to share their answers.</p> <p>Use the following questions to help you guide a group discussion:</p> <ol style="list-style-type: none"> 1. How did you decide to prioritize which plane should be the one to land? 2. Did you feel stressed or like you didn't have enough time? How did this affect your performance? 3. What was your reaction to the time constraint in making your decision? What was going on in your head? 4. Does anyone have any good strategies for juggling multiple commitments at once? Give an example of when you were successful at this. 	Handout 5.a

5. Does anyone have any good strategies for dealing with stress in the moment? Give an example of when you were successful at this.
6. What happens when you are not good at time management? What happens when you don't deal with stress well?
7. Why do you think we did this activity in a college/career prep class? What did you learn?

Activity/Time	Notes for facilitation	Materials and prep
Study habits: pair and share 20 minutes	<p>Prioritizing and working well under pressure are skills that will help with college and career success. Prioritizing is especially important for developing strong study habits. Tell students they're going to look at some suggested study habits from other college students and think about the recommended strategies.</p> <p>Distribute handout 5.b. Ask students to find someone in the room who they don't usually work with, and to sit with that person. Ask each student to interview the other about these habits, sharing their strategies and giving each other suggestions for how to adopt or strengthen these habits. Once the pairs are done, have two pairs join together to become a group of 4 and to continue talking. For the last round, have two groups of four join to become a group of eight. Remind students to write down ideas, suggestions, and tips they hear from the others on their own copy so that they can try some out.</p>	Handout 5.b

Activity/Time	Notes for facilitation	Materials and prep
Stress management: on the clock 45 minutes	<p>Have students get back into their original air traffic control groups. Tell them they are going to work in these groups to create some materials to help others who are thinking about college and career. Ask all groups to assign a number to each member, starting with one.</p> <p>Tell students that each group will have a different task, as follows:</p> <ul style="list-style-type: none"> • Group A: create a 2 minute oral presentation about the importance of keeping priorities in balance. Each team member must have a role in the presentation. • Group B: create a poster that shows why college is worth the time and money. Each team member must contribute an idea for the poster. • Group C: create a cheer that encourages young people to stay in school. Each team member must contribute a line or a movement for the cheer. • Group D: create a 2 minute skit that demonstrates good or bad prioritizing in action. Each team member must have a role in the skit. 	chart paper markers

Groups will have 15 minutes to complete their task.

After exactly 5 minutes, interrupt the group as follows:

“Please listen to the following announcement. Whoever is number 2 in your group, you are now in the next group. If you were in group A, please move to group B—and so on. Please move quickly; the clock is still ticking for you to complete your tasks.”

After exactly 5 more minutes, interrupt the group as follows:

“Please listen to the following announcement. Whoever is number 4 in your group, you are now to skip ahead two letters. If you were in group A, please move to group C—and so on. Please move quickly; the clock is still ticking for you to complete you tasks.”

Give students a one minute warning before calling time.

Give each group a chance to present their deliverable, without mentioning the process of interruptions.

Once all have presented, debrief the activity.

Talk to them about the process of interruptions. How did that raise the stress level of the activity? How did the group respond to the new members? How did it shift the priorities and the process for completing the task? How did it affect the result?

Ask students to think about their daily lives, and how stress can affect their thinking process, their priorities, and hoped-for results. Strategize with students about how to keep priorities in balance even during times of stress. What are some things they can do to keep stress from getting in their way?

Activity/Time	Notes for facilitation	Materials and prep
Reflective writing 10 minutes	Ask students to reflect in writing on how they reacted to the last activity. Did they stay calm? Did they take a leadership role and try to keep the group moving forward? Did they feel anxious? Negative? Did they complain about the interruptions? Give students about five minutes to write. Ask for volunteers to share their writing. To overcome negative self-talk you need to first start recognizing when it is happening. Spend time identifying your negative thoughts and list them out. Once you're done writing your list,	Notebooks Pens

you will argue it and replace it with a rationale one. For example: “I feel so anxious every time I can’t control a situation.” Ask yourself, “is it true that I am anxious under every situation I can’t control?” Replace the thought with, “I am calm even during situations that are out of my control.” Spend some time identifying some ways that you see these behavioral patterns play out in your real lives. What are some ways that you can deal with it?

Let students finish writing their thoughts. Give them a 2 minute wrap-up warning. Ask them to bring the piece to a close and to wait quietly until everyone has finished. See if a few students want to share what they wrote down.

Congratulate students on their hard work today!

Air Traffic Control

Your group has three minutes to decide which plane gets to land in the one available parking spot. There is a dangerous weather system in progress and the other planes may not be able to land. Once you decide on the plane that will get the parking spot, your group must write a sentence that explains why you chose that plane. You must also write a message that will be sent to the other planes.

Airplane 1 carrying a heart transplant

Airplane 2 carrying injured military officers

Airplane 3 the plane has reported that it is low on fuel

Airplane 4 Air force One, carrying the president and his family

Airplane 5 carrying the cure for cancer

Which plane did you choose?

Why?

What is your message to the other planes?

Homework and Study Skills

To become a successful student, you need:

1. a positive attitude
2. a commitment to and interest in learning
3. a sense of pride in doing your best work
4. a willingness to go beyond your comfort zone

You need a good place to do your homework.

Find somewhere that is quiet—the library, a room at home, a quiet café, etc... Choose somewhere with good lighting, so you can see what you are doing, and somewhere with a table or desk big enough to hold your work.

You need the proper supplies to complete your assignments.

Make sure you have the supplies you need: pencils, pens, highlighters, ruler, notebook, calculator, dictionary, thesaurus, etc.

You may want to use headphones to block out sounds, or to listen to classical or instrumental music at a low volume. (Music with lyrics is not recommended, as it can make it hard to focus.)

If you are using a computer, make sure you know how to access/save your work.

Have two file folders for documents, labeled “work in progress” and “completed work.”

You need to organize your time.

Set aside a special time each day for your work. Try to avoid making it right before you go to sleep; it's hard to concentrate if you're tired. On the weekend, choose times when you are most alert.

Set a beginning and end time, then set a goal for that time (read 3 chapters, write a draft of an essay, review the materials for an exam, etc.)

Do not leave assignments until the night before they are due! You might find that you need some additional materials, or that you have a question about the assignment, or that something else comes up that you have to attend to. Do yourself a favor and plan ahead!

Now that you have a time and a place, you need to organize yourself.

Gather everything that you will need to complete your tasks. (assignment sheet, class textbook, class notes, etc.)

Divide big assignments into smaller, more workable tasks, and set a time for each task.

Check your calendar for due dates, and fill in any new deadlines. Check your homework notebook for work to be completed for the following day.

Divide your time into: review, new material, and ongoing project or research time.

You may want to work from a list and check it off as you complete each task. This serves to give you a sense of accomplishment.

Remember you owe it to yourself to always do your best work. Have pride in what you do. It will make you feel more successful.

What do you do if you need help?

Decide what questions you need to ask so that you can be as specific as possible with the people who can help you.

If you are well organized, you will have time to ask your teacher. Ask him or her if you can set up an appointment to talk.

Find a student in the class who can be your “question buddy,” who you can call if you are confused. (Make sure it is someone who is a strong student!)

Find a friend, family member, neighbor, or someone else you can call with study questions. Can you think of anyone right now who could be a help to you?

- 1.
- 2.
- 3.

Writing Skills:

Brainstorm your ideas by making word webs, lists, or by freewriting. Some people use tape recorders to record their ideas.

Next, organize your ideas into a sequence.

Write your rough draft to get your ideas on paper. Read the draft aloud. What needs more detail? What is unclear? Think of at least one change you can make to each paragraph to strengthen the work.

Read the draft aloud again. If you have someone you can read it to and get their feedback, even better. Follow the same steps as above—add more details, clear up confusing ideas or sentences, and look at each paragraph to see how you can improve it.

Proofread your work. This involves checking the spelling, punctuation, grammar, and sentence-by-sentence organization. Put the draft down for a while (a day or so is best), then go back to it and proof-read one last time.

Write or print out the final copy. Congratulations! You're done!

Reading Skills:

Determine your purpose for reading. Are you reading for enjoyment or for information?

Highlight main ideas, and make notes as you go along. Don't over-highlight!

Look up unfamiliar words, and record them in an individual vocabulary book.

Review the information you read to help you remember it. Count on reading difficult material at least twice so that you can absorb it well.

Math Skills:

Math has a language of its own. Before you begin a math assignment, take a minute to clear your head so you can THINK math! Do some quick brainteasers, or say the times-table, or review some basic number facts.

Remember to read the directions and break down the questions into steps.

Check the examples that have been given to you.

Keep your own math dictionary in which you put examples of how computations are done. (For example: The steps involved in long multiplication, how to determine area, etc.)

Have copies of the times-tables for reference, if you have not yet memorized them.

In-Class Suggestions:

Get plenty of rest and eat properly. You can think more clearly when you are not tired.

Listen to the instructions given by the teacher in class and make note of any important details.

If you do not understand anything the teacher has said, ask right away.

Preparing for exams and tests:

Make sure you have all your notes in order and that important information is highlighted.

Make a list of things you need to know for the test.

Some people study best with a partner. To review information with someone else, take turns quizzing each other.

Organize your study time. Do not cram the night before. You will thank yourself if you follow this advice!

Taking a test:

First of all, relax! Breathe deeply several times before you even look at the paper.

Read over the entire test and think about how much time you will need on each question. Put checks by the easier questions and do those first. This will give you a sense of accomplishment and build up your confidence.

Make sure you have enough time to get to every question. This is one reason why time management is so important.

If you get stuck, skip the question and leave it until the end.

Do not be afraid to ask the teacher if you need further explanation.

Session 6: Identifying Resources for Support

Skills practiced:

- Public speaking
- Problem solving
- Critical thinking

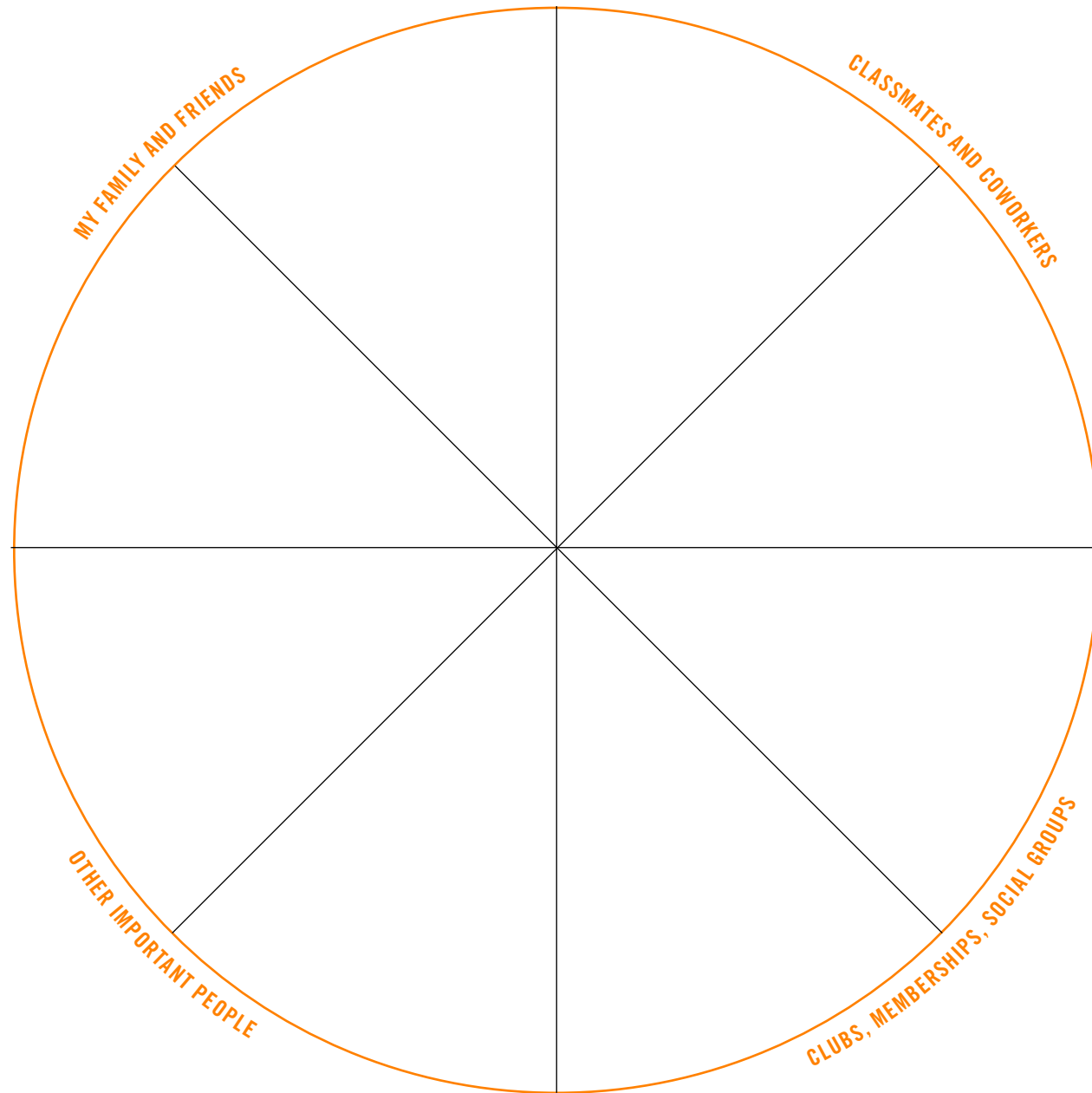
Activity/Time	Notes for facilitation <i>(note: access to computers is needed for this session)</i>	Materials and prep
Icebreaker: Resource game 20 minutes	<p>Welcome students to the session. Tell them that today they're going to identify resources they can use as support during college and at work, and talk about how best to access those resources.</p> <p>Give each student one strip of paper, which will either have a resource name or a resource definition on it. Tell them they have three minutes to find their match. They can use whatever strategy they think best—work together as a group, work separately, have one leader who organizes the matching—tell them it's up to them.</p> <p>Give them one minute to discuss and come up with a strategy without revealing their strips. At that point, say “go!” and they then have three minutes to find the correct matches for their strips.</p> <p>Once matched, distribute handout 6.a and have students see if there are any matches they need to correct.</p> <p>Clarify and respond to any questions that students may have about the resources listed. Ask students to:</p> <ul style="list-style-type: none"> • circle any resource that they have used, now or in the past • underline any resource they would like to use, or to know more about <p>Tell students that they'll be returning to the resource list a bit later. For now, they're going to think about resources they already have, through their relationships and connections.</p>	Handout 6.a (As prep, divide resource name from its definition into two separate strips, for a total of 28 strips. If there are more strips than students, eliminate some name/definition pairs so that each student can get one strip.)

Activity/Time	Notes for facilitation	Materials and prep
Mapping your social capital 20 minutes	<p>Introduce the concept of capital—economic and social—using the idea of capital as an asset. <i>Economic capital</i> = assets in the form of money, property, etc. <i>Social capital</i> = assets in the form of relationships, connections, etc.</p> <p>Tell students that social capital can be categorized in two different ways: relationships or connections that represent strong bonds in our lives (family, close friends, etc.), and relationships or connections that represent bridges (acquaintances, colleagues, classmates, co-workers, etc).</p> <p>Ask students why social capital is important for our personal and professional lives, and why it's important to have both strong bonds and strong bridges.</p> <p>Distribute handout 6.b and tell students to take about five minutes to fill out their social capital map. Tell them to add a star to those people in their life that they have a strong bond with and a check next to those who have served as bridges (helping them connect to other people or opportunities).</p> <p>After they have completed the handout, debrief with a discussion that includes the following points:</p> <ol style="list-style-type: none"> 1. Which kinds of relationships do you seem to have more of: bonds or bridges? 2. Is your social capital stronger in certain areas of your life? Why do you think that's so? 3. How can you work to increase your bonds and your bridges? 	Handout 6.b
Research resources 25 minutes	<p>Talk to students about the importance of having support and access to the best resources possible. Tell them that they're now going to spend time researching and reviewing websites that provide educational resources and support.</p> <p>Distribute handout 6.c and tell students to pick one resource to research from each category. (When researching apps, encourage students to download the app and test it out.) Ask students to consider the questions at the top of the handout and write responses to them in their notebooks.</p>	Computers (one per student or one per small group) Handout 6.c

Activity/Time	Notes for facilitation	Materials and prep
Online treasure hunt 20 minutes	<p>Tell students they will be conducting an online treasure hunt in order to sharpen their internet researching skills. Write or post the following treasure hunt topics at the front of the room, and tell them to find the “treasures” as quickly and accurately as they can. They can use google, the CUNY website, and the HITE site for their research.</p> <p>Tell students that once they find the treasures, they should write 2-3 questions about each one.</p> <p>Give them a two minute warning before you call time. Have them complete their work, and ask them to wait quietly until everyone has finished.</p> <p>Treasure hunt topics:</p> <ul style="list-style-type: none"> • College tutoring • Academic Advising • 3 free occupational training programs • Child care services • Career planning and job placement 	<p>www.cuny.edu www.google.com www.hitesite.org</p>
Activity/Time	Notes for facilitation	Materials and prep
Presentations 25 minutes	<p>Ask students to get back into their resource game pairs, and have two pairs join to form a small group.</p> <p>Ask each group to share with each other what they found during their online research, and give them ten minutes to prepare a short presentation describing key things they learned on their “treasure hunt”. (Depending on the number of students, presentations can run from 2-5 minutes.)</p>	
Activity/Time	Notes for facilitation	Materials and prep
Group share 10 minutes	<p>Ask for a few volunteers to talk about their takeaways from the session. Remind them that the resources, the support, and their own social capital are major factors in their potential for success, and that the more they take advantage of support from others, the more likely they are to become a source of support for someone else.</p>	

Financial Aid	A grant or scholarship, loan, or paid employment offered to help a student meet his/her college expenses. Such aid is usually provided by sources such as federal and state agencies, colleges, high schools, foundations, and corporations
Academic Advisor	Someone who can help students to understand options, access resources and identify alternatives.
Access NYC	A free online service that helps New Yorkers find out if they qualify for city, state and federal benefit programs
Office of Student Affairs	The department or division of services and support for students at institutions of higher education, to enhance student growth and development.
HITE	An online tool that contains thousands of searchable resources that list the name, address, and phone number of health and social service organizations, as well as information about intake procedures, languages spoken, hours of operations, and more
Financial Education Network	Provides access to free or low-cost financial education classes, workshops, hotlines, and one-on-one counseling services in New York City
Studyblue	This website offers the largest and fastest-growing library of online study materials, containing more than 350 million user-generated digital notecards covering every topic from Algebra to Zoology.
Coursera	This company offers massive open online courses (MOOCs) in physics, engineering, humanities, medicine, biology, social sciences, mathematics, business, computer science, and other subjects.
Internmatch	This is the largest internship and entry-level jobs marketplace dedicated entirely to students and new grads. Their goal is to help people launch careers that they love.
Wunderlist	Use this to organize and share your to-do, work, grocery, movies and household lists. No matter what you're planning, how big or small the task may be, Wunderlist makes it super easy to get stuff done.
Passport Career	An online career resource that will help you to explore opportunities around the world.
Google Books	A service from Google Inc. that searches the full text of books and magazines that Google has scanned and stored in its digital database.
VITA Program	They offer free tax help to low income people, persons with disabilities, the elderly, and limited English speaking taxpayers.
IDNYC	The new, free identification card for all New York City residents.

Social Capital Map



Research: Online Resources

Pick one resource to research from each category below. In the case of an app, try downloading it on your phone and doing a test run. Answer the following questions for each resource you research and write down your responses in your notebook:

1. What kind of services does the platform/app offer?
2. In your opinion, is the platform/app useful? Why or why not?
3. Will you use the platform/app? If yes, how will it help you? If not, why not?

1. Supportive Services

Access NYC- This website doesn't certify you for benefits but it helps you prepare the paperwork. Create an account and use the eligibility calculator screen yourself and your family for benefits. Print out your applications and log out.

www.nyc.gov/accessnyc

HITE- an online tool that contains thousands of searchable resources that not only list the name, address, and phone number, but also information about intake procedures, languages spoken, hours of operations, directions, and more.

www.hitesite.org

2. Study Resources

Studyblue-offers the largest and fastest-growing library of online study materials, containing more than 350 million user-generated digital notecards covering every topic from Algebra to Zoology.

<https://www.studyblue.com/>

Openstudy- is a social learning network and global study group. Connect with other students studying the same things. Get help and give help. Stay and enjoy the conversation. And level up!

<http://openstudy.com/>

Wolframalpha- is an engine for computing answers and providing knowledge. It works by using its vast store of expert-level knowledge and algorithms to automatically answer questions, do analysis, and generate reports.

<http://www.wolframalpha.com/>

3. Organization Resources /Apps

Evernote- Let Evernote change the way you organize your work. Just dive in: take notes, track tasks, and save things you find online. It syncs everything between your phone and computer automatically.

<https://evernote.com/>

Wunderlist- organize and share your to-do, work, grocery, movies and household lists. No matter what you're planning, how big or small the task may be, Wunderlist makes it super easy to get stuff done.

<https://www.wunderlist.com/>

Awesome Note- combine your notes and to do list in one app. (iPad and iPhone)

<http://www.bridworks.com/anote/eng/>

4. Online Learning Resources

Udemy- an online platform which offers free and fee based courses, where students can learn at their own pace, on their own time, and on any device.

<https://www.udemy.com/>

Coursera- an educational platform that partners with top universities and organizations worldwide, to offer courses online for anyone to take, for free.

<https://www.coursera.org/>

Ted-Ed- you can find curated educational videos, many of which represent collaborations between talented educators and animators nominated through the TED-Ed platform.

<http://ed.ted.com/>

Session 7: You and Your Money

Skills practiced:

- active listening
- emotional intelligence
- critical thinking
- problem solving

Activity/Time	Notes for facilitation	Materials and prep
<p>Needs vs. Wants icebreaker 20 minutes</p>	<p>Welcome students to the session. Tell them that today they're going to talk about money—how to think about it, how to set financial goals, and how to improve financial habits.</p> <p>Tell students that the foundation of good financial planning is to be able to distinguish between needs and wants. Needs are things like a MetroCard, groceries, or shoes. Ask students to give other examples of needs. Ask them to give examples of wants (dinner out, a new pair of sneakers, etc.) Tell students that knowing the difference between needs and wants helps us know when to spend and when to save.</p> <p>Needs are things that we truly can't be without, such as:</p> <ul style="list-style-type: none"> • Nutritious food • A place to live • A warm winter coat • A good pair of shoes • Transportation <p>Wants are things you'd like to have, but if you don't, you'll still survive (in fact, you'll be just fine). For example:</p> <ul style="list-style-type: none"> • Designer jeans • Air Jordans • The latest iPhone • A Starbucks coffee every morning <p>Ask students how a want might become a need. Give this example:</p> <p>If you work out on the edge of the city and have to take two buses and a train to work, and one of those bus lines is discontinued, a car might go from being a want to being a need.</p>	<p>Pink index cards Yellow index cards</p>

Tell students that you're going to read some items aloud, and that when they hear the item named, they should quickly decide if it's a want or a need in their own life. If it's a want, they should hold up a pink card. If it's a need, they should hold up a yellow card. Remind students that wants for some people might be needs for others, and vice versa.

1. Blowdryer
2. Raincoat
3. Computer
4. Washing machine
5. Make up
6. TV
7. Car

adapted from PBS/itsmylife/money

Activity/Time

Notes for facilitation

Materials and prep

Reflective Writing:
my money and me
30 minutes

Tell students that they are going to spend time thinking and writing about their relationship with money. We all think about wanting more, but it's important to explore our feelings and perceptions around money so that we can set goals that reflect our dreams, our beliefs, and our behaviors.

Ask students to take out a pen and paper. As they do so, write or post the reflective writing prompts at the front of the room. Tell students they will have about two minutes to respond to each prompt. Let them know that you will indicate when they should move to the next prompt. Remind students that as they finish, they should stay quiet until all are done. Tell students that this will be confidential; they will only have to share what they feel comfortable sharing.

Ask for volunteers to read through the prompts before beginning the activity, in case clarification is needed.

After scholars have finished writing, ask them to get in pairs and to share whatever parts of their writing they're comfortable sharing (for example, question #3).

Ask students to choose one word, phrase, or sentence to read aloud. Tell them they don't have to raise hands—whoever wants to should just read their words, letting the words “popcorn” around the room. Encourage students to notice words or phrases that come up frequently. After the popcorn reading, ask students to name any words or phrases that were repeated. These words and phrases can help them all as they set financial goals.

Reflective writing prompts:

1. Describe one thing you have no control over in terms of your finances.
2. Describe the last large purchase you made—what and why.
3. Name the first three things you would buy if you suddenly had unlimited funds.
4. Name the first three things you would cut back on if needed.
5. Describe how your life would change if you made more money.

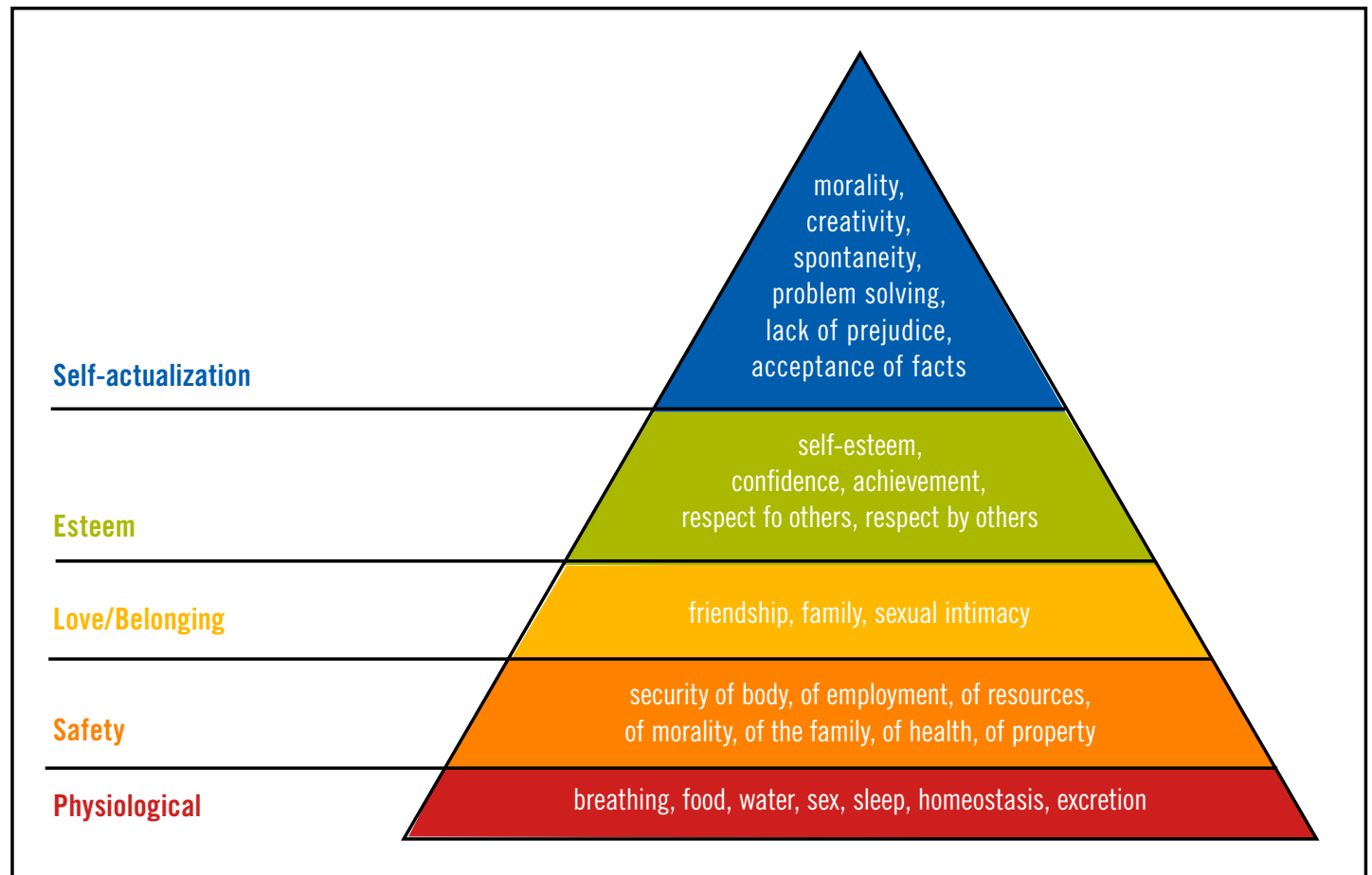
Activity/Time	Notes for facilitation	Materials and prep
Maslow's Hierarchy 40 minutes	<p>Tell students that another step before setting financial goals is to set clear spending priorities. One way to do this is by using a framework developed by a psychologist named Abraham Maslow. Distribute handout 7.a. Give students a few moments to look it over. Ask if any students are familiar with the concept. Give them some basic background.</p> <p>“Maslow’s hierarchy of needs is one of the best-known theories of motivation. It describes different needs that all humans have, and how we make decisions to help us ‘move up’ the hierarchy. (<i>Define “hierarchy” if needed—“the categorization or arrangement of a group of people or things into ranks or levels.”</i>) Maslow’s hierarchy is often shown as a pyramid, with the most basic needs at the bottom and more complex needs at the top. The theory and the visual don’t work perfectly for all people, but it’s still a good way to think about how we set priorities and make life decisions.”</p> <p>Take about five minutes to talk briefly through the pyramid, asking for examples for each level.</p> <ul style="list-style-type: none"> • Basic needs: air, water, food, shelter • Safety needs: health, non-abusive relationships, stability • Social needs: friends, community, sense of belonging • Esteem needs: confidence, achievement, respect of others • Self-actualization: creativity, purpose, meaningful life <p>Tell students that Maslow’s pyramid is also a good way to think about financial priorities. If the labels are changed a bit, it can become a financial hierarchy of needs and a useful way to think about spending and saving.</p> <p>Ask students to turn to the other pyramid on the handout. Give them a few moments to look it over. Ask them what they notice about the differences between this pyramid and the previous one. Review the handout, helping scholars see the correlation between Maslow’s hierarchy and this one.</p> <p>Ask students to take out their reflective writing from earlier, and to see if they can attach any of the things they wrote about to a section of the pyramid. For example, if a student said she would buy a car with her unlimited funds, where would that car go on the pyramid? If a student said he would cut out gym membership if he needed to cut back on spending, where would he put gym membership on the pyramid?</p> <p>Ask students to take about five minutes to write items on the lines next to each section of the pyramid, filling in as much as possible on each line. This will give them a preliminary snapshot of</p>	Handout 7.a

their spending needs and priorities. Tell students that this snapshot can help them as they make budgets, goals for saving money, and spending decisions, because it keeps their financial planning deeply connected to their individual priorities and realities. Ask for volunteers to name some of the things they listed on each level.

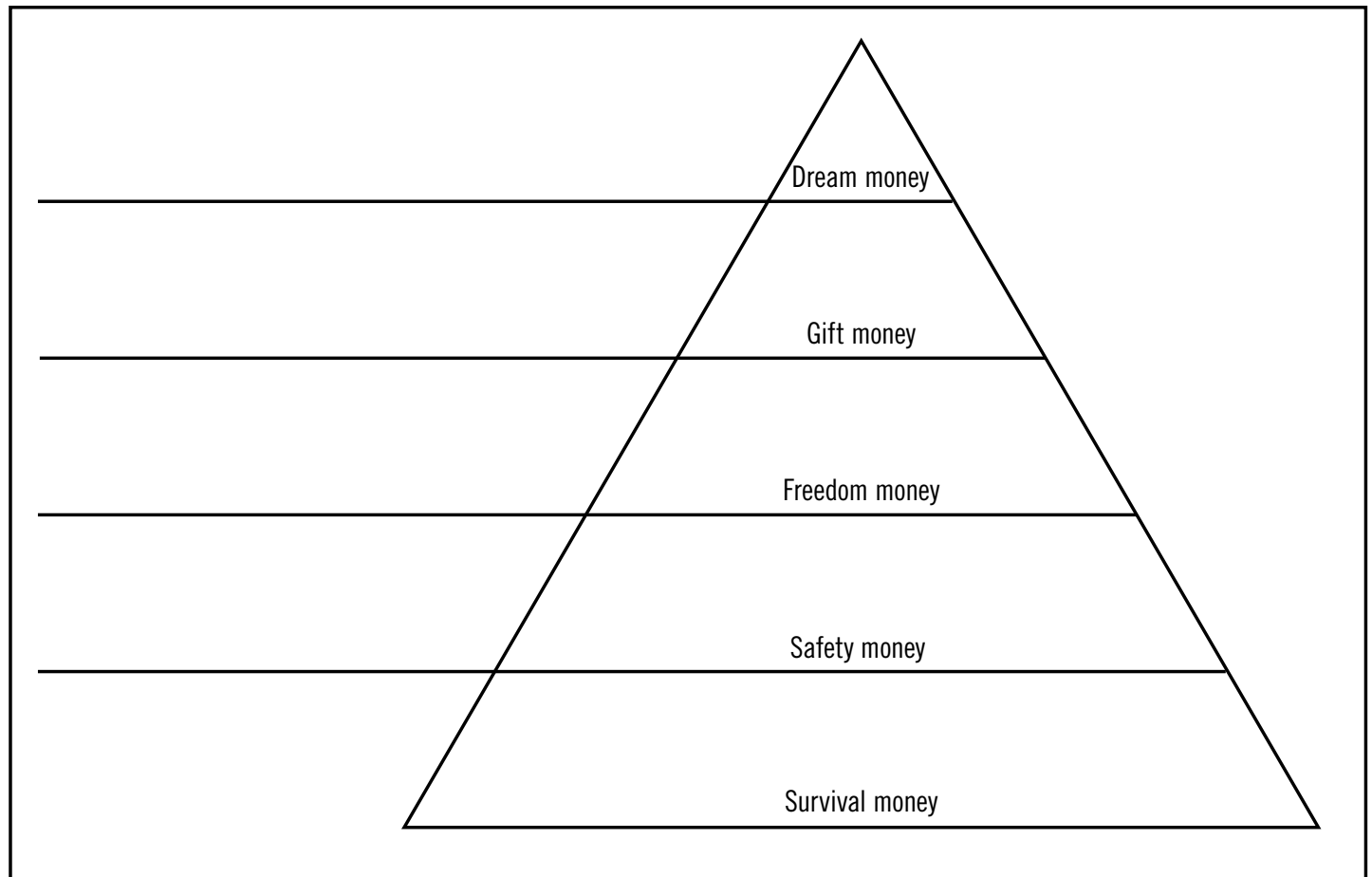
Debrief with students about their spending habits and how they might change now that they've ranked their priorities on the pyramid.

Activity/Time	Notes for facilitation	Materials and prep
Financial goal setting 20 minutes	Distribute handout 7.b. Ask students what they remember from session one about SMART goals. Go through the handout with students, using examples for each section so they can visualize how to complete it. Give students about 15 minutes to complete the handout. Handout 7.b	
Activity/Time	Notes for facilitation	Materials and prep
Reflection 10 minutes	Ask students to get in pairs and to share with their partner some of the ways that they're thinking differently about money and finances as a result of this session. Ask for volunteers to share their thoughts.	

Abraham Maslow's Hierarchy of Needs



Hierarchy of Financial Needs



The new levels:

- **Survival income.** How much do you spend simply to survive?
- **What-if income.** You will want to protect your life. This could mean health care costs, health insurance, and/or proper portfolio planning so you don't outlive your money.
- **Freedom income.** Money needed to do the things that bring joy and fulfillment to your life. Could be travel, education, or fine wine.
- **Gift income.** Money for people and causes that deserve your help. This is the replacement for "love".
- **Dream income.** This is the elusive "self-actualization" level where you find true happiness and meaning.

Breaking down your income needs could be another way to track your progress towards financial freedom. You can make covering your bare necessities your first, smaller goal, and move on from there.

Financial SMART Goals

One Short-Term Financial Goal

something to accomplish this year

Is your goal **SPECIFIC**? Yes/No

If no, restate it to be **SPECIFIC**.

This year I will....

How can you **MEASURE** your goal?

I will know I met my goal if...

1.

2.

How will you **ATTAIN** your goal? What action steps do you have to take to reach this goal?

(for example: if your goal is to save for the down payment on a home, your action may be to open a savings account by next pay day and save \$50 a week into this new account. Sub-steps might be to bring lunch everyday instead of buying it, and to read news on the internet instead of buying a daily newspaper.

1. Action step:

a. Sub-step:

b. Sub-step:

c. Sub-step:

What **RESOURCES** will help you achieve your goal (people, organizations, websites, etc.)?

1.

2.

3.

4.

What is the **TIMELINE** for your goal? Give an approximate date for when you will reach this goal:

1.

2.

Session 8: Guest Speaker/Panel Discussion

Skills practiced:

- active listening
- critical thinking

Activity/Time	Notes for facilitation	Materials and prep
Icebreaker: familiar and unique 10 minutes	<p>Welcome students to the session. Tell them that today they're going to prepare for a guest speaker/panel that will present on (your topic of choice) in the second hour.</p> <p>Count the class off into groups of four. Tell each group that they must come up with four things they have in common (all work full time; all are single parents; all speak more than one language, etc.). After they identify their commonalities, have them each state one unique thing about themselves—something that they believe is different from everyone else in the group. Each group should choose one person to recap their commonalities and their list of unique characteristics.</p>	
Etiquette list 15 minutes	<p>Ask students to return to their seats. Tell them that there will be a guest speaker/panel coming to class today. Ask students to think about how they felt during the previous activity. Ask a few volunteers to share their thoughts about the following prompts:</p> <ul style="list-style-type: none"> • Did you feel heard? • Was everyone mentally present while you were talking? • Were there any distractions? <p>Encourage students to think about an “etiquette list” that everyone can agree on and will follow during the guest speaker/panel presentation. Keep the list limited to about 5 items. Write items down as students agree on them. Ask students to copy the items down and to refer to it during the presentation to remind them of their commitment.</p>	

Activity/Time	Notes for facilitation	Materials and prep
Guest speaker research & preparation 30 minutes	<p>Distribute information about the guest speaker/s along with handout 8.a and break students into small groups. Have the groups review the information and then ask them to use their phones (although access to a computer is preferable) to do research on their guest speaker. (If you are having a panel of speakers, give each group one person to research.) Give them about 15 minutes.</p> <p>Once they are done with their research, ask the groups to think of five questions they would like to ask the speaker. Remind students to develop open-ended questions, rather than questions that can be answered with “yes” or “no.”</p> <p>Once students have their questions, ask one person from each group to read their questions to the rest of the class. The others should vote for their favorite question from each group, to result in about five to seven questions. Tell students that as moderator, you will use some or all of these questions for the speaker.</p> <p>Tell students that a few, but not all, of them will be able to ask additional questions during the Q&A portion. Additionally, after the presentation is complete, they will have an opportunity to introduce themselves to the presenter/panel. Let them know that speakers are usually flattered by students’ questions and requests for advice.</p> <p>Make sure they know that applause is a sign of appreciation at the end of a talk. Encourage them to stay after class and network with the speaker and offer a personal “thank you.”</p>	Guest speaker information (see facilitator preparation document for additional points) Handout 8.a
Guest presentation 1 hour	<p>Introduce the guest speaker/panel by reading their bio(s). Thank them for their participation.</p> <p>After the presentation is over, applaud your presenter/panel and facilitate a Q&A for the remaining ten minutes.</p>	Materials and prep
Wrap up 5 minutes	Remind students to bring their goals worksheets to the next session.	Materials and prep

Preparing for a Guest Speaker

Guest Speaker/Panelists Preparation:

- Identify a guest speaker or a panel at least 6-8 weeks ahead of the presentation date.
- Invite a speaker who will complement the topics covered during the sessions.
- Choose a speaker that students can relate to and connect with.
- Agree on a topic that the speaker/panel will cover and the length of time.
- Make sure students have background information about the speaker, along with a list of questions to ask the speaker.
- Check in with your guest speaker/panel periodically and send a confirmation e-mail prior to the presentation.
- The day of the presentation, ensure that your speaker/panel has everything they need.
- After the presentation, make sure to follow-up with the speaker or panelists via e-mail, once again thanking them for their time.

Sample Questions for Guest Speaker/Panel:

1. What is a typical workday for you?
2. What education is needed for your profession?
3. If you could change one aspect of your job, what would it be?
4. Did you feel discouraged at any point in your career? If so, how were you able to overcome it?
5. How did you decide you wanted to work at your company?
6. Do you have a mentor/sponsor? If so, how did you go about identifying this person?
7. Who are your role models?
8. How do you keep yourself motivated about your career?
9. What is one thing you know now that you would have liked to have known about your field/position when you first began working?

Complete the following research assignment as part of your preparation for the upcoming presentation. Review the questions below and use the internet to research information about the presenter(s).

Student name:

Guest speaker name:

Guest speaker company / organization:

1. What educational background does your guest speaker have?

2. What is the guest speaker's professional background?

3. What industry does your guest speaker work in currently?

4. Company's web address:

5. Company's mission statement:

6. What is the primary business that the company is in?

7. What do you find interesting on the company's website?

8. What is something that you look forward to learning about your guest speaker?

Session 9: Revisiting and Refining Goals

Skills practiced:

- time management and personal organization
- public speaking
- problem solving
- conflict resolution
- teamwork

Activity/Time	Notes for facilitation	Materials and prep
Icebreaker: Human knot 15 minutes	<p>Welcome students to the session. Tell them that today they're going to revisit their goals: check off accomplishments, set new action steps for goals in progress, and make new goals where needed.</p> <p>Ask students to stand in one circle, or divide them into two circles if you have a big group. Ask them to put their right hands into the middle and clasp hands with someone across the circle. Then, everyone should put their left hand into the middle of the circle and clasp the hand of a different person. The group should be in a "knot." The objective is for the group to untangle itself without releasing anyone's hand.</p> <p>Have students set their own time goal for when they will be untangled and to track their time. Whether or not they meet their goal, use the debriefing questions to lead a group discussion after the activity.</p> <p>For debrief:</p> <ul style="list-style-type: none"> • <i>Did you meet your own expectations?</i> • <i>What was the most challenging part of this exercise for you?</i> • <i>How does this experience apply to setting life goals?</i> 	

Activity/Time	Notes for facilitation	Materials and prep
Revisit SMART Goals 30 minutes	<p>Have students sit down. Ask them to take out their goal-setting worksheets from the first session and to take a few minutes to review them by:</p> <ol style="list-style-type: none">1. circling the goals that have been achieved and/or that are on track2. underlining goals that need to be redone completely3. putting an asterisk next to goals that need to be revised <p>Ask students for a round of applause for the action steps and the goals that they as a group have achieved. Ask for volunteers to describe what helped them to complete action steps and/or reach their goals.</p> <p>Ask students to think about the action steps and the goals they haven't achieved. Ask for volunteers to share what they think got in the way. List on the board some of the things they say. If "fear" is on the list, tell students that they've named the number one thing that people state as the reason for not achieving goals. If it's not there, write the word on the board and tell students that fear is the number one reason people name for not achieving their goals. Tell them that they're going to watch a short video about achieving goals.</p> <p><i>Note: if you are not able to screen a video, skip this step—give more time for the previous discussion, then go to the handout.</i></p> <p>After playing the video, ask students to describe how fear might play a role in their own progress towards goals.</p> <p>Tell students they're going to have a chance to revise some of their goals—to change or completely redo a goal, to change action steps or timelines. Distribute handout 9.a. Tell students to complete the handout using their stated SMART goals from the first session. Remind them to think about how fear might hold them back, and how they can address that through small action steps.</p>	Achieving goals video: https://www.youtube.com/watch?v=XZRw91uNMq0 Handout 9.a

Activity/Time	Notes for facilitation	Materials and prep
Vision Boards 30 minutes	<p>Tell students that they are going to create individual vision boards, using ideas from their original SMART goals, their revised goals worksheet, and their reflective writing entries. Using the materials provided, they should find words and images that represent their goals—their vision for the future. Tell students that they will each have an opportunity to present their vision boards to the class.</p> <p>Once they have completed their vision boards, each student should think about how to share it with the class in a two minute presentation.</p>	<p>Vision board materials: magazines and newspapers scissors tape or glue construction paper (one per student, as base for vision board)</p>
Activity/Time	Notes for facilitation	Materials and prep
Presentations 40 minutes	<p>Tell students that they are each going to present their boards, and will also provide feedback to each other on their presentations. Distribute the index cards and ask them to write the + (plus sign) on one side of a card and the Δ (delta sign) on the other side, along with the presenter's name. Tell students that they should write positive feedback on the + side and a suggestion for improvement on the Δ side for each presenter.</p> <p>Remind presenters to collect their feedback forms at the end of their presentation.</p>	<p>Index cards—enough that each student can have one for all other students in the class</p>
Activity/Time	Notes for facilitation	Materials and prep
Reflective Writing 5 minutes	<p>Ask students to take out a piece of paper and to respond to the following prompt in writing. Tell them they will have two minutes to write:</p> <p><i>What is one thing you want to keep in mind about the goals you've set for your future?</i></p> <p>Ask for volunteers share.</p>	

Reviewing Goals

Goal #1

Why is it important to you?

Projected completion date

Action Steps

Was this goal revised? yes no

What revisions did you make?

Keep in mind:

Goal #2

Why is it important to you?

Projected completion date

Action Steps

Was this goal revised? yes no

What revisions did you make?

Keep in mind:

Goal #3

Why is it important to you?

Projected completion date

Action Steps

Was this goal revised? yes no

What revisions did you make?

Keep in mind:

Goal #4

Why is it important to you?

Projected completion date

Action Steps

Was this goal revised? yes no

What revisions did you make?

Keep in mind:

Session 10: Portfolio Presentations

Skills practiced:

- active listening
- public speaking
- teamwork
- emotional intelligence
- self-advocacy

Activity/Time	Notes for facilitation	Materials and prep
Icebreaker: What I Appreciate About You 20 minutes	<p>Welcome students the session. Tell them that today will be their last session, and that they will have an opportunity to present their work and share their experiences with each other.</p> <p>Divide students into groups of four. Give four index cards to each student. Tell students that they're going to begin by acknowledging each other's strengths and positive traits. Ask them to write the name of each person in the group (including their own name)—one on each index card. Tell them they'll have five minutes to write a list of strengths/positive traits of each person in their group, including themselves. The lists should be short but meaningful, and tailored to each individual. Tell them that it's often hardest to make a list of our own strengths so they might want to leave that one for last. Give students a one minute warning before the five minutes are up.</p> <p>Tell students they now have ten minutes to share their lists; they can decide how best to do so. The sharing should include the information on the lists and some explanation behind the traits listed. At the end, each student should end up with four lists—three from others in the group their own list. Once students have finished sharing, each student should collect his/her set of cards, and put them away for later.</p> <p>If the class needs an example before getting started, offer something such as:</p> <p><i>“Jose, I think some of your strengths and positive traits are that you are enthusiastic, professional, always on time, and helpful. You always do class activities with a lot of enthusiasm, and you have helped other students a few times when they didn't understand something.”</i></p>	Small index cards (enough for each student to have four)

Activity/Time	Notes for facilitation	Materials and prep
Presentation Prep 30 minutes	<p>Tell students that they will have an opportunity to present some of the work they've done over the course of the seminar. First, they will look through their reflective writing, group activity work, independent work, and anything else they've done in the seminar. Ask students to choose five items that best represent the growth and progress they've made this semester. Encourage them to choose five different kinds of things—a written reflection, a worksheet, the positive traits others used to describe them, etc... Tell students that they should choose items they're comfortable sharing with others. Anything confidential or sensitive should not be part of the set.</p> <p>Once students have chosen their five items, ask them to lay them out on their desks and to write for five minutes about why they chose those items. What do these things say about the student as a learner, as a classmate, as a person? Ask students to think about when they first started the seminar and how they have changed since then—in their skills, in their attitudes, and in their thinking.</p> <p>Tell students that this will be their portfolio for the course—the five items, a description of how the items represent their growth in class, and a cover. Let them know that they'll now have about 20 minutes to create a cover that illustrates some of the ideas inside the portfolio. Put out the portfolio cover materials. Have each student choose one piece of construction paper, and tell them to help themselves to the materials. Tell students to take one file folder, as well. Perhaps play some music while students work to help them relax and get creative.</p>	portfolio cover materials: construction paper magazines other craft items: beads, feathers, stickers, etc. scissors tape glue stapler file folders (one per student)

Activity/Time	Notes for facilitation	Materials and prep
Presentation Display 30 minutes	<p>Have students put their written description and their five items into the folder, and to staple their cover to the folder cover. Tell students to take everything off their desks except for the portfolio. Explain that they'll now have an opportunity to walk around to look at each other's portfolios and to leave some written comments on the work.</p> <p>Give each student a stack of post-its, and tell them they'll have about 20 minutes to look at and leave comments for the other students' portfolios. They should use the Post-its to stick comments anywhere in the portfolios that they want to comment on.</p> <p>Give students a five minute wrap up warning. At the end of the time, ask them to come to the center of the room. Ask for volunteers to share some things they saw or read in the portfolios that surprised them, or impressed them, or that they could relate to in some way.</p>	Post-its

Activity/Time	Notes for facilitation	Materials and prep
Round Robin 25 minutes	<p>Divide everyone into two groups. Have one group stand in a circle facing outward, and a second group stand in a circle around the first one, facing the inner circle. Each student should be facing one other student (if there are an odd number of students in the group, either join the group or have a group of three work together). Tell students that they're going to spend some time sharing their experience in the seminar with a few different classmates. Explain that you will pose a question and they'll have four minutes to talk with their partner. Each partner should take two minutes. Let them know that you'll indicate when two minutes have passed so that they can switch. At the end of each round, the inside circle will move clockwise one person to the right. Continue the rounds until all questions have been asked or until time is up. Edit or substitute questions as you see fit.</p> <p>Round robin questions:</p> <ul style="list-style-type: none"> • What was one of your favorite parts of this seminar and why? • Which was your favorite topic and why? • What are some of the goals you've accomplished since you began this seminar? • Which activity did you like the most and why? • Which activity did you like the least and why? • What are some of the tools you used during the seminar that you will continue to use in your personal life? • If you could change anything about the seminar, what would it be? 	

Activity/Time	Notes for facilitation	Materials and prep
Final Group Sharing and Networking 15 minutes	<p>Ask for volunteers to share some things they heard during the round robin. Acknowledge students for their work, their contributions, and their commitment to their futures. Tell students that for the next ten minutes, they can walk around and talk with each other—get contact information, tell someone something they've learned from that person, ask a question about something they saw in a portfolio, etc. Request that they speak with every other student in the room, even if very briefly.</p> <p>Congratulate them once again and thank them for their hard work and participation in the seminar.</p>	